Causes and consequences of irregular employment in the F2F sectors

Cross-national comparative report

DignityFIRM WP6

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Executive Summary

This comparative report presents findings from Work Package 6 (WP6) of the DignityFIRM project, examining migrant employment in Farm-to-Fork sectors across four EU member states: Italy, the Netherlands, Poland, and Spain. The study analysed the scale, drivers, and mechanisms of both formal and informal migrant employment, with particular focus on working conditions experienced by migrant workers and the long-term structural consequences of labour market informality. The study was based on a firm-level survey of 1,204 small and medium enterprises conducted in Spring 2025, complemented by individual and focus interviews with sectoral stakeholders. The findings show that the employment of foreign citizens in the F2F sectors is not temporary or marginal, but a structural phenomenon. Between 35% (Poland) and 79% (Italy) of surveyed firms employed at least one migrant worker in 2024. In firms with migrants, foreign workers constituted on average one third of the workforce, and a majority in one in five firms.

The primary driver of migrant employment is an insufficient supply of native labour, compounded by the need for flexible employment arrangements. Survey and qualitative evidence showed that native workers are unwilling to accept physically demanding, seasonal, or irregular-hours roles, whereas migrants are more willing to accept flexible employment forms, including weekend shifts, variable hours, and non-standard contracts. In Poland, some migrants prefer informal or civil law arrangements to maximise short-term earnings before returning home. Informal employment encompasses a broad spectrum rather than a single practice. Direct survey questions identified non-compliance in firms employing migrants in roughly 10% of firms in Poland and the Netherlands and up to 30% in Spain and Italy. Experimental survey methods suggested higher rates: approximately 31% of migrant-employing firms in Poland and 48% in Spain. The main forms of informality identified include entirely undeclared employment, most common among undocumented migrants with no legal access to formal employment, and partial under-declaration of hours, wages, or contributions while maintaining a formal contract as legal cover. Other situations that favour non-compliant practices relate to the abuse of civil law contracts and B2B arrangements, used especially in Poland to reduce employer costs while circumventing employment protections, as well the intermediation of temporary work agencies which create multi-layered subcontracting structures that diffuse accountability for working conditions.

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Introduction

Aim

The report's primary objective is to provide an analytical summary of the work conducted under Work Package 6 (WP6) of the DignityFIRM project, which largely focused on the employers' perspective and aimed to identify the key patterns of foreign labour employment in the F2F sectors, as well as the reasons behind such a high level of reliance on foreign labour. Our research activities focused particularly on the various dimensions of irregularity, with the aim of identifying and assessing the factors driving irregular migrant labour in the F2F sectors in Europe. The report also assesses the conditions resulting from irregular labour market status and discusses the possible long-term structural effects of migrant labour, including informal employment. Our contribution to the literature involves comparing four important EU member states that represent various economic and welfare regimes, yet share many similarities in terms of how F2F sectors operate.

Hypotheses

The starting point of our research approach was to reproduce the logic driving employers' decisions to hire a worker, allowing not only for economic calculations, such as wages and profitability, but also for the availability (supply) of labour, the existing regulations concerning the employment conditions and international migration, employers' and employees' preferences towards the existence and the type of contract, and others. We assumed that employers' decisions to hire formally / informally and to hire a native / a migrant are not independent from each other. Consequently, determinants and mechanisms underlying migrant irregular employment might be different from those governing native irregular employment. We put forward four major hypotheses: (H1) The extent of informal employment is significantly related to the sector of activity and the size of the enterprise; (H2) Enterprises that employ natives informally differ in terms of characteristics from enterprises that employ migrants informally; (H3) The decision to offer jobs formally or informally is the result of an economic analysis and labour market constraints; and (H4) From an employer's point of view, the decision to hire a worker formally or informally is more important than the choice between a migrant or a native worker. These hypotheses all resulted from an extensive theoretical and empirical review, as well as from the mapping exercise implemented in the first phase of the project. They were then used to design the research tools employed during the fieldwork, including the survey questionnaire and interview and focus group scenarios.

Approach and structure

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The logic of the report reflects the mixed methods approach that we attempted to implement throughout the study. First, we present the context in conceptual and empirical terms, referring to all the data revealed during the secondary data analysis. We then turn to the survey results, using a series of statistical and econometric methods to highlight the scale, patterns and drivers of informal employment among both migrants and natives in the F2F sectors. The next section is pivotal, as it seeks to validate and interpret the initial findings using qualitative material. It also revisits the set of initial hypotheses presented above. As our focus was not exclusively on the drivers and underlying factors, Section 5 discusses the consequences of informal migrant employment in the analysed sectors, focusing on the impact on migrant workers. The final section concludes.

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1. Conceptual and theoretical context

As discussed in the conceptual and review report presented as part of the DignityFIRM project (Fihel et al., 2025), the concept of 'irregularity' in migration studies lacks clarity. The situation becomes even more complicated in the context of labour market research, where additional controversies and ambiguities arise. For research activities undertaken within WP6, we therefore decided to refer to the informal employment of migrants rather than irregular employment. We adopted one of the possible approaches, which assumes that the informal employment of migrants may refer to three situations (which, in practical terms, do not need to be exclusive): 1) Migrants whose legal status is irregular (i.e. persons' legal residence); 2) The informal employment of migrants, independent of their residence status; and 3) The atypical or non-standard characteristics of the job (e.g. bogus self-employment related to the platform economy). Importantly, points 2 and 3 apply to both immigrants and natives, and this has been taken into account in our analyses.

According to migration research, the irregular or informal employment of foreigners in certain sectors of the economy is the result of an interplay between two key factors: restrictive legislation that limits opportunities for legal employment, and employers' incentives to reduce labour costs, avoid taxes, and evade social contributions (Boswell and Straubhaar, 2004). The latter remains a problem, particularly in highly competitive sectors at risk from globalisation and increased competition (e.g. tourism and manufacturing), or from natural cycles (e.g. agriculture). From an economic perspective, irregular or illegal employment is a result of rational decisions of actors operating in several sectors of the economy. This implies that governments that are favourable to businesses may have a clear interest in tolerating such informal or quasi-formal activities (Boswell and Straubhaar, 2004; Reyneri, 1998; Ambrosini, 2016; Ambrosini and Hajer, 2023; Bommes and Sciortino, 2011; Talani, 2019; King et al. 2021). This would explain why many European and non-European governments have a relatively ambivalent attitude towards informal (migrant) employment,

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with a clear divide between their openly expressed negative assessment and their real actions[1].

Economic literature considers the macro-level and structural factors, as well as the micro-level drivers, of informal labour market relations. The structural approach assumes that the labour market is not homogeneous, but rather should be analysed as a set of coexisting segments (including sectors of the economy with particular characteristics). The basic approach, which is still dominant, assumes that we should consider at least two labour market segments: capital-intensive and labour-intensive segments, respectively. The latter are characterised by intrinsic difficulties in hiring native workers, which in turn results in a structural need, or even dependency, on foreign workers. As Piore (1979) and many others have suggested, F2F sectors clearly fulfil most of the characteristics attributed to the secondary labour market segment. Micro-level approaches propose analysing and understanding informal employment as a possible – and economically rational – strategy for functioning in a highly competitive environment and navigating government regulations. In general, this kind of approach can explain why companies may take action to minimise costs by avoiding state intervention and the regulatory burden of taxes, social security contributions and labour market standards, even if they are exposed to potential penalties for informal practices (La Porta and Shleifer, 2014; Schneider and Buehn, 2018). Empirical literature suggests that several factors can be linked to a higher propensity for informal employment practices, such as lower firm size and relatively low productivity. However, it also highlights the importance of worker characteristics and their economic choices and strategies (Erosa et al., 2023; Taymaz, 2023; Vallanti & Gianfreda, 2021; Kanbur, 2017; Meghir et al., 2015; Kampelmann et al., 2018; Galiani and Weinschelbaum, 2011). Additionally, while the empirical part of the research was being designed and the data was analysed, it was assumed that the analysis of informal/irregular employment should consider the so-called concealment costs faced by both employers and workers (Kolm and Larsen, 2019), as well as the moral issues related to particular forms of economic activity (Mickiewicz et al., 2019; De Backer et al., 2015).

The empirical literature on the irregular/informal employment of immigrants in Europe is extensive (see also the extensive literature review presented by Fihel et al. 2025). Available studies show how important, and often key, is the role of both formally and informally

[1] This ambivalence has resulted in extensive academic debate, in which the causes of irregular or informal employment are presented in terms of 'paradoxes' (see, for example, Cornelius, Martin and Hollifield, 1994), or 'gaps' between the explicit or implicit policy objectives, actual actions, and the outcomes achieved (Echeverría, 2020).

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employed foreigners in certain sectors of European economy, always with a clear focus on F2F sectors. The short-term effects are clear as foreigners provide a supply of relatively cheap, reliable and flexible labour which is of key importance for highly competitive sectors operating often at a minimum profit margin (Reyneri 1998; 2004; Bommes and Sciortino 2011; Triandafyllidou and Bartolini 2020; Ruhs and Anderson 2010; Martin 2020; Palumbo and Corrado 2020; Palumbo et al. 2022). The long-term effects are more challenging as irregular/informal migrants can contribute to structural changes in EU economies, particularly as they can perpetuate the existence of the informal economy as such and the creation of substandard employment conditions (Chappell et al. 2011; Boswell and Straubhaar 2004; Ahmad 2008; Górny and Kaczmarczyk 2018; Echeverría 2020). Finally, what will be also a subject of our analysis, growing number of studies document the vulnerability of irregular/informal migrants in F2F sectors and its layers. These include not only low wages or long working hours, but also unsafe/dangerous working conditions, series of occupational risks, lack of social protection and exploitative employment practices (Martin 2020; Fiałkowska and Matuszczyk 2021; Gottlieb and Niediek 2026; Gottlieb and Ertel 2024; Spencer and Triandafyllidou 2022; Homberger et al. 2022; ETUC 2011; Ambrosini 2016; Lucifora 2019; Anderson 2010).

2. Data sources

The present study draws on two sources of data. The first is a firm-level survey conducted across four countries: Italy, the Netherlands, Poland, and Spain, covering three sectors: agriculture (Nomenclature of Economic Activities, NACE: A01 and A03, excluding tobacco cultivation), food processing (NACE C10, excluding feed and animal food production), and catering (NACE I56, food service activities[2]). The survey targeted small and medium firms employing between 1 and 49 workers, with a minimum of 300 interviews per country and at least 70 per sector. Interviews were conducted primarily by telephone (CATI), with a web-based option (CAWI) available on request. The questionnaire covered firm size and employment structure, conditions of employment for both native and foreign workers, and market conditions, and included both standard and experimental questions. The sampling frame was drawn from the Dun & Bradstreet (D&B) global firm database, one of the largest commercial databases worldwide, covering over 500 million companies. Records were selected at random. The survey was conducted in March, April and May, 2026.

The second source of data consists of individual interviews and focus group discussions with experts from the above-mentioned sectors: employer representatives, trade union officials, labour inspectors, migrant organisations, lawyers and migration scholars. See Table A1 in

[2] We use catering or bars and restaurants for this type of activities.

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Annex for more details. Interviews and focus groups took place in 2024 and 2025 in each country under study. The qualitative evidence gathered through these discussions allows us to interpret, validate and contextualise the survey findings, and to answer questions that survey data alone cannot fully address, such as the circumstances underlying employers' decisions to hire migrants and to employ workers non-compliantly.

The survey questionnaire defined migrant workers as workers holding foreign citizenship (i.e., citizenship other than that of the country of employment). This encompasses different categories of migrants, such as those who arrived from abroad solely to take up employment, those who permanently reside in the country but do not hold its citizenship, and migrants in the process of obtaining international protection (asylum seekers) or already holding such protection (refugees), but excludes those migrants and their descendants who have obtained the citizenship of the country of employment. In this paper, we use the term 'migrant workers' similarly, referring to foreign citizens undertaking work in the countries under study, and 'native workers', referring to citizens undertaking work in the countries of their citizenship.

