Digital labour platforms and migrant workers

Analysing migrants' working conditions and (over)representation in platform work in Europe

Wouter Zwysen and Agnieszka Piasna

Working Paper 2024.06

etui.

Digital labour platforms and migrant workers

Analysing migrants' working conditions and (over)representation in platform work in Europe

Wouter Zwysen and Agnieszka Piasna

Working Paper 2024.06
european trade union institute

Wouter Zwysen and **Agnieszka Piasna** are senior researchers at the European Trade Union Institute (ETUI) in Brussels, Belgium. Contact: wzwysen@etui.org; apiasna@etui.org

Cite this working paper: Zwysen W. and Piasna A. (2024) Digital labour platforms and migrant workers: analysing migrants' working conditions and (over)representation in platform work in Europe, Working Paper 2024.06, ETUI.

Brussels, 2024

Print: ETUI Printshop, Brussels

D/2024/10.574/11
ISSN: 1994-4446 (print version)
ISSN: 1994-4454 (electronic version)

The ETUI is co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the ETUI. Neither the European Union nor the ETUI can be held responsible for them.

Contents

1. Introduction

Working for labour platforms is still relatively rare, but the generally poor working conditions and the impact on the world of work are the subject of much debate (Urzì Brancati et al. 2020; Piasna et al. 2022; Lenaerts et al. 2023). Although data are scarce, there is a general consensus that migrants are overrepresented in this type of work (van Doorn and Vijay 2021; Piasna et al. 2022; Kowalik et al. 2023). Platforms may well provide migrants with work opportunities, especially shortly after arrival, due to relatively lower entry barriers, including formal requirements, compared to the traditional economy. However, the entry of these more vulnerable groups into a segment of generally poor quality jobs poses serious challenges in terms of their potential exploitation and the longer-term negative effects on labour market integration and prospects (Lam and Triandafyllidou 2022; Kowalik et al. 2023).

The extent to which platforms rely on migrants and create the conditions for exploitation compared to other workers is an important question with clear policy implications. However, a lack of representative data has thus far limited understanding of the extent of migrants' involvement in platform work and their working conditions in relation to non-migrant groups. This paper addresses this gap by analysing the presence of migrants and their work patterns in the European platform economy, using representative cross-national data for 14 European Union Member States collected in 2021.

The analysis has three main objectives. First, it reveals the extent to which migrants are indeed overrepresented in platform work and whether this holds for different types of platform. Secondly, it explores whether there are substantial differences between migrant and non-migrant platform workers in their experiences with the platform economy in terms of earnings, hours worked and the use of one or several platforms (multi-apping). Third, by focusing on variations between migrants with different characteristics, it sheds some, primarily indirect, light on the mechanisms that guide migrants towards platform work.

2. Conceptual framework: migrants and the platform economy

2.1 Migrant overrepresentation in platform work

Platform work is generally characterised by clearly delineated tasks carried out by a worker on behalf of a client, with the matching between the two handled by a digital platform through a series of algorithms. Platform work is hailed on the one hand as a new, more inclusive form of work while, at the same time, being denounced as exploitative and a version of old, precarious, albeit technically advanced, forms of work organisation (for a discussion, see Piasna and Zwysen 2022). Policy debates mainly concern the regulatory framework, with much attention being paid to whether these platforms are actually employers.

In-depth qualitative studies have repeatedly pointed to the very high prevalence of migrant workers – especially from more vulnerable groups such as those without the right to work and those who have recently arrived – in different types of platform work, particularly in the more precarious forms such as care and cleaning, but also in ride-hailing and food delivery (see e.g. Berger et al. 2019; van Doorn and Vijay 2021; Lam and Triandafyllidou 2022). This is partly confirmed by quantitative studies that show an overrepresentation of migrants in the platform economy (e.g. Urzì Brancati et al. 2020; Jeon et al. 2021; Piasna et al. 2022; Kowalik et al. 2023). This raises the question of what drives this overrepresentation and whether platforms provide migrants with work opportunities that facilitate further integration.

The literature offers two main possible explanations for why platforms may be particularly attractive to migrants and thus suggests there are two main pathways that may lead to a greater take-up of platform work among them.