3. Structural reliance on migrant labour and informality in the F2F sectors: Evidence from existing studies

Across Italy, Spain, Poland and the Netherlands, the F2F sectors have become increasingly reliant on migrant labour. The experience of these countries suggests that this reliance is structural and, at least so far, irreversible. Over time, specific jobs within agriculture, food processing and catering have become the domain of immigrants, while domestic labour, beyond the non-core groups such as students, is unwilling to perform them. Restrictions on international travel and migration during the COVID-19 pandemic demonstrated that even under conditions of a severe labour supply shock, employers in F2F sectors were largely unable to replace migrant workers with domestic ones (Anderson et al. 2021; Anderson et al. 2023; Corrado et al. 2023; Kaczmarczyk 2023). The COVID-19 experience suggests that even a substantial wage increase in these professions – which would in any case be unlikely, as it would risk triggering a broader wage spiral in the labour market – would probably not be sufficient to persuade domestic workers to take up these jobs.

Labour market statistics and social surveys show that migrants constitute a significant share of employment in F2F sectors in all four countries, although the scale and composition differ across contexts. In Italy, foreign workers accounted for about 2.5 million employees in 2024, equal to 10.5% of the total workforce (Ministero del Lavoro, 2025). In F2F sectors, their presence was higher, with approximately 20% of agricultural employment and about 18.5% in hospitality (here: bars, restaurants and hotels) and tourism made up of foreign workers

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(Ministero del Lavoro, 2025). Non-EU nationals are over-represented in physically demanding and lower-status jobs, accounting for nearly 15% of employment in hospitality and tourism and 14.9% in agriculture, and Romanians are the largest migrant group. In agriculture, nearly one quarter of all employees are non-EU nationals, mainly from Morocco, India and Albania, with particularly rapid recent growth among South Asian and North African workers. In food processing and catering, migrant workers are concentrated in manual and back-of-house positions: between 2014 and 2023, the share of non-EU workers among new hires rose sharply in cooking and kitchen assistant roles, exceeding half of new contracts in the latter category, while growth remained limited in customer-facing occupations.

In Spain, migrants similarly play a central role: in 2023–2024, foreign workers represented around 26% of agricultural employment nationwide (approximately 234,700 workers), up to 70% of the workforce in farming provinces such as Almería (Gálvez-Iniesta, 2020), and roughly 25-30% of employment in hospitality (Mahía Casado & Medina Moral, 2023). In 2023, more than 137,000 job contracts in food processing were granted to foreign nationals (SEPE, 2024; Mahía Casado & Medina Moral, 2023). Spanish data further reveal a pronounced occupational segmentation: around 80% of foreign workers are employed in elementary occupations, compared to roughly 30% of Spanish nationals (Mahía Casado and Medina Moral 2023), indicating that migrants are disproportionately concentrated in physically demanding jobs within the F2F sectors. Recruitment relies on a combination of intra-EU mobility, particularly from Romania and Bulgaria, and regulated third-country entry channels such as seasonal recruitment schemes (GECCO), direct hiring from abroad, and regularization programmes.

In the Netherlands, migrant employment in F2F sectors is substantial: as of December 2022, around 1.54 million working migrants were registered in the Netherlands (CBS, 2022). However, migrant labour is less visible due to the prevalence of temporary work agencies, especially in agriculture and horticulture, where agency-mediated employment is dominant: in 2019, around 90% of migrant workers in these sectors were employed through agencies (SEO, 2000). In 2023, employment agencies affiliated with ABU and NBBU placed over 460,000 migrant workers, with 21% in greenhouses, 3% in farming, and 18% in the food industry (ABU, 2024). Migrants employed directly by firms account for roughly one third of directly employed workers in agriculture and horticulture, and for a significant share of employment in hospitality, where around 35–42% of workers had a migration background in 2022 (NBTC, 2025). Migrant labour in Dutch agriculture continues to be dominated by mobile EU citizens, primarily from Eastern Europe: Poland, Romania, Bulgaria. Since 2006, the number of such workers registered in Dutch municipalities increased fourfold, though around

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40% remain in the Netherlands for longer periods. However, the declining availability of EU mobile workers has increased recruitment difficulties, particularly during seasonal peaks, intensifying pressure to recruit labour from outside the EU (Van Meer, 2022).

Poland represents a specific case. The country, where economic growth and wage levels lag behind those of EU members without the communist legacy, has seen the inflow of workers from abroad start relatively recently, in the last two decades. Labour immigration, however, has already reached massive proportions, due to the so-called simplified employment procedure targeting nationals of Ukraine and other Eastern European countries (Armenia, Belarus, Moldova, and until recently Georgia and the Russian Federation). Originally dedicated to seasonal work in agriculture, this procedure has been extended to other F2F sectors and longer-term employment. For this reason, the country experiences accelerated labour market segmentation into sectors dedicated either to immigrants or to natives, allowing us to capture this process as it unfolds. In 2023, over 384,000 foreign citizens were registered under employers' declarations of intent, complemented by about 320,000 work permits and nearly 16,300 seasonal work permits (Ministry of Family, Labour and Social Policy, 2024). Estimates indicate that approximately 100,000–180,000 Ukrainian nationals (arrived before or after the outbreak of the war in Ukraine) work in agriculture and catering (Dudek et al., 2024). Importantly, the COVID pandemic has confirmed the significant role played by foreigners in selected sectors of the Polish economy. Contrary to general trends in the labour market, immigrants have seen an increase in employment in selected sectors of the Polish economy. As a result, the share of immigrants in total employment rose to 7% in 2020 and even 9% in 2021. In contrast to the rest of the labour market, which showed low growth during the pandemic (with the exception of the IT sector), immigrant employment was characterised by high 'resilience' and rapid growth (especially in logistics, construction, agriculture, bars and restaurants) (Kaczmarczyk 2023).

Despite widespread reliance on migrant labour, the national composition of migrant workforces varies across F2F sectors, reflecting differences in recruitment practices and migration histories. In Italy, the majority of foreign workers in agriculture, bars, restaurants and tourism are non-EU nationals. In Spain, EU nationals, particularly from Romania and Bulgaria, are heavily represented in seasonal agricultural work, alongside non-EU workers recruited through the GECCO programme. In Poland, Ukrainian nationals play a dominant role: in 2023 alone, 1.08 million notifications of entrusting work to Ukrainians were registered, while survey data show that between 68% and 94% of Ukrainian nationals who arrived after the Russian invasion are economically active, depending on arrival cohort (Dudek et al., 2024).

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Informal and semi-formal employment remains a structural feature of F2F sectors in all four labour markets, though its scale and forms vary, and migrants are consistently over-represented in non-compliant work arrangements. In Italy, ISTAT estimates that nearly 3 million workers were employed informally in 2021, corresponding to an irregularity rate of 12.7% of total employment (ISTAT, 2023). Agriculture and accommodation and catering are among the sectors with the highest incidence of non-compliant work (16.8% and 12.7% respectively) (ISTAT, 2023). Although migrants' irregular legal status may limit access to compliant employment, as in the case of the approximately 458,000 irregular migrants residing in Italy in 2023, most informal employment in this country involves migrants with regular residence status rather than undocumented migrants (ISMU, 2024; Osservatorio Placido Rizzotto, 2022). Agriculture and food processing alone account for an estimated 230,000 informal jobs, ranging from fully to partially undeclared employment (Osservatorio Placido Rizzotto, 2022). Wage penalties associated with informality are substantial: informal workers earn on average around half of the gross hourly wage of formal workers, and Italy displays one of the largest migrant pay gaps in the EU (ILO, 2023; Amo-Agyei, 2020).

In Spain, informal economy is estimated at around 20% of GDP, and informal migrant employment is closely associated with irregular administrative status. In 2023, approximately 700,000 third-country nationals were estimated to be in an irregular administrative situation, representing about 11% of non-EU residents (Funcas Foundation, 2024). Sectoral studies indicate that undocumented migrants are concentrated in agriculture, domestic work, and accommodation and food services, which together account for over half of informal migrant employment (Gálvez-Iniesta, 2020). Informal employment in F2F sectors commonly takes the form of fully undeclared work or partial under-reporting of hours and wages, as well as the misuse of seasonal contracts beyond their legal scope (Gálvez-Iniesta, 2020; SEPE, 2024).

In Poland, informal employment most often takes the form of partial non-declaration of hours and wages. Survey data indicate that between 8% and 12% of (domestic and foreign) employees received part of their remuneration unofficially between 2015 and 2021, while around 2% reported having worked informally at least once in 2022 (Polish Economic Institute, 2023; CSO, 2023). Labour inspections show consistently higher rates of non-compliance among migrant workers than among nationals: in 2022, 13% of inspected migrant workers were found to be employed informally, compared to 17% in 2021 (State Labour Inspectorate, 2023). These practices are most common in temporary agency-mediated employment and typically stem from failures to properly register work or from discrepancies between declared and actual working conditions. Although such agency-mediated employment is formally

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registered under services, the work itself is frequently performed in agriculture, accommodation and catering (State Labour Inspectorate, 2023).

In the Netherlands, undeclared employment is comparatively low overall. Based on estimates derived from the Labour Input Method, undeclared work accounted for 4.8% of total labour in 2019, below the EU average (European Labour Authority, 2023). At the same time, labour authorities estimate that around 314,000 people are at risk of informal employment, including both legally residing migrants and migrants without residence permits (Nederlandse Arbeidsinspectie, 2023). In F2F sectors, informal practices rarely take the form of fully undeclared work and more often involve bogus self-employment, violations within agency-mediated arrangements, and employment without valid permits, disproportionately affecting migrant workers in agriculture, horticulture and food-related services (Nederlandse Arbeidsinspectie, 2022; 2023; European Labour Authority, 2023).

Although the DignityFIRM survey, individual and focus interviews are not nationally representative, their findings largely corroborate the patterns identified in secondary data discussed above. In what follows, we present the specific contribution of our study, before the final discussion returns to the overall picture.

4. Migrant employment practices in F2F sectors: Evidence from the DignityFIRM project

4.1. The scale and character of migrant employment

According to the DignityFIRM survey, the percentage of enterprises that employed at least one migrant (foreign) worker, for any period of time in 2024 and on any terms, ranged from 35% in Poland to 79% in Italy (Fig. 1).

Fig. 1. Percentage of firms having employed at least one foreign worker in 2024, by country and sector, in %

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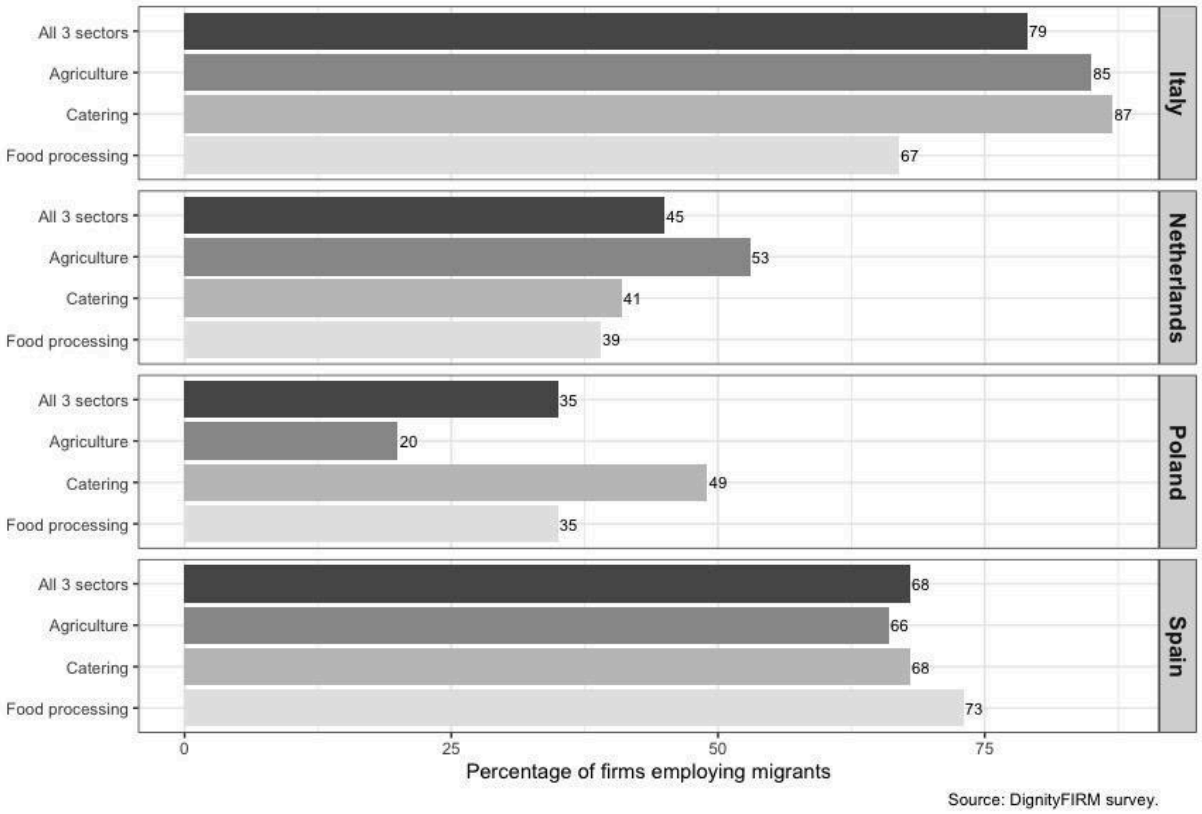

Source: DignityFIRM survey conducted in Spring 2025 (N=1,204).

The numbers are more varied when broken down further by sectors, but what matters is that in companies that employed foreign workers at some point in 2024, migrants constituted on average one third of the workforce, while in every fifth surveyed company they formed the majority of workers (Table 1).

Proportion of migrants among employees	**Share of firms employing migrants (%)**
Up to 10% employees	11.5
From 10 to 19% of employees	22.3
From 20 to 49% of employees	45.6
50% and more employees	20.6
Total	100.0

Table 1. Proportion of migrants among employees in firms having employed at least one foreign worker in 2024, in %

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Source: DignityFIRM survey conducted in Spring 2025 (N=686).

Migrants were employed mainly in manual occupations, both skilled and unskilled. In the four countries together, almost nine out of ten firms with migrants employed them in unskilled manual positions, especially in agriculture and food processing, whereas around half of firms employing migrants reported hiring them as skilled manual workers, a pattern that was more common in food service. Results related to permanent and full-time employment partly reflect the extent to which surveyed firms rely on migrant labour, namely, in all four countries and in two sectors: food processing and catering, the majority of firms employing migrants reported that these workers were hired on permanent and full-time contracts. In agriculture, by contrast, most employers relied on migrant workers on a seasonal basis, although typically in full-time positions. Non-standard forms of employment, including employment mediated by temporary work agencies and migrant self-employment, vary primarily by country, rather than by sector. Employment through temporary agencies takes place in every second firm with migrant workers in the Netherlands and Spain, while migrant self-employment is also relatively frequent in the Netherlands.

Taken together, the survey demonstrates high incidence of migrant employment in F2F firms, especially in manual and unskilled jobs, and both in permanent and seasonal work. The frequent use of permanent contracts shows that migrant employment is not reduced to exceptional occupational niches or temporary difficulties in the recruitment of domestic workforce.

4.2. Employers making an employment decision: four possible outcomes

Administrative statistics or aggregated survey results cannot capture how migrant employment and informal employment result from everyday decisions of employers. This is why, in what follows, we move from the scale and sectoral patterns of migrant and informal employment across F2F sectors to employment practices within firms. Individual-level data gathered in the DignityFIRM survey allow us to investigate the circumstances under which employers decide to hire workers informally, in particular migrant workers. The results of the survey are further interpreted with the evidence gathered in individual interviews and focus groups with national experts.

Employers' decisions to hire migrants and to hire informally may be theoretically independent or interdependent. When these decisions are independent, they represent two of the many strategies that employers may use to reduce operating costs and/or gain employment flexibility. They may also be interdependent, for instance when informal employment is the

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only feasible way to hire a migrant without regular status, or when it is the preferred arrangement for circular migrants who seek to maximise earnings over a short period of time. The DignityFIRM survey, however, allows us to examine only the coexistence of these two employment strategies, and not the causal relationship between hiring migrants and hiring informally. For this reason, we begin our analysis by treating employers' hiring strategies as leading to four distinct outcomes: (1) hiring a native worker in a compliant manner, (2) hiring a native worker in a non-compliant manner, (3) hiring a migrant worker in a compliant manner, and (4) hiring a migrant worker in a non-compliant manner.

What distinguished firms that hire migrants or employ workers non-compliantly? We estimate the correlates of four hiring outcomes (Table 2) using a multinomial logit regression. Compliance is defined on the basis of a survey question asking whether, in 2024, either during the peak season or at other times when rapid assistance was needed, a newly hired employee began work before all required formalities had been completed. Respondents who reported such practices (N = 180) or answered "don't know" (N = 40) are classified as having hired non-compliantly. The classification of a firm as informally employing does not imply that all its employment relations are informal; a single instance of a non-compliant practice was sufficient for inclusion in this category, and formal and informal arrangements likely coexist in many such firms. The independent variables used to estimate the model are listed in Table A2 in the Annex.

Employment practices	**Number**	**Percent**
(1) Employs only natives, employs only formally	470	39.0
(2) Employs only natives, employs informally[1]	48	4.0
(3) Employs migrants[2], employs only formally	514	42.7
(4) Employs migrants[2], employs informally[1]	172	14.3
Total	**1,204**	**100.0**

Table 2. Employment practices in surveyed firms

Notes: [1]Agrees that or does not know whether in 2024, during peak season or in other moments where quick help was needed, a new employee started working before all formalities had been fulfilled; [2]Employs exclusively migrants or migrants and natives.

Source: DignityFIRM survey conducted in Spring 2025.

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A single multinomial logit regression was estimated, but the results are presented with reference to either the exclusive employment of natives in compliant arrangements or the employment of migrants in compliant arrangements (Fig. 2). Only statistically significant variables are presented. See Table A3 in the Annex for detailed results of the estimation. Employers who hire natives informally rather than formally (results presented in the left panel of Fig. 2) are more likely to agree with the opinion that not enough natives apply for a job, are less likely to agree with the opinion that the costs of obtaining documentation to employ a migrant speak against hiring them, and are more likely to accept unethical behaviours, such as claiming undue state benefits or cheating on tax. No other correlates of informal employment identified in the literature, such as the firm's size measured by the number of employees, appear statistically significant.

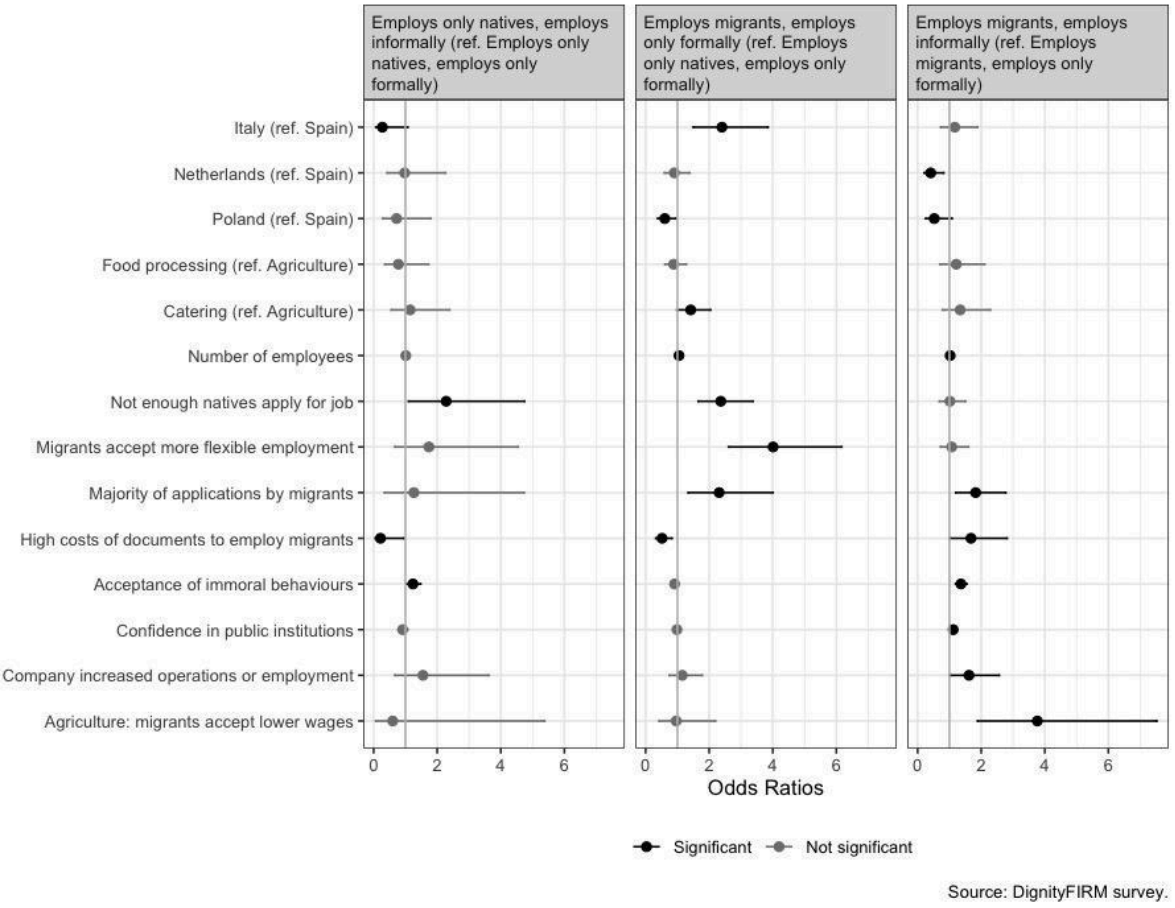

Fig. 2: Estimation results from a multinomial logistic regression of four employment practices

Notes: the reference outcome is the compliant employment of natives when comparing non-compliant employment of natives and compliant employment of migrants, and the

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compliant employment of migrants when comparing non-compliant employment of migrants.

Source: DignityFIRM survey conducted in Spring 2025 (N=1,204).

Employers who rely on migrant workforce rather than exclusively on native workers (the central panel of Fig. 2) are more likely to operate in catering than in agriculture and to manage firms with a larger number of employees. They are also more likely to agree that not enough natives apply for jobs, that the majority of applications come from foreign workers, that migrants accept more flexible forms of employment than natives, and they are less likely to agree with the opinion that the costs of obtaining documentation to employ a migrant speak against hiring them. These results clearly indicate that employers who hire migrants face greater difficulties in recruiting native workers overall, and for flexible positions in particular.

Finally, employers who admit to the informal rather than formal employment of migrants (the right panel of Fig. 2) are more likely to manage firms with a larger number of employees and firms that have, in the last three years (2022–2024), significantly increased the scale of operations or the size of the workforce. They are also more likely to agree with the opinion that one reason for employing migrants is that the majority of applications are from foreign workers, that the documentation required to hire migrants compliantly is costly and, among employers in agriculture only, that migrants accept lower wages than natives. They are also more likely to accept immoral behaviours and, paradoxically, more likely to express confidence in public institutions[3].

With regard to countries, the estimations show that Italian employers are less likely than Spanish employers to employ natives non-compliantly rather than compliantly. Migrant employment is more likely in Italy and less likely in Poland, as compared to Spain. Non-compliant employment of migrants is less likely in the Netherlands and Poland than in Spain.

These results lead to the following main conclusions, around which we develop further analysis:

1) migrant employment (whether compliant or non-compliant) is associated with difficulties in recruiting native workers and the need of flexible labour arrangements in the first place,
2) the mechanisms underlying informal employment of native and migrant workers differ,

[3] The survey question evoked social security system, justice system, and government.

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3) informal migrant employment is determined by several variables, which means that it encompasses a diversity of situations related to the migrant's, firm's and sector's characteristics.