First, migrants have fewer opportunities in the traditional labour market and this lack of alternatives makes platform work more likely due to its lower entry barriers (van Doorn et al. 2022). It is relatively easy to start working on platforms, with a straightforward registration that typically replaces a more rigorous recruitment process and which has less emphasis on language skills or prior experience as well as a lower administrative burden (van Doorn and Vijay 2021; Holtum et al. 2022). Such low barriers offered by platforms may be particularly important for migrants and minorities who face different and usually much more pronounced barriers in the labour market. Migrants may face legal hurdles limiting their right to work or the recognition of their

qualifications. Further, migrants may face language or cultural barriers making it more difficult to find work, and this can be alleviated by the platform economy (Dustmann and Fabbri 2003; Zwysen 2018; Zwysen and Demireva 2018). Third, migrants are also more at risk of discrimination and disadvantage on the labour market limiting their opportunities (Zwysen et al. 2021). Moreover, due to the transnational nature of many platforms and the similarities in their user interface and operation, many migrants may already have experience of working on platforms in their home countries and feel comfortable using them (van Doorn and Vijay 2021; van Doorn et al. 2022). Relatedly, it may be the case that migrants rely more on networks of other migrant workers who already work in the platform economy and, through these networks, find themselves more likely to work there (van Doorn 2017).

Second, migrants may have a greater need for flexibility in terms of working and employment arrangements due to the particularities of their personal situation (Lam and Triandafyllidou 2022). Platforms allow for flexibility in the time and place of work which may be especially important for migrants who often have to fit work around study or other commitments, restricting their ability to work standard hours. In an interesting study of Uber drivers in Australia, Holtum et al. (2022) find that migrants experience such flexibility very differently to native-born workers: flexibility is a necessity for migrants, enabling them to fit platform work around other commitments such as studying or job search; however, being more economically dependent on platform work, they in fact experience greater constraints on notional flexibility. In contrast, non-migrants tend to use platforms for sporadic work and to earn some extra money and, as a result, are able to organise platform work in a more flexible way according to their needs.

There are several theoretical mechanisms that account for the importance of low entry barriers and flexibility in platform work among foreign-born populations. While not all are explicitly tested in this analysis, there are distinct hypothesised pathways through which specific migrants may be more likely to rely on platforms due to fewer opportunities in the outside labour market.

First, we expect differences between migrants depending on their individual opportunities in the labour market. While there are several relevant aspects of heterogeneity among migrants, this paper focuses on two in particular that would indicate differences in opportunities in the traditional labour market; namely, educational attainment and whether workers report being employed in the traditional economy. Migrants may encounter greater difficulty in having their qualifications recognised and are often overqualified for their positions (Damas de Matos and Liebig 2014). For this reason, we expect the mechanism of having fewer alternatives to be more important for highly skilled migrant workers, especially if there are options to perform high-skilled work through remote work platforms. In addition, those workers who do not already have an offline job can be considered generally to have fewer employment alternatives. We would then expect a higher share of migrants

that are not employed in the traditional economy to engage in platform work compared to the native-born population.

Second, migration regimes are expected to play a role as some migrants, especially from outside the EU and depending on the channel of entry, face restrictions on their right to work or the presence of other regulations affecting them. Such barriers may make it more difficult to find work in the traditional labour market and may render migrants more in need of the working time flexibility offered by platforms. While platforms often check work permits, it is not unheard of for platform workers to share or lend accounts, allowing those without permits to work through the app, possibly by paying a fee to the account holder. Lax oversight by platforms may therefore make it easier to circumvent policies and regulations (Altenried 2021; van Doorn et al. 2022).

Third, migrants may be at a disadvantage in the traditional labour market due to various forms of ethnic discrimination (Lancee 2021; Zwysen et al. 2021). They may also lack country-specific human capital such as language skills or recognised qualifications (Dustmann and Fabbri 2003; Zwysen 2018). In such cases platform work may provide somewhat more opportunities as there is expected to be less discrimination in access to work, although there may very well be discrimination in client evaluations of their work.

Finally, in the host country migrants are, on average, embedded in social networks that are smaller and less useful for job search compared to non-migrants, reducing their opportunities in the traditional labour market (Granovetter 1995; Giulietti et al. 2013). This may again put them at a disadvantage in finding work in the traditional economy. However, there are variations between migrants depending on their level of embeddedness in such networks, both those that are ethnically specific and more broadly (Patacchini and Zenou 2012; Mahuteau and Junankar 2016; Zwysen and Longhi 2018). We therefore expect that migrants who have access to more developed and extensive networks are less likely to be overrepresented in platform work.