4.3. Migrant employment is due to limited supply of native labour and requirement of flexible labour arrangements

The econometric analysis demonstrates that migrant employment (whether compliant or non-compliant) is strongly associated with difficulties in recruiting native workers. For employers who hire migrants, a clear factor underlying this employment strategy is an insufficient supply of native labour, reinforced by the availability of migrant labour. This conclusion is supported by a descriptive analysis of the survey results (Fig. 3, two upper panels): respondents from firms that employ migrant workers considerably more often agree that a potential reason for employing a migrant rather than a native relates to the supply side of the labour market (not enough natives apply for a job; the majority of applications are from foreign workers).

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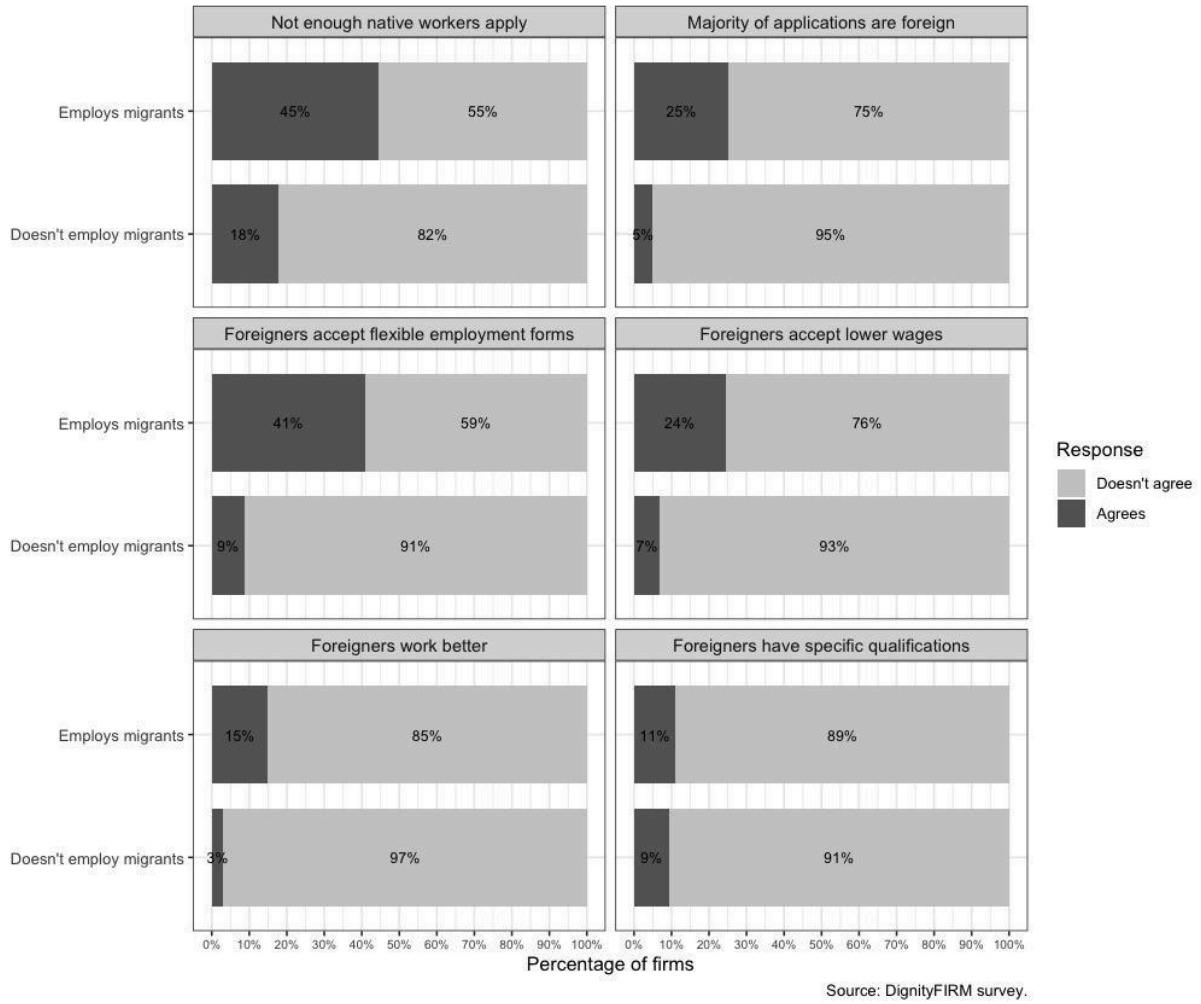

Fig. 3. The percentage of respondents who agree or disagree with potential reasons for employing a migrant[1], by whether the firm employs a migrant

Notes: [1]Based on the question: *In your opinion, what would be the reasons for employing foreign workers instead of native workers in your company?* Multiple answers allowed.

Source: DignityFIRM survey conducted in Spring 2025 (N=1,204).

Qualitative evidence from focus groups, expert interviews, and fieldwork across all four countries reinforces this finding, consistently pointing to labour shortages as a primary driver of migrant employment, particularly in agriculture and catering. In Italy and Spain, the shortages of native labour are most pronounced in agriculture: native workers are structurally unwilling to take up physically demanding, seasonal, and low-paid jobs, leaving employers with little choice but to rely on migrant labour. In Spain, experts noted that recruitment efforts targeting local workers fail even in regions with high unemployment, with

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one participant stating that the sector "is practically sustained by foreign workers". In Italy, focus group participants similarly described recruitment of national workers as increasingly difficult, with employers resorting to informal networks to hire migrants already present in the country. In catering, Italy and Poland show the strongest evidence for labour shortages. In Italy, interviewees pointed to demographic decline, deteriorating working conditions, and post-pandemic exits from the sector as structural causes of native labour shortages. In the Netherlands, fieldwork in the agricultural sector directly documents this dynamic through employer testimony: Dutch workers are described as unwilling to perform physically repetitive tasks or work outside standard hours, leaving employers feeling they have no other choice but to hire migrants. As already signaled, Poland constitutes a case of immigration destination *in statu nascendi*, but the intensity of inflow and migrants' labour market participation has been considerable in the most recent years. Qualitative evidence illustrates how quickly these changes can occur: in one food-processing company mentioned in a focus group, the share of migrant workers in manual positions reportedly rose from around 10% to 80% within the last four years. Participants linked this shift to population decline and ageing, changing aspirations of native workers away from manual jobs, and post-pandemic wage dynamics, reinforced by state-funded family allowances that raised wage expectations among nationals. Focus group discussions revealed that in the most recent years, Polish nationals have simply not been applying for jobs in bars and restaurants, and even well-established restaurants struggle to find staff, leading employers to hire migrants with no prior experience and to recruit through transnational networks.

The qualitative characteristics distinguishing between migrant and native employment are also non-negligible: the opinion that migrants accept employment in more flexible forms than natives is more frequent in firms employing migrants, which is statistically significant in the econometric model. This opinion is shared by 41% of employers in firms with migrant workers, as compared to 9% of employers without migrant workers (the middle-left panel of Fig. 3). Evidence from interviews consistently shows that migrants are more willing than native workers to accept flexible employment forms, though the nature of this flexibility varies by sector and country. In agriculture, this pattern is documented in Italy, Spain, and the Netherlands. Across all three countries, native workers are unwilling to perform physically demanding, seasonal, and low-paid work, leaving employers dependent on migrant labour. In Italy and the Netherlands, respondents of individual interviews stressed that migrants, driven by urgent financial need and, in the Dutch case, by short-term stay plans, accept conditions that natives increasingly refuse. In catering, the dynamics is similar for Italy and Spain: migrants fill positions requiring irregular hours, evening and weekend shifts, and variable

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schedules that native workers tend to avoid. Italian unions cautioned, however, that this 'flexibility' often masks exploitation rather than reflecting genuine worker preference. In Poland, the pattern emerges primarily in catering and agriculture, but takes a distinct form: the key issue is not so much working conditions as the type of contract. Native workers, burdened with financial obligations such as mortgages, are unwilling to accept civil law or B2B arrangements, while migrants, particularly recent arrivals prioritising short-term earnings, are more likely to accept or even prefer such contracts.

Respondents from firms employing migrants also more often agree with the opinion that foreigners accept lower wages than natives; this result is worth noting, although it is not statistically significant in the econometric estimation. A more detailed analysis reveals that employers observe lower wage expectations of migrants regardless of sector, particularly in Italy and Spain. In Spain, focus group experts noted that "the preference for migrant workers stems from their willingness to accept long hours, low wages, and substandard housing, while nationals often choose subsidies or jobs in less demanding sectors". In Italy, focus group participants highlighted that the urgent need for immediate income pushes migrants to accept low wages and precarious contracts, even when these fall below standards that native workers would tolerate. This dynamic is made more explicit in the Polish evidence, where an expert concluded that small and medium-sized enterprises did not need to improve their working conditions because foreign workers were readily available. In his view, migrant workers "were ready to accept minimal wages and temporary, on-demand work", which natives were no longer willing to accept. In the survey, other characteristics of foreign labour, such as better performance and specific qualifications, do not appear important for employers.

At the same time, language barriers appear to all respondents as the most important arguments against employing migrants. Although statistically non-significant for the employment strategy, these barriers are considered important by all respondents: to a higher extent in firms that do not hire migrants, but also to a non-negligible extent in firms with migrant workers (Fig. 4). Evidence from focus groups confirms that language barriers represent a significant obstacle to migrant employment, particularly in customer-facing roles. In Spain, focus group participants noted that front-service positions are often reserved for native speakers or migrants with strong language skills, while kitchen roles, where communication with customers is not required, are rather filled by other migrants. In Italy and the Netherlands, language difficulties compound other vulnerabilities, contributing to migrants' concentration in back-of-house positions and reinforcing internal hierarchies of ethnicities in the workplace. The Polish evidence additionally points to an emerging way in

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which employers circumvent language barriers through technological change. Focus group participants noted that an increasing number of bars and restaurants have introduced apps and tablets for order placement, which does not require a good knowledge of Polish. Bars employing Ukrainian waiters were among the first to adopt QR code ordering systems, suggesting that the language barrier, rather than being simply an obstacle to migrant employment, can itself become a driver of workplace automation.

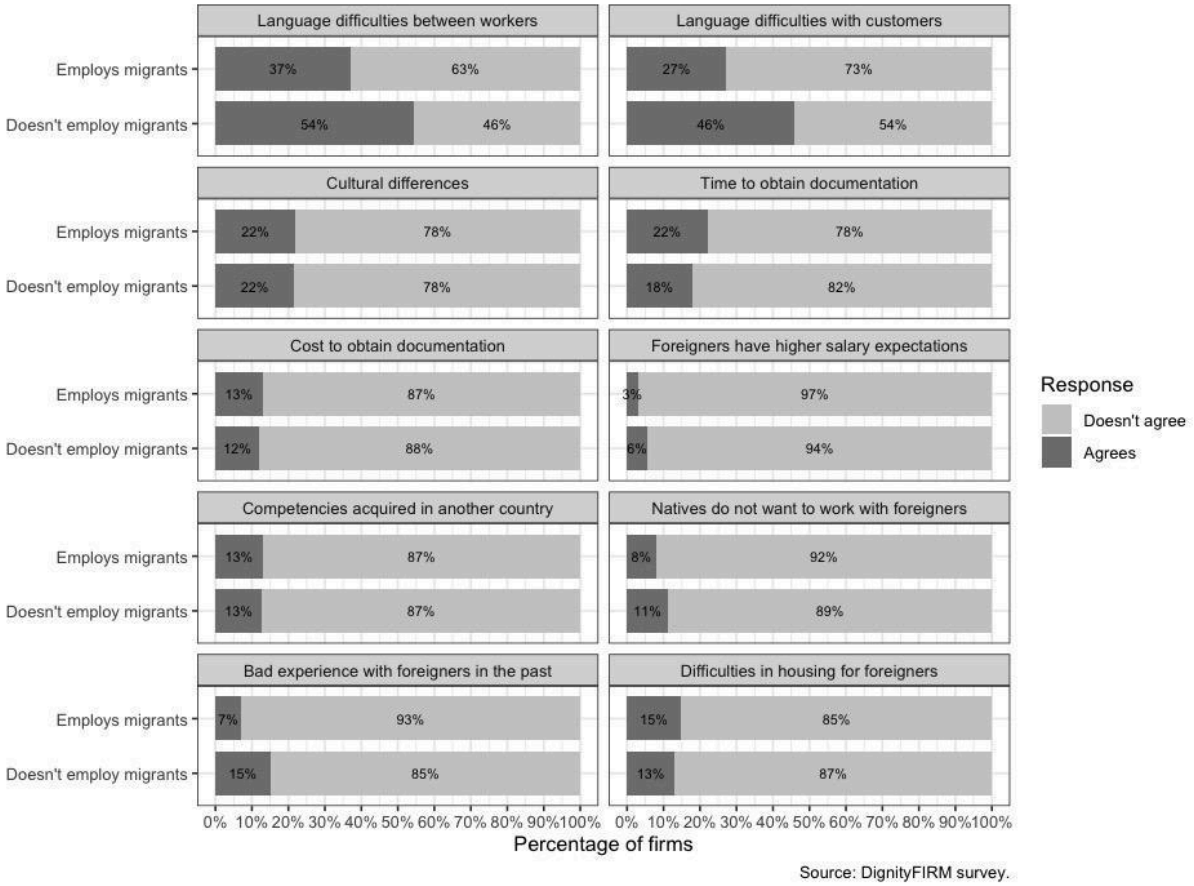

Fig. 4. The percentage of respondents who agree or disagree with potential reasons against employing a migrant[1], by whether the firm employs a migrant

Notes: [1]Based on the question: *What, in your opinion, speaks against employing foreign workers in your company?* Multiple answers allowed.