2.2 Types of platform work

Most of the literature concerning migrants engaged in platform work has focused on different types of so-called on-location work, particularly with regards to driving or delivery but also cleaning or personal services (e.g. van Doorn 2017; Altenried 2021; Holtum et al. 2022; van Doorn et al. 2022). Much less research has focused on other types of platform work, particularly remote work. This focus is understandable as in-person platform workers are, on the one hand, generally easier to recruit for analysis as they are more visible, while they may also be more in touch with each other or actually associate online or in person (Vandaele 2021). At the same time, on-location work may be more appealing to the migrant workforce given the generally lower skill profile of this work and the lower language requirements. However, remote

platform work may also be attractive as there is a much wider labour market, meaning language and cultural barriers with the host country are likely to matter less. Second, for higher-skilled migrant workers, the possibility of carrying out professional work through remote labour platforms may be a more attractive position, particularly if different discriminatory barriers make it more difficult to see qualifications rewarded in the traditional labour market.

This paper considers several different types of platform work, performed both on-location and remotely, and thereby considerably expands the focus of earlier research.

2.3 Outcomes in terms of working conditions and employment patterns

The second major issue, apart from what drives a higher participation of migrants in the platform economy, concerns outcomes from platform work; thus, whether it provides foreign-born populations with decent work opportunities, or at least comparable standards to non-migrant workers. While platforms can make it easier for migrants to find work and earn money, they can also damage their long-term prospects by providing few opportunities for upward mobility, skills or broader social network development, and through the possible effects of discrimination. In their work, van Doorn and Vijay (2021) refer to this as the Janus face of platforms that initially welcomes newcomers but then rejects, deceives and disappoints them. It is also linked to the concept of predatory inclusion that is a part of racial capitalism – while the system appears to be inclusive and open, it results in a racialised form of oppression of the most vulnerable (McMillan Cottom 2020).

Therefore, when working on platforms, migrants may still face disadvantage. While ethnic or racial discrimination might be expected to have less of an impact in platform work through the role of algorithms that are ostensibly neutral, it can still be reinforced where the ratings and customer feedback fed into them are discriminatory. In a recent Polish study, Kowalik et al. (2023) find that migrants are not only overrepresented on labour platforms, but they also tend to have lower quality jobs than their non-migrant counterparts – in particular, working long and unsocial hours and with less work-life balance. Moreover, while finding work through platforms does not require social networks, this work can create a vicious circle by hindering the accumulation of skills and social contacts found through work in the country of residence which, in turn, further hinders career progression over time (Damas de Matos 2017; Zwysen 2018). This point is not directly addressed in this paper, but platform work may well turn out to be disadvantageous to recently arrived platform workers.

The aim of this paper is, therefore, first to examine the prevalence of platform work and its various types among migrants, taking into account differences

in individual characteristics compared to the native-born population. The second aim is to analyse whether foreign-born workers experience platform work differently and thus report different working conditions than the native population once they engage in platform work.

3. Data and methods

3.1 The Internet and Platform Work Survey

This paper uses data from the spring and autumn waves of the 2021 ETUI Internet and Platform Work Survey (IPWS) (Piasna et al. 2022). This is a cross-nationally representative survey conducted in 14 European countries, with generally at least 1,750 respondents surveyed per country, to investigate the prevalence of internet and platform work, conducted by Ipsos using random digit dialling. While this is the best possible resource to analyse the prevalence of platform work across EU countries, there are some limitations for this particular study – namely that the sample may not include recent or undocumented migrants as they might have been less likely to be contacted or to respond when contacted. As the survey instrument was carried out in the language of the country, those migrant workers who did not speak the language could not be included. The estimates reported in this paper are, therefore, likely to underestimate the amount of migrant workers. The issues outlined here are discussed in greater detail in the section on limitations and robustness.

The survey includes a series of questions on different types of digitally-mediated work. Respondents are asked which application or website they use for each task and these are coded as labour platforms or not. There are two types of remote tasks: clickwork – generally small and unskilled tasks ('remote clickwork'); and higher-skilled projects carried out online such as IT tasks, copy editing or other creative types of work ('remote professional'). On-location work is also divided into two types: driving work, which involves either delivering food or goods, or ride-hailing ('driving'); and other on-location work which involves work in the private sphere such as handyperson activities, cleaning or childminding ('other on-location'). Respondents who report doing other tasks not elsewhere classified were grouped with other on-location work. This paper focuses on the prevalence of platform work – which is defined as having done at least one of these four different tasks for pay over the internet in the 12 months prior to the survey.

The main dependent variables are the prevalence of platform work and its working conditions outcomes. Prevalence is measured by whether someone has done any type of platform work in the past year, making a distinction between the four types specified above. Measures of working conditions include how many hours per week respondents worked on platforms; how much they earned monthly (in euros) from platforms on the last occasion

they did it;[1] and the share of platform earnings in their annual income.[2] A final indicator of engagement in platform work is the number of platforms used by respondents who were asked to indicate which applications and platforms were used for each task, making it possible to capture whether more than one response was given for a task as well as whether more than one task was indicated. These variables are also broken down by the four types of task.

In this paper, migrants are defined as those born outside the country of residence, and their experiences are contrasted with those of the native-born, or majority, population. Demographic and socioeconomic characteristics are accounted for including sex; age (18-24, 25-34, 35-44, 45-54, 55-65); urbanity (big city, town, rural); the highest qualification attained (at most lower secondary, post-secondary non-tertiary or upper secondary, tertiary); whether a child aged 12 or lower lives in the household; and main employment status (employed, unemployed, student, other inactive). However, one further limitation of the study is that migrants' length of stay in the country of residence cannot be accounted for.

3.2 Characteristics of workers

Table 1 shows the composition of the overall sample by sociodemographic details and type of work, as well as the split by migrant status and existence as platform or non-platform worker.

There are 326 migrant platform workers in the sample, out of 4,367 migrant respondents, corresponding to 7.5%. Out of the 32,115 non-migrant respondents, 2,175 are platform workers, corresponding to 6.8%, so the proportion is somewhat less.

Among the native-born majority, women are less likely to be platform workers than men; among migrants there is no such difference.

The share of third country migrants is somewhat higher among platform workers than among non-platform workers, which could indicate that those who have fewer traditional opportunities are more likely to enter platform work. Table A1 in the appendix further describes the characteristics of migrants born in the EU and those born in third countries. Third country

1. People were asked for the exact amount. If they did not know or did not want to respond they were requested to indicate in which band the amount fell – less than 5% of median; 5-20% of median; 20-60% of median; 60% up to the median; or more than the median – with the median amount indicated for each country. Midpoints were taken and measured against the exact amount of the country median. As there are some outliers the earnings were winsorised at the highest percentile.
2. Measured as almost none, around 10%, around 25%, around 50%, around 75%, and almost all or all income. These values were brought to the midpoint of the scale and treated continuously.

migrants are rather more likely to be women and are generally younger and lower qualified than EU-born migrants. They more often live in big cities and are less likely to be employed. In the remainder of this description, these two groups of migrants are considered jointly.

There is a clear age pattern among non-migrants in which the younger are overrepresented among platform workers and the older under-represented. While there are also more young migrant platform workers, there is a large middle-aged group as well.

With regards to age and gender, we thus see that the difference between platform and non-platform workers is smaller among migrants than among non-migrants, which points to the probability of doing platform work being more common regardless of demographics. Regarding education, however, there is a stronger selection among migrants under which 46% of platform workers have university degrees compared to 33% of non-platform workers; while for the native-born majority, these figures are, respectively, 37% and 29%. Migrant platform workers are also more likely to have a young child living with them than the native-born majority. Among both migrants and non-migrants, platform workers are more likely to live in a big city or suburb, although this difference is somewhat lower as migrants are more likely to live in big cities anyway.

Among the native-born, platform workers are a little more likely to be employed in the traditional economy and especially to be students compared to non-platform workers. Among migrants this is rather different, as the share of the employed is lower among platform workers than non-platform workers: 65% of migrant platform workers report being employed compared to 75% of non-migrant platform workers. A higher percentage of migrant platform workers is unemployed, which generally reflects the higher unemployment rate among migrant respondents: 16% for platform and non-platform workers alike, compared to 9.5% of native-born platform workers. Further, migrant platform workers are also more likely to be students (11%) than non-platform migrant workers (5%).