Source: DignityFIRM survey conducted in Spring 2025 (N=1,204).

In the econometric model, the cost of documentation appeared statistically significant as a potential impediment to employing a migrant. Descriptive evidence from the survey data demonstrates that the costs of documentation are more often perceived as high in firms

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without migrant workers, as compared to firms that employ migrants compliantly (Fig. 2). In three countries: Italy, the Netherlands and Spain, individual and focus group participants shared this perception: in Italy, experts described the bureaucracy associated with entry flows as "the main barrier to hiring migrant workers", noting that slow procedures often cause seasonal workers to arrive after the harvest season has ended. Some employers resort to private intermediaries to avoid bureaucratic burdens and meet urgent labour needs. In Spain, experts stressed that the rigidity of administrative requirements "makes regular hiring almost impossible for short-term needs", which favours informal practices particularly among small businesses. In the Netherlands, interviews with employers revealed that many simply refuse to hire workers who require a work permit, citing the complexity and administrative burden involved.

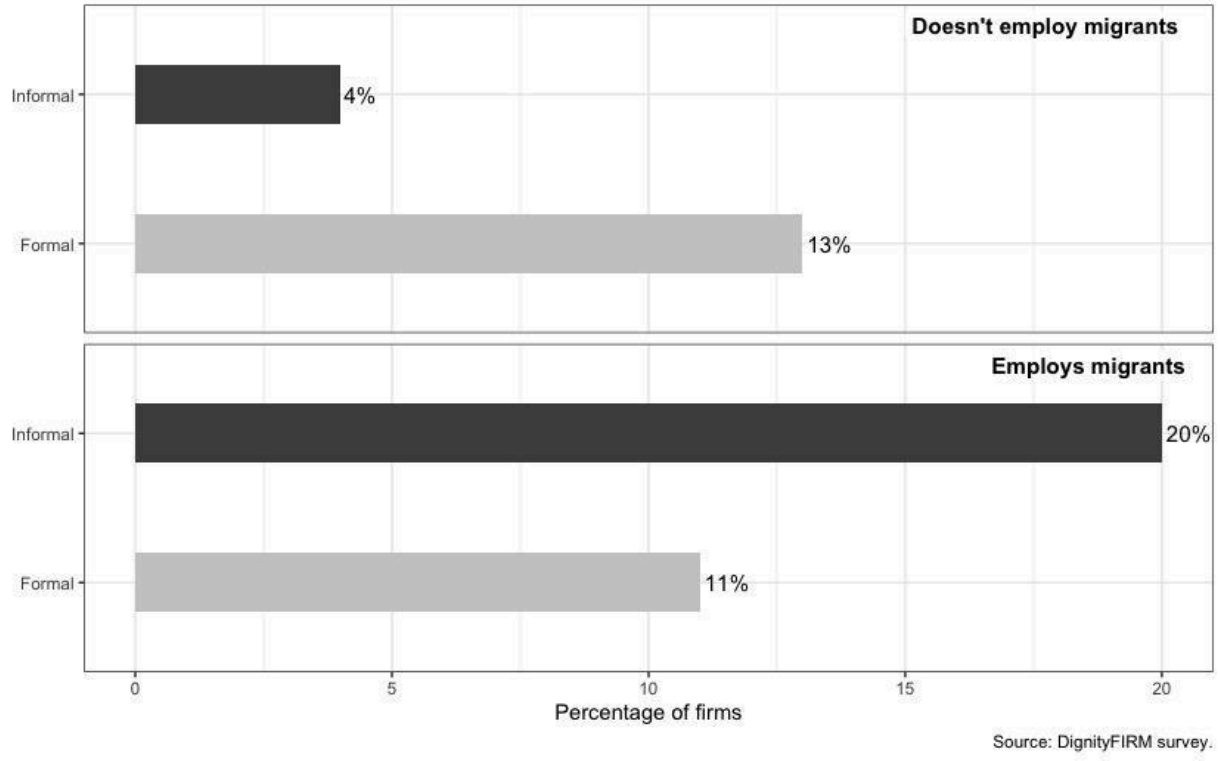

Fig. 5. The percentage of respondents who agree with opinion that costs to obtain documentation is a potential reason against employing a migrant, by whether the firm employs a migrant and employs formally

Source: DignityFIRM survey conducted in Spring 2025 (N=1,204).

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A more detailed analysis (Fig. 5) reveals that among firms with compliant practices, the perception of documentation costs as high is similar regardless of whether they employ migrants or not. By contrast, firms with non-compliant practices diverge markedly: those employing migrants non-compliantly are much more likely to perceive documentation costs as high (20% of respondents), while non-compliant firms without migrant workers rarely do so (4% of respondents). This leads us to the second thread of analysis, namely the drivers and mechanisms of informal employment.

4.4. Mechanisms underlying informal employment of migrants and natives

In the survey, we used three direct questions related to informal employment:

- a question about the documents on which migrants were employed;
- a question about the health insurance of migrant workers;
- a question about whether it occurred in the firm that a person was employed before formalities were fulfilled under urgent circumstances.

The last question was used in the econometric model because it can concern not only migrants, but also native workers. In addition, the survey included a set of experimental questions that indirectly investigated the incidence of non-compliant employment and the propensity of employers to use such practices. Below, we discuss the results of these questions.

When asked directly about the types of documents used, the majority of employers indicated documents signaling legal forms of migrant employment, with only marginal shares, below 4% in all countries, selecting the “other” option, indirectly pointing to the possibility of informal employment. In response to the question on health insurance for migrant workers, the vast majority of employers reported that all of their migrant employees were covered (Fig. 6). The remaining employers indicated that not all migrants had health insurance (or that coverage was “not yet” in place), suggesting the possibility of informal employment, or that they did not know. The latter response could be justified in agency-mediated employment, that is, when the firm was not responsible for documentation. Indeed, in the Dutch sample, the “don’t know” responses were significantly more frequent in firms using agency-mediated employment. The survey results for other countries are ambiguous, but it should also be noted that the high share of Polish employers reporting full coverage may still include non-compliant employment, since Ukrainians with temporary protection status automatically receive health insurance regardless of employment status.

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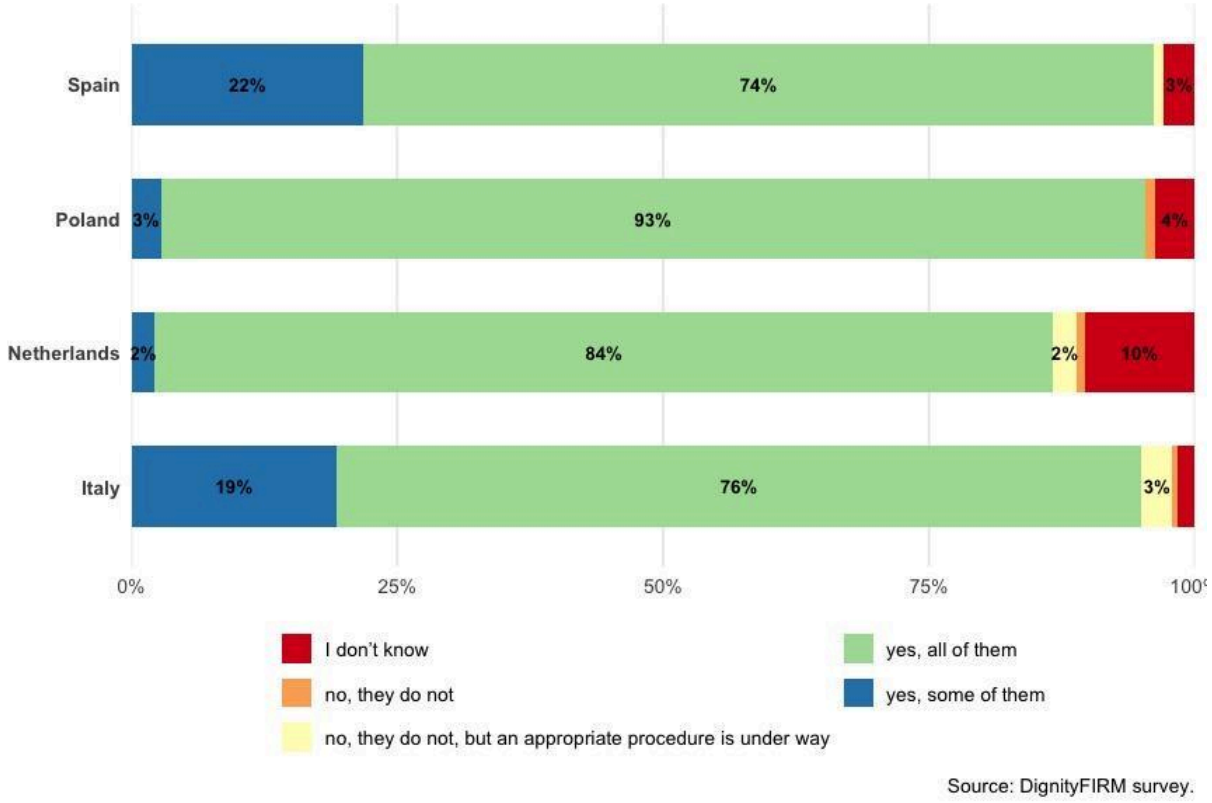

Fig. 6. Responses to the question related to foreign employees having health insurance, by country (in percent)

Source: DignityFIRM survey conducted in Spring 2025 (N=686).

The last direct question about informal practices was related to cases when a person was employed before formalities were fulfilled. Compliant employment implies that all formalities are completed before a worker starts working, and employers are aware of this requirement. Nevertheless, among firms employing migrants, 9% in Poland, 10% in the Netherlands, 21% in Spain, and 32% in Italy acknowledged that workers had started work before all formalities were fulfilled, with a further share, up to 10% in Spain, not excluding that this may have occurred (Fig. 7). On the basis of these responses, it can be estimated that roughly 10% of migrant-employing firms in Poland and the Netherlands, and up to around 30% in Spain and Italy, were engaged in employment practices that were not fully compliant, affecting both migrant and native workers. In the case of firms employing only domestic workers, apart from the Netherlands, the shares of firms admitting to not fully compliant employment are much lower and vary from 5% for Italy, 7% for Poland to 11% for Spain. Interestingly, in the Netherlands, the distribution does not differ significantly from the distribution for firms which employ migrants.