Regarding the type of platform work, there is some difference: 47% of platform workers are remote clickworkers, followed by 26% doing driving, 21.5% doing other on-location work and 19.2% doing remote professional work. Among migrant platform workers the largest group do ride-hailing or delivery work (42.8%) followed by clickwork (37.8%), while a substantially smaller group carries out remote professional work (13.5%). As people can and often do perform several types of platform work these percentages do not add to 100.

On average, a native-born platform worker earned 307 euros in the last month compared to 365 euros for a migrant. For the former, this made up 20% of their annual earnings on average compared to 23% for migrants. This reflects some country differences, with a greater share of migrants living in countries with higher wages overall. Both groups worked around

12 hours in the last week. Finally, slightly over half of platform workers work simultaneously on different platforms, showing multi-apping to be a very common practice.

Table 1 **Description of the sample by native-born or migrant status**

		Native-born		Migrant	
	Overall	Non-platform	Platform	Non-platform	Platform
N	36,657	29,940	2,175	4,041	326
Share women	49.8%	50.2%	45.3%	48.8%	48.5%
Born in country of residence	87.1%	100.0%	100.0%	0.0%	0.0%
Born elsewhere in EU	4.4%	0.0%	0.0%	34.2%	30.4%
Born in third country	8.6%	0.0%	0.0%	65.8%	69.6%
Age: 18-29	19.8%	18.8%	32.0%	21.6%	29.0%
Age: 30-49	45.4%	44.6%	44.0%	50.2%	56.2%
Age: 50-65	34.8%	36.6%	23.9%	28.3%	14.8%
Share with child under 12	32.0%	32.0%	32.2%	31.6%	37.1%
Education: low	17.3%	16.4%	10.7%	26.1%	14.6%
Education: intermediate	52.8%	54.6%	52.6%	41.3%	39.2%
Education: high	29.9%	29.0%	36.7%	32.6%	46.2%
Dummy: big city or suburb	42.6%	41.0%	53.1%	48.6%	56.1%
Share employed	70.4%	70.6%	74.5%	68.1%	64.9%
Share unemployed	9.8%	8.8%	9.5%	15.9%	16.3%
Share student	5.8%	5.7%	9.8%	4.9%	11.0%
Share inactive	14.0%	14.9%	6.3%	11.2%	7.8%
Platform – remote clickwork	2.4%	0.0%	47.4%	0.0%	37.8%
Platform – remote professional	1.0%	0.0%	19.2%	0.0%	13.5%
Platform – driving	1.5%	0.0%	25.7%	0.0%	42.8%
Platform – other on-location	1.1%	0.0%	21.5%	0.0%	20.1%
Platform work: earnings (in euros)	317		307		365
Platform work: share of annual earnings	21%		20%		23%
Platform work: hours worked	11.9		12.1		11.1
Platform work: share who multi-app	52.4%		52.1%		57.3%

Note: weighted averages of IPWS sample.
Source: IPWS.

3.3 Methods

This paper focuses on migrant platform workers. First, it shows descriptively the differences between native-born and migrant groups. Second, the probability of having done platform work in the last 12 months is modelled by a logistic regression of doing platform work – of different types – on migrant status, controlling for other demographic and socioeconomic characteristics as well as country and wave, and weighted to be representative of the population aged 18-65. The aim of this analysis is to show the extent to which migrants are more likely to work on platforms than otherwise similar non-migrants.

In the overall sample, the power to detect a difference of one percentage point in the probability of doing platform work, given our sample size of 32,115 native-born and 4,367 migrants, with a standard deviation of 0.25 and alpha level of 0.05, is 0.70. A larger difference of two percentage points would almost certainly be picked up given the power level of 0.99. This indicates that the sample should be of sufficient size to detect meaningful differences in the probability of doing platform work between migrants and the native-born majority.

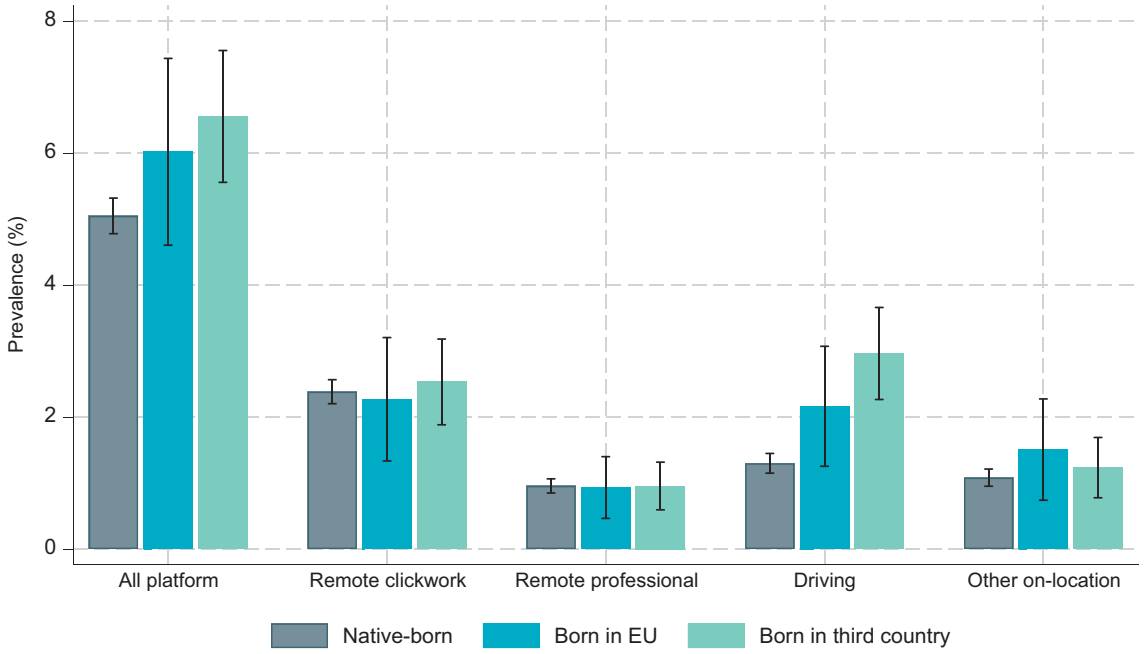
We also estimate the differences in the outcomes of platform work in terms of hours worked, earnings, share of income and the incidence of multi-apping (using more than one platform per type of work), between migrant and native-born platform workers. These are estimated through weighted regression models, linear for the continuous outcomes and binary logistic for multi-apping, among the group of platform workers.

4. Results

4.1 Prevalence of platform work among migrants

The first aim of this study is to map the prevalence of platform work across different groups of workers in order to assess the extent of overrepresentation of migrants in this type of labour market. The differences are inspected more closely with a consideration of variations by type of platform work and the sociodemographic characteristics of workers.

Figure 1 **Prevalence of any platform work, and of the different types, by migration status**