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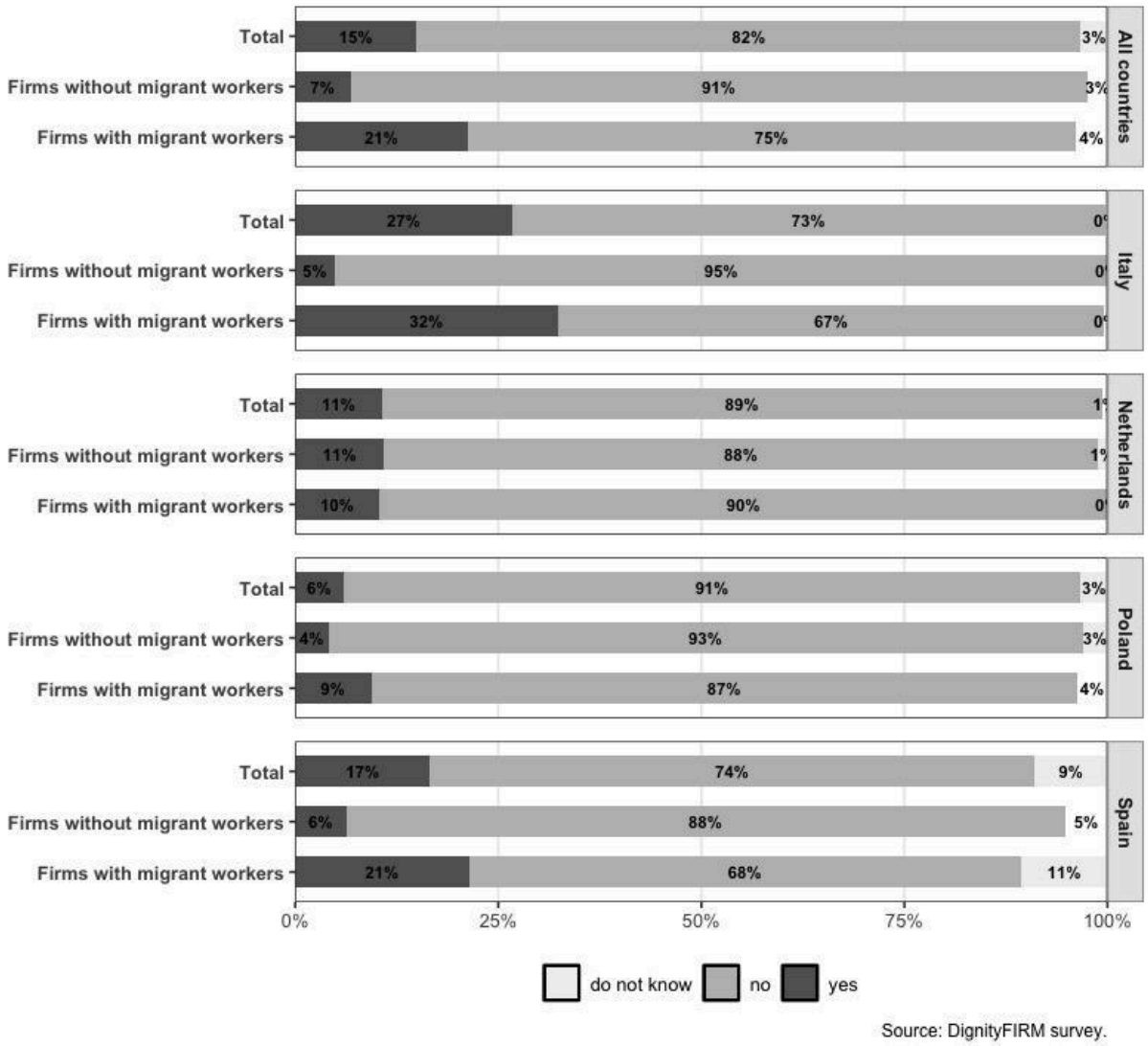

Fig. 7. Responses to the question on employment without fulfilling all formalities[1], by country and whether the firm employs a migrant, in %

Notes: responses to the question: "Did it happen in 2024 that at peak season or in other moments when quick help was needed, a new employee started working before all formalities were fulfilled?"

Source: DignityFIRM survey conducted in Spring 2025 (N=1,204, therein 686 with migrant workers and 518 without migrant workers).

The econometric analysis demonstrated that among all firm characteristics and employers' opinions, only one is consistently associated with a higher propensity to employ non-compliantly, whether natives or migrants: the respondent's acceptance of immoral

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behaviours. To some extent, perceived difficulties in recruiting natives coexist with a higher propensity to hire (natives or migrants) informally, but this result is difficult to interpret in the case of informal native employment: natives may be willing to work informally when they consider their employment as temporary and occasional. Firm size appears significant in the case of informal migrant employment, but not informal native employment, whereas the sector appears insignificant in both cases. Evidence from interviews offers some corroboration for this finding, though with an important nuance. In Poland, focus group participants noted that larger enterprises "cannot afford to risk their image by engaging in informal relations". In Spain, experts similarly observed that larger companies "tend to comply strictly with formal standards", while smaller establishments frequently operate in a grey zone where informality becomes normalised. In Italy, fieldwork revealed that many employers deliberately maintain a stable core of long-term formally employed migrant workers, reserving informal arrangements for short-term seasonal hires. These findings suggest that the preference for regular employment observed in the survey is unevenly distributed: it is strongest among larger firms, where reputational and legal risks act as effective deterrents, while smaller firms are more likely to treat informality as an operational necessity.

Among all possible reasons against employing migrants, only the costs of obtaining documentation appear significant for informal employment (see also Fig. 5). Although non-significant in the econometric analysis, the time required to obtain documentation is relatively frequently indicated as an obstacle to employing migrants compliantly in firms using non-compliant practices. The survey did not allow us to assess the potential impact of previous labour inspections, operational problems, or other past circumstances on informal employment. Nonetheless, in 2024, informal employment of natives or migrants was lower in firms that had undergone a labour inspection in 2022–2024 (17% of such firms) than in firms that had not been inspected (21%). The summarized results lead us to the conclusion that the mechanisms underlying informal employment differ between native and migrant workers, except for employers' sense of morality, which is a factor that can hardly be targeted by policy interventions.

The DignityFIRM survey included two indirect, experimental questions on non-compliant employment. One of them was a so-called list experiment, in which respondents were asked to indicate how many of a list of practices had occurred in their firm in 2024. The listed practices included both legal and illegal, with some elements having a positive aspect (granting bonuses to employees, having done investments), while some elements having a negative light (delays in payment, accidents, not taking holidays). As opposed to a so-called

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control group of respondents, selected randomly, two experimental groups had one item more to select: having employed a native worker (the first experimental group) or a migrant worker (the second experimental group) without fulfilling all required formalities. The average numbers of indicated practices in experimental groups were compared with the control group (Fig. 8). We discuss the results pointing to non-compliant employment of migrant workers. For Poland, the results are consistent with those obtained from direct questions, but point to a much larger scale of informality: approximately 31% of firms employing foreigners appear to be involved in informal employment of migrants, whereas in Spain, the scale of informality can be assessed as 48% in the case of employment of migrants. The pattern is therefore consistent with that inferred from direct questions, albeit at higher levels. For Italy and the Netherlands, by contrast, the experiment did not reveal informality with regard to migrant workers, that is, the results were either close to zero (Italy) or the average number of practices was lower in the experimental group than the control one (the Netherlands). The results for these two countries were statistically nonsignificant. This indicates that, in these country contexts, the experimental approach did not reveal the practices to which employers did not want to admit. Most probably, the employers did not trust the interviewers enough to admit to these practices.

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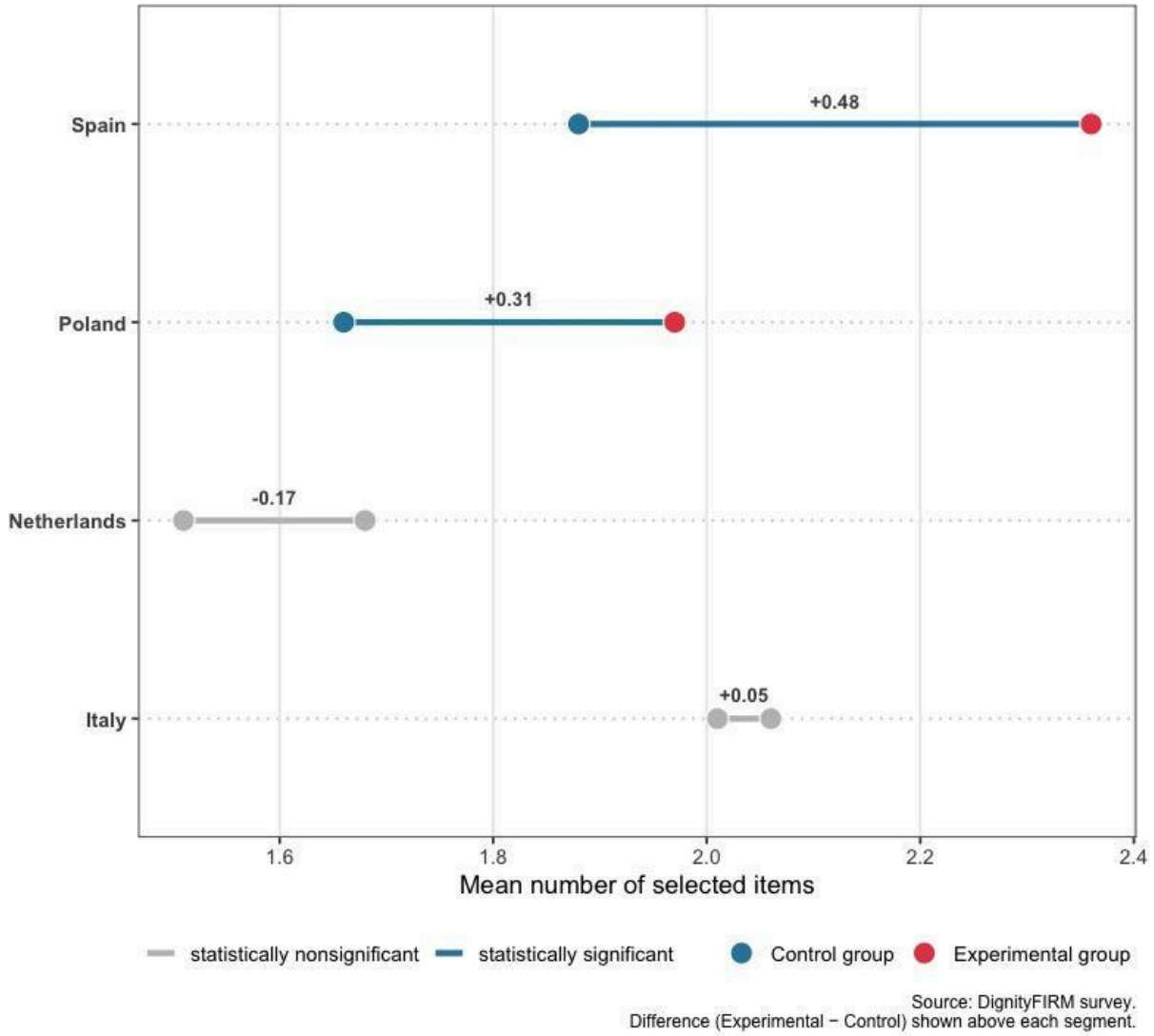

Fig. 8. The mean number of practices[1] that occurred in firms in 2024 (list experiment), by country, group of respondents[2] and whether the firm employs a migrant

Notes: [1] Values in the plot mean the difference between the number of practices selected by the experimental and control group, e.g., the value of 0.48 for Spain means that the experimental group selected on average 0.48 more practices than the control group; [2] Experimental group could choose an employment of native or migrant without all formalities, as opposed to control group.

Source: DignityFIRM survey conducted in Spring 2025 (N=1,204, therein 686 with migrant workers and 518 without migrant workers).

The other experimental approach consisted of presenting to respondents two hypothetical candidates with different characteristics, including the nationality of a potential employee,

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the formality of employment, the wage level, the duration of contract and potential fine for irregular employment. We discuss here respondents' preferences towards the nationality of a potential new employee (native or migrant) and the formality of employment (compliant or not). The results are presented only in the text.