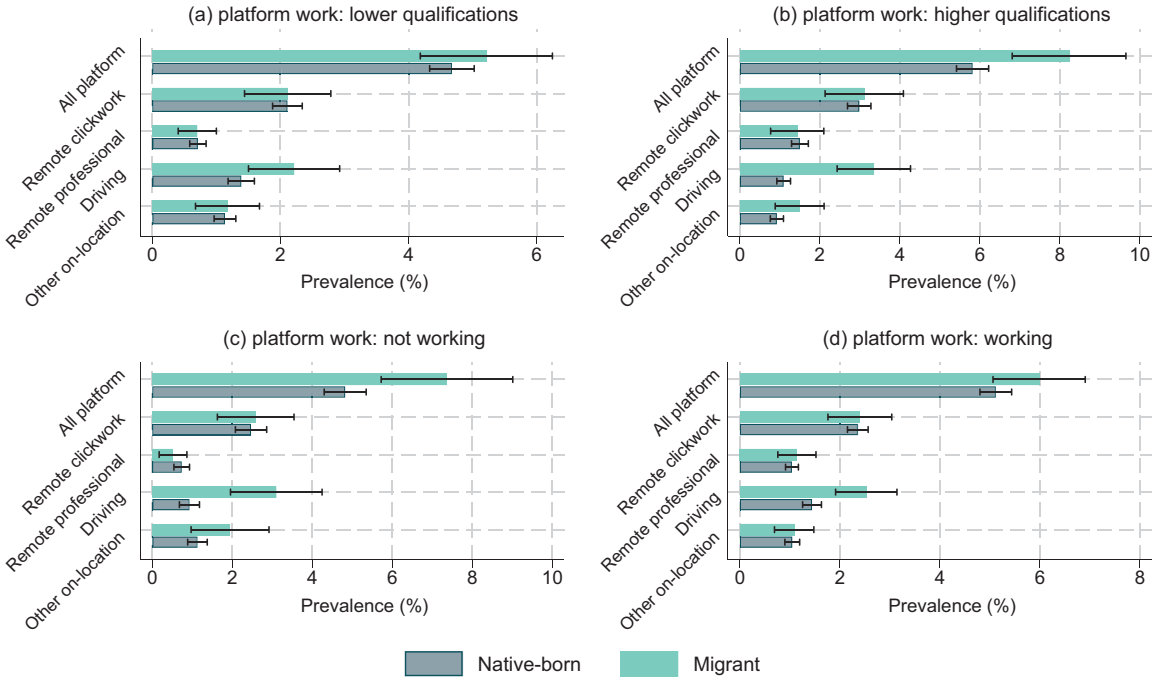


Note: weighted share of platform work with 95% confidence interval by type of platform work, controlling for country fixed effects.
Source: IPWS.

Figure 1 shows the prevalence of platform work for native-born, EU migrants and third country migrants. On average, around 5.5% of the working age population reported having done platform work in the 12 months prior to the survey. This proportion is generally higher among migrants and is highest among third country migrants of whom about 7% are platform workers.

Moreover, these differences are sector specific and mainly observed in ride hailing and food delivery. In particular, third country migrants are about twice as likely as the native-born majority to do platform work involving driving. There is little overrepresentation of migrants in other types of platform work.

Figure 2 **Take-up of platform work by migration status, education and labour market status**



Note: weighted share of platform work with 95% confidence interval by type of platform work by education (a and b), and whether or not workers report being employed in the traditional economy (c and d), controlling for country fixed effects.
Source: IPWS.

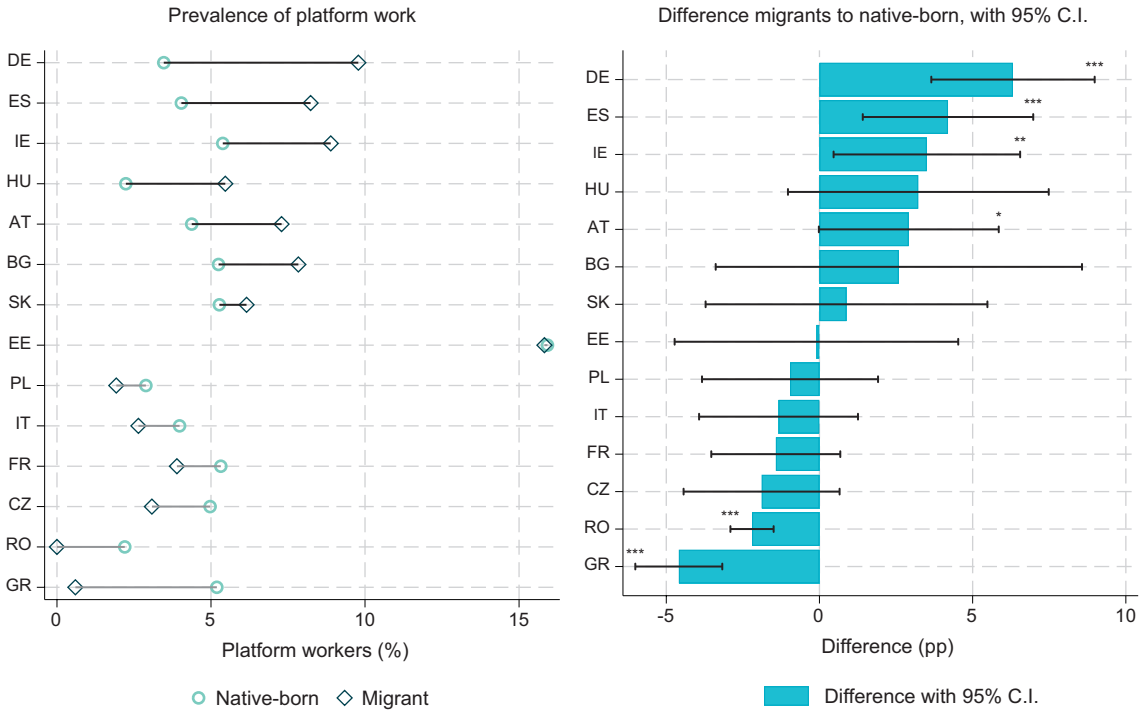
There are also some notable differences in engagement in platform work between workers with similar migrant backgrounds but different educational attainment and labour market status (Figure 2).