When asked directly about their hiring preferences in a hypothetical situation, respondents did not reveal a clear preference towards migrants: 60% declared they do not consider whether candidates are natives or migrants, while 37% stated they primarily look for a native worker. These preferences varied across the four countries, but in none of them did the share of respondents preferring migrant workers exceed 10%. In the experimental question, however, preferences towards candidate's nationality were more pronounced: when asked to choose between a native and a migrant worker, only between 41% and 46% of respondents (depending on the country) preferred the native candidate. Among those who had declared a preference for native workers in the direct question, the choice of natives was even more frequent, as expected. More strikingly, respondents who had declared no nationality preference were, in practice, significantly more likely to choose the migrant candidate, suggesting that some employers who claim not to consider nationality may in fact prefer migrants when it comes to an actual hiring decision.

As for the formality of employment, respondents showed a clear preference for compliant employment, regardless of other characteristics of candidates, with 92% indicating such preferences in the Netherlands, followed by slightly lower rates in Italy (87%), Poland (83%) and Spain (81%). The experiment provided also evidence that employers are less likely to choose informal employment if the potential employee is a native rather than a migrant. As for the experiment result indicating that employers are less likely to choose informal employment in relation to native than migrant workers, focus groups participants suggested that this preference relates to higher bargaining strength of native employees and their long-term strategies, such as seeking stable, permanent employment to meet financial commitments including mortgage repayments. On the contrary, the focus group in Poland confirmed that for some migrants, informal employment is a result of family strategies, in which one spouse works formally and provides social insurance to all family members, while the other works informally, thus having a higher remuneration. Some migrants, especially those who arrived in Poland relatively recently, prefer to under-declare wages or to work based on civil law contracts for financial reasons. These individuals seek to earn as much as possible in the shortest timeframe, as they remit funds and/or plan to return to their country of origin. Sometimes, migrant workers do not even want to enter into a permanent employment contract. It should be noted, however, that these focus group findings reflect a

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specific migration context, in which migrants pursue short-term economic strategies rather than settlement ones. This pattern is more characteristic of Poland, where circular migration remains considerable, than of Italy or Spain, where migrants more often aim for long-term residence and integration.

All in all, our analysis demonstrates that employers' decisions to hire informally are dependent on, rather than independent of the nationality of the worker. We develop this issue in the next section.

4.5. Non-compliant migrant employment encompasses a variety of situations

The qualitative evidence collected across the four countries reveals that informal employment is not a uniform phenomenon but encompasses a wide spectrum of forms and circumstances driven by distinct factors (Table 3). In the DignityFIRM survey, direct questions about documents used in migrant employment revealed only marginal shares of potentially informal arrangements (below 4% in all countries), while indirect experimental methods pointed to a considerably larger scale: up to 31% of firms employing migrants in Poland and 48% in Spain. This gap between declared and experimentally estimated informality is itself evidence of the hidden and varied nature of non-compliant practices.

The most extreme form of informality involves workers employed entirely without contracts or social security contributions. In Spain, this is referred to as "trabajo en negro" and is most common among undocumented migrants, who have no legal access to formal employment. In Italy, focus group participants noted that fully undeclared work has been slowly decreasing over the last twenty years, partly as a result of controls and enforcement. In these cases, the key determinant is irregular migration status, which makes formal employment inaccessible and leaves workers with no alternative.

Type of informality	Situation	Determinant of informality
Fully undeclared employment („on black")	Work of migrants without regular status in Italy and Spain	Residence status
	Migrant work in Italy and Spain (particularly seasonal, temporary)	Inefficiencies of the admission system for migrants from abroad
Partially undeclared employment, other	Migrant work in Italy, Poland and Spain (Poland: abusing civil law contracts)	Cost calculations by employers and employees

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violations of labour regulations	Migrant work in Italy	Residence status being dependent on work contract
	Employment through agencies (all countries)	Cost calculations, no clear responsibility for working conditions, difficulties in controlling

Table 3. Types of informal work arrangements for migrants in countries under study.
Source: own elaboration based on interviews conducted in DignityFIRM.

More widespread and harder to detect is the partial under-declaration of hours, which is referred to as "grey" employment. This consists of formally registered employment relationships in which working hours, wages, or contributions are only partially declared. In Spain, focus group experts described this as "underreporting of working hours and disguised overtime, often through contractual arrangements designed to reduce costs". In Italy, focus group participants pointed to a constant increase in grey employment, where contracts provide legal cover while the majority of actual work occurs informally. In Poland, the most common form identified by focus group participants was under-declaration of working hours, sometimes reduced to as little as eight hours per month. A widespread practice consists of formally employing migrants on civil law contracts while hiding the actual number of hours worked, with only a fraction of hours declared. This arrangement reduces employers' costs while appearing compliant on paper. It also has consequences that extend beyond the workplace: migrants with few declared working hours may not meet the income thresholds required to obtain long-term residence status, a vulnerability we discuss further in the next section. Here, the primary drivers are cost pressures on employers, particularly in small firms, compounded by a degree of social acceptance of partial informality among both employers and workers.

A further, more specific situation arises at the intersection of migration status and labour law. When migrants with precarious legal status require a formal employment contract to renew their residence permit, they may accept accompanying informal arrangements as the price of legal cover. In Italy, focus group participants described workers who "accept grey employment contracts, with fewer hours declared than those actually worked, in order to obtain a residence permit". For these workers, the formal contract component is non-negotiable, yet it coexists with informal arrangements. The key determinant here is the

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legal link between employment contracts and residence permits, which creates migrant dependency on employers.

A structurally distinct pathway to informality runs through temporary work agencies and other intermediaries. The survey points to the scale of agency-mediated employment: in the Netherlands and Spain, temporary work agencies are involved in every second firm with migrant workers. In the Dutch sample, "don't know" responses to the question about migrant workers' health insurance coverage were significantly more frequent in firms using agency-mediated employment, which demonstrates how the responsibility for employment conditions is diffused in intermediary chains. In Poland, focus group participants identified agencies as the main "hotspots" of informal employment: agencies compete on price, under-declare working hours, and exploit civil law contracts in ways that circumvent employment protections, while employers avoid co-responsibility by claiming ignorance. In Italy, private cooperatives provide an all-in-one recruitment service that allows employers to "avoid bureaucratic burdens", but often operate with limited control. In the Netherlands, complex multi-layered agency chains make it impossible for workers to identify their actual employer, effectively dissolving accountability. Across all three countries, the circumstances of informality are similar: lack of transparency in intermediary chains, weak enforcement, and delegation of responsibilities by employers to agencies.

Finally, in Spain and Italy, focus group participants described a situation where informality is not primarily driven by cost savings or migrant vulnerability, but by the inability of formal regulations to accommodate highly seasonal and unpredictable labour demand. The survey corroborates this: the cost of documentation emerged as a statistically significant impediment in the econometric model, and firms employing migrants non-compliantly were considerably more likely to perceive these costs as high than compliant firms. This suggests that regulatory and administrative burdens are not merely perceived obstacles, but active drivers of non-compliance. As one focus group expert noted: "the rigidity of labor regulations makes regular hiring almost impossible for short-term needs and events with highly variable demand". In this context, informality becomes, as experts put it, "a survival strategy" for small businesses rather than a deliberate evasion of the law. The key determinant here is the mismatch between regulatory frameworks and sectoral demand patterns.

5. Consequences of non-compliant employment for migrants

Migrant employment in the F2F sectors is characterised by different forms of informality that entail labour market vulnerabilities. In all countries studied, migrants often accept non- or semi-compliant work arrangements because the access to legal status frequently depends on

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proof of employment or declared income. This creates a structural incentive for migrants to tolerate under-declared work and hours, non-standard working conditions hours and incomplete contracts, while employers benefit from reduced costs and increased flexibility of employment. At the same time, these arrangements reinforce systemic precarity: low wages, lack of social protection, exposure to unsafe working conditions, and limited access to housing, training, and union representation.

In some countries, like Poland, temporary work agencies play a central role in mediating migrant employment. Small and medium enterprises often rely on agencies that may provide incomplete or fictitious documentation, while large enterprises avoid informal arrangements due to reputational risks. Migrants frequently misidentify the F2F firms as their employers, and long chains of subcontracting obscure employers' responsibility for ensuring dignified working conditions. Focus group evidence shows that in Poland, migrants who strategically move between the country of origin and employment, may accept partial informality to maximise earnings over short periods. Over time, however, undeclared work undermines migrants' access to social insurance, health care and long-term residence permits, and can result in fines, deportation, or bans from re-entry. Enforcement gaps persist: agencies are rarely held accountable for working conditions, and firms often do not verify compliance despite their legal responsibility.

In Spain, labour inspections are under-resourced, enforcement is fragmented between different levels of government and agencies, and sanctions are often minor, allowing informal practices to persist. Migrant workers are frequently exposed to such forms of non-compliance, as under-reporting of working hours and wages, partial payments of wages outside official payrolls, and the use of seasonal or short-term contracts beyond their legal scope. These practices are closely related to migrants' dependence on employment in order to maintain their resident status. Precarity is strengthened by extreme working conditions, unsafe housing, and limited access to union representation or social protection.

In Italy informal employment is associated with bureaucratic rigidity, especially the legal dependency of the residence permit on a valid employment contract. Despite a comprehensive legal framework, the formal channels, such as quota and visa systems are delayed and quantitatively insufficient. In order to compensate for these inefficiencies, employers resort to informal intermediaries, landless cooperatives, and gangmasters who facilitate rapid recruitment, especially seasonally. Migrants, particularly asylum seekers accept these irregular arrangements to secure or maintain legal residence, but are subject to low wages, lack of social security, unsafe working conditions, and spatial and social isolation in overcrowded accommodations.

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In the Netherlands, temporary employment agencies dominate migrant recruitment, which complicate contractual obligations of employers. The so-called phase-based contract systems prevent many migrants from transitioning to stable employment, and frequent agency changes reset their status. Housing insecurity further compounds dependence on employers and intermediaries. In catering, flexible contracts, low wages, and the invisibility of specific professions, such as kitchen assistants, cleaners, and delivery workers, intensify migrant vulnerabilities. Migrants may accept semi-informal or self-employment arrangements to secure income and maintain eligibility for legal status.

Comparing the four countries reveals a common mechanism driving migrant vulnerability: dependence on a single employer for legal status, which entails further reliance on intermediaries, agreement to under-declared hours and wages, and weak enforcement of labour standards. However, country-specific regulatory frameworks play a role; in Poland and Spain, it is a weak enforcement and inefficient system of labour inspections, in Italy it is bureaucratic rigidity, while in the Netherlands, these are the layered, multi-tiered agency constructions that contribute to informal or semi-informal arrangements. Respondents admitted that migrants accept informality strategically, and it is rare that they do so out of ignorance about their rights.

Thus, non-compliant arrangements are not due to the absence of regulations, but rather the inefficiencies of enforcement instruments: depending on country context, formal recruitment channels, labour inspections, agency-mediated work arrangements. Migration governance plays a decisive role in providing sufficient number of work visas, transforming short-term into long-term status, and basing the residence rights on integration and employment history, rather than the current employment contract, so that migrants become less dependent on single employers. Next, official recruitment may constitute a bottleneck for legal inflows of labour and, consequently, increase employers' reliance on informal intermediaries and agencies, which are more prone to arranging employment outside the compliant framework. The participants of individual and focus interviews, especially in Italy, the Netherlands and Poland, evoked stronger licensing and supervision of temporary work agencies, and sanctioning of work brokers as necessary means to prevent migrant vulnerabilities. Potential regulations towards agencies should impose shared responsibility for dignified working conditions on firms (the service recipients). Another domain of enforcement relates to housing and living conditions; in Italy and Spain, overcrowded and often informal accommodation result in migrant isolation and strengthen the dependence on employer. In the Netherlands, the separation of housing and employment has reduced direct employer

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control over migrant workers, but has also generated a profit-oriented housing market that strengthens precarious economic situation.

5. Conclusions

The analysis conducted in WP6 of the DignityFIRM project reveals that migrant employment in the F2F sectors in Italy, the Netherlands, Poland and Spain is a structural phenomenon, driven primarily by an acute shortage of domestic labour and a systemic need for flexibility. This is largely a function of the specificity of the sectors and is often considered to be irreversible. The mixed methods approach, which combines statistical and econometric analyses based on the DignityFIRM survey with qualitative evidence, demonstrates that reliance on foreign workers stems from native populations' unwillingness to perform physically demanding, seasonal or low-paid roles, even in regions with high unemployment. Beyond mere labour supply, the study shows that migrants are often preferred because they are more willing than native workers to accept flexible employment, including irregular hours and weekend shifts, which are essential for agriculture, bars and restaurants. This willingness stems from various factors, including differences in wages and working conditions between countries of origin and destination, as well as different frames of reference, as suggested by the dual labour market theory, among others.

The findings of this study allow us to revisit the four hypotheses formulated at the outset of the research. (H1) postulated that the extent of informal employment is significantly related to the sector of activity and the size of the enterprise, and it cannot be rejected with respect to firm size: contrary to expectations, larger firms and firms that increased the scale of operations are more likely to employ migrants non-compliantly. (H2) predicted that enterprises employing natives informally would differ in characteristics from those employing migrants informally, and it cannot be rejected. The two groups of firms share only one common determinant: the employer's acceptance of unethical behaviours, while diverging on all others. Informal employment of natives is associated primarily with perceived labour shortages, whereas informal employment of migrants is additionally linked to firm size, rapid increase in the scale of operations, high perceived documentation costs, and in agriculture (in all countries) – the perception that migrants accept lower wages. (H3) postulated that the decision to employ formally or informally results from economic analysis and labour market constraints, and it cannot be rejected. Cost pressures, documentation burdens, and labour shortages all emerge as drivers of non-compliance. However, the employer's moral attitudes prove to be the only factor consistently associated with informality across all firm types, suggesting that the decision to employ informally is not purely economic but also reflects

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individual dispositions that are difficult to address through policy. (H4), which proposed that the decision on formality is more important to employers than the choice between a native and a migrant worker, is rejected. Experimental evidence shows that employers are significantly less likely to choose informal employment when the candidate is a native worker, which the qualitative evidence attributes to the higher bargaining power of natives and their long-term employment strategies. Decisions to hire informally are thus dependent on, rather than independent of, the nationality of the worker.

A key finding of the research presented is that informal employment is not a uniform practice, but rather a broad spectrum of non-compliant arrangements influenced by specific national and sectoral factors. While "black" work, which is entirely undeclared, definitely exists, particularly among undocumented migrants who lack any legal access to the formal market, the more widespread "grey" employment involves the under-declaration of working hours and wages, as well as breaches of insurance rules. Such practices, including the misuse of civil law contracts or B2B schemes in Poland, enable employers to reduce costs while maintaining an appearance of compliance. Furthermore, the study identifies temporary work agencies as significant "hotspots" for informality. Multi-layered subcontracting chains effectively dissolve employer accountability. They also obscure the true nature of working conditions (see also Gottlieb, Niediek 2026).

A profound mismatch between rigid regulatory frameworks and the unpredictable, seasonal demands of the F2F sectors further reinforces the mechanisms underlying non-compliance. The high costs and bureaucratic burdens associated with formal hiring make regular employment challenging for short-term needs, leading many employers to view informality as a necessary strategy rather than an intentional attempt to break the law. However, statistics show that this kind of approach is more common among employers who are generally more willing to accept unethical behaviour (as also selected literature on the subject: Luttmer, Singhal 2014; Packard 2012; Perry 2007).

Crucially, the study identifies a common mechanism driving migrant vulnerability in all four countries: legal dependency on a single employment contract for residence status. This dependency creates an imbalance of power, which may encourage migrants to tolerate exploitative conditions, such as under-declared wages and unsafe environments, in order to maintain their legal status. While some migrants may strategically accept partial informality to maximise their short-term earnings (a practice traditionally common among seasonal or circular migrants), such arrangements ultimately undermine their long-term access to social protection and permanent residency. They also have a negative impact on working conditions, safety and overall well-being (see also Niediek, Celoria, Gottlieb 2026).

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The presented findings suggest that the prevalence of irregular or informal work is not merely the result of absent regulations, but is also driven by the inefficiencies of enforcement instruments and the vulnerable position of migrant workers, which is sometimes, but not always, related to their legal status (Niediek, Celoria, Gottlieb 2026). Addressing these systemic issues requires a fundamental shift in migration governance by decoupling residence rights from current employment contracts and basing them on broader employment history and integration prospects instead. Furthermore, stronger licensing and supervision of temporary work agencies is needed, alongside the implementation of shared responsibility for dignified working conditions between agencies and the firms that rely on their services.

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Annex

Table A1. Individual and focus group interviews, by country

Country	Types of interviews
Italy	3 sectoral focus groups (1 in agriculture, 2 in catering) 69 individual interviews with stakeholders (employers, migrant organisations and public administration)
The Netherlands	2 sectoral focus groups (agriculture, catering) 35 individual interviews with stakeholders in agriculture 39 individual interviews with stakeholders in catering
Poland	3 sectoral focus groups (agriculture, catering, food processing) 49 individual interviews with stakeholders (employers, migrant organisations and public administration)
Spain	2 sectoral focus groups (agriculture, catering)

Table A2. Independent variables used in the multinomial logistic regression model.

Variables included in the model:

Dependent index variable (the combination of values from two dependent variables) consists of:	
Migrant	(dummy) Has at least one foreigner worked at your company for any period of time, on any terms, in 2024? yes / no
Peak	(dummy) Did it happen in your company in 2024 that at peak season or in other moments where quick help was needed, a new employee started working before all formalities were fulfilled? yes / no
Independent variables:	
Country	(dummy) Italy, the Netherlands, Poland, Spain
Sector	(dummy) Agriculture, food processing, catering
Number of employees	(numerical) How many employees in total – foreigners and native workers – worked at your company on any terms at the peak of high season in 2024?
Not enough natives	(dummy) In your opinion, would the fact that not enough native workers apply for the job a reason for employing foreign workers instead of native workers in your company? yes / no
Migrant flexibility	(dummy) In your opinion, would the fact that foreigners accept employment in more flexible forms a reason for employing foreign workers instead of native workers in your company? yes / no
Majority migrant	(dummy) In your opinion, would the fact that the majority of applications are foreign a reason for employing foreign workers instead of native workers in your company? yes / no

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High costs	(dummy) Do the costs of obtaining documentation to employ a foreigner speak against employing foreigners in your company? yes / no
Immorality	(composite index) Indicate your opinion about the following behaviors: a) Claiming state benefits which you are not entitled to b) Cheating on tax if you have the chance The behavior can never be justified / it should not be justified, but in certain cases, it may be / it can sometimes be justified, and sometimes not) / it should be justified, but in certain cases, it should not) / the behavior can always be justified
Confidence	(composite index) Tell me for each item listed how much confidence you have in them: a) The social security system b) The justice system c) The government A great deal / quite a lot / not very much / none at all
Increase in operations	(dummy) Did your company significantly increased its scale of operations or the size of its workforce in the last three years (2022-2024)? yes / no
Agriculture: low wages	(dummy) Only for firms in agriculture: In your opinion, would the fact that foreigners accept lower wages a reason for employing foreign workers instead of native workers in your company? yes / no

Variables excluded from the model as non-significant:

Turnover	(dummy) Has your company's turnover in 2024 increased, decreased or remained the same with respect to 2023? Increased / remained at the same level / decreased / do not know
Innovation	(dummy) Did your company introduced technological innovations enabling work automation in the last three years (2022-2024)? yes / no
Low wages	(dummy) In your opinion, would the fact that foreigners accept lower wages a reason for employing foreign workers instead of native workers in your company? yes / no
Work better	(dummy) In your opinion, would the fact that foreigners work better a reason for employing foreign workers instead of native workers in your company? yes / no
Time	(dummy) Do the time it takes to obtain documentation to employ a foreigner speak against employing foreigners in your company? yes / no

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Table A3. The results of the multinomial logistic regression model

Variable	RR	Std. error	z	P>|z|	95% CI	
Employs only natives, employs informally (Ref. Employs only natives, employs only formally)						
Country (ref. Spain)						
Italy	2,409	0,580	3,650	0,000	1,503	3,861
Netherlands	0,906	0,199	-0,450	0,653	0,589	1,393
Poland	0,495	0,107	-3,240	0,001	0,324	0,758
Sector (ref. Agriculture)						
Food processing	0,885	0,169	-0,640	0,523	0,609	1,287
Catering	1,456	0,271	2,020	0,043	1,011	2,096
Number of employees	1,049	0,007	7,540	0,000	1,036	1,062
Not enough natives	2,314	0,418	4,640	0,000	1,623	3,297
Migrant flexibility	3,901	0,850	6,250	0,000	2,545	5,978
Majority migrant	2,322	0,647	3,020	0,003	1,345	4,010
High costs	0,519	0,127	-2,680	0,007	0,321	0,838
Immorality	0,908	0,053	-1,650	0,099	0,810	1,018
Confidence	0,984	0,037	-0,420	0,671	0,913	1,060
Increase in operations	1,097	0,242	0,420	0,677	0,711	1,691
Agriculture: low wages	1,004	0,423	0,010	0,992	0,440	2,291
Constant	0,403	0,174	-2,110	0,035	0,173	0,938
Employs migrants, employs only formally (Ref. Employs only natives, employs only formally)						
Country (ref. Spain)						
Italy	0,277	0,193	-1,840	0,065	0,071	1,084
Netherlands	0,969	0,415	-0,070	0,941	0,419	2,241
Poland	0,487	0,218	-1,610	0,108	0,203	1,170
Sector (ref. Agriculture)						
Food processing	0,785	0,319	-0,600	0,551	0,354	1,740
Catering	1,208	0,449	0,510	0,612	0,583	2,503
Number of employees	1,010	0,014	0,730	0,466	0,983	1,039
Not enough natives	2,144	0,798	2,050	0,040	1,034	4,446
Migrant flexibility	1,650	0,800	1,030	0,302	0,637	4,270
Majority migrant	1,259	0,846	0,340	0,732	0,337	4,697
High costs	0,217	0,165	-2,010	0,044	0,049	0,960
Immorality	1,232	0,113	2,270	0,023	1,029	1,475
Confidence	0,916	0,076	-1,060	0,288	0,779	1,077
Increase in operations	1,445	0,622	0,850	0,393	0,621	3,359
Agriculture: low wages	0,657	0,734	-0,380	0,707	0,074	5,867
Constant	0,114	0,100	-2,480	0,013	0,020	0,636

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Employs migrants, employs informally (Ref. Employs only natives, employs only formally)						
Country (ref. Spain)						
Italy	2,798	0,840	3,430	0,001	1,554	5,040
Netherlands	0,370	0,138	-2,660	0,008	0,178	0,769
Poland	0,177	0,065	-4,740	0,000	0,086	0,362
Sector (ref. Agriculture)						
Food processing	1,088	0,333	0,270	0,784	0,597	1,981
Catering	2,015	0,602	2,340	0,019	1,122	3,620
Number of employees	1,072	0,010	7,700	0,000	1,053	1,091
Not enough natives	2,289	0,554	3,420	0,001	1,424	3,678
Migrant flexibility	4,159	1,108	5,350	0,000	2,467	7,012
Majority migrant	4,203	1,318	4,580	0,000	2,273	7,772
High costs	0,857	0,260	-0,510	0,610	0,473	1,552
Immorality	1,229	0,091	2,780	0,005	1,063	1,422
Confidence	1,101	0,058	1,830	0,067	0,993	1,221
Increase in operations	1,743	0,493	1,960	0,050	1,001	3,036
Agriculture: low wages	3,845	1,815	2,850	0,004	1,525	9,699
Constant	0,008	0,005	-7,510	0,000	0,002	0,029
Number of obs = 1,204 LR chi2(42) = 564.28 Prob > chi2 = 0.0000 Log likelihood = -1086.845 Pseudo R2 = 0.2061						

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Deliverable information

Schedule Information	
Title and number	**Causes and consequences of irregular employment in the F2F sectors**
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DignityFIRM WP6

Causes and consequences of irregular employment in the F2F sectors

Cross-national comparative report

ABOUT DignityFIRM

Towards becoming sustainable and resilient societies we must address the structural contradictions between our societies' exclusion of migrant workers and their substantive role in producing our food.

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