The overrepresentation of migrants in platform work is mainly driven by those with tertiary education, who are 2.2 percentage points more likely to do platform work compared to the native-born majority. This may indicate that migrants with tertiary education are relatively more likely to see their qualifications discounted in a host country and experience greater difficulty in finding work that matches their level of education. For them, platform work may be more appealing due to the lower barriers and the expectation that it will be temporary (van Doorn et al. 2022).

In terms of employment status, patterns among migrants are different from those among the majority population. For the latter, platform work is more likely to be done by those who are employed in the traditional economy,

although this difference is very small and not statistically significant in our data. However, for migrants those who are not employed are much more likely to do platform work: a difference of around 3 pp. This finding is consistent with previous work showing that platform work is more likely to be taken up by migrants in place of, rather than in addition to, offline opportunities (Altenried 2021). It also supports the idea that platform work is particularly relevant for those with fewer opportunities.

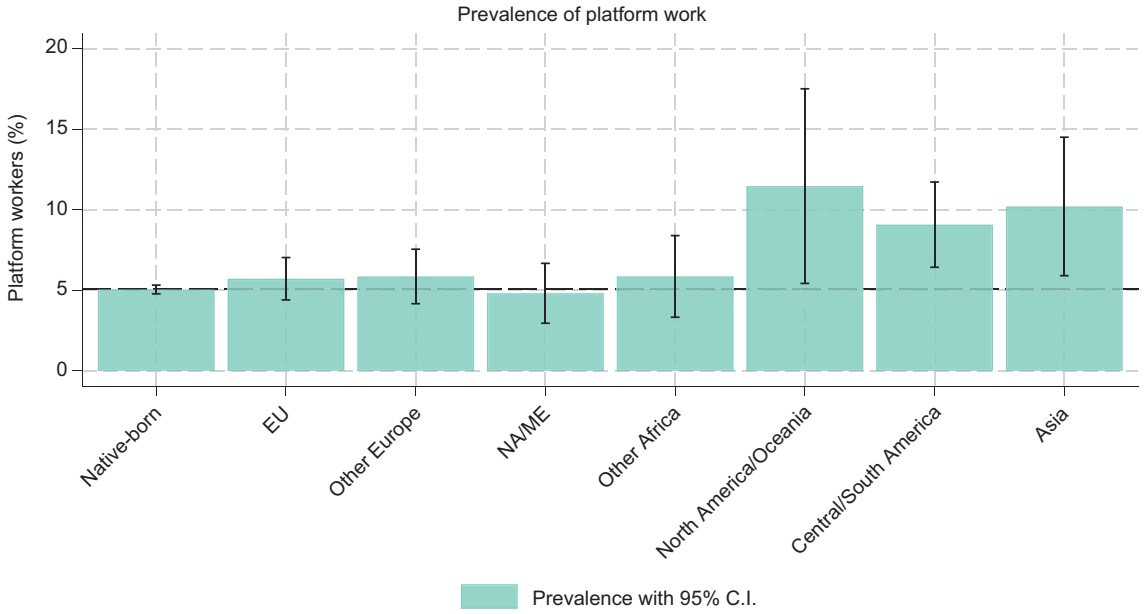
Figure 3 **Platform work among migrants and the native-born, by country**



Note: left panel shows the share of platform workers (%) among the native-born and migrant populations of working age, while the right panel shows the weighted difference in percentage points with 95% confidence interval.
*: p<0.1; **: p<0.05; ***: p<0.01.
Source: IPWS.

There are further substantial differences between countries, as shown in Figure 3. On average, migrants are particularly more likely to engage in platform work in Germany, Spain, Ireland and Austria (where the gaps are statistically significant), as well as in Hungary, Bulgaria and Slovakia (where the differences are not statistically significant, perhaps due to the small migrant populations). In contrast, migrants are less likely to engage in platform work than the native-born in Greece and Romania (statistically significantly so). In several countries, however, there is no statistically significant difference.

Figure 4 **Prevalence of platform work by region of origin (%)**



Note: the figure shows the share of platform workers in the working age population by geographical region of birth, with 95% C.I., controlling for country.
Source: IPWS.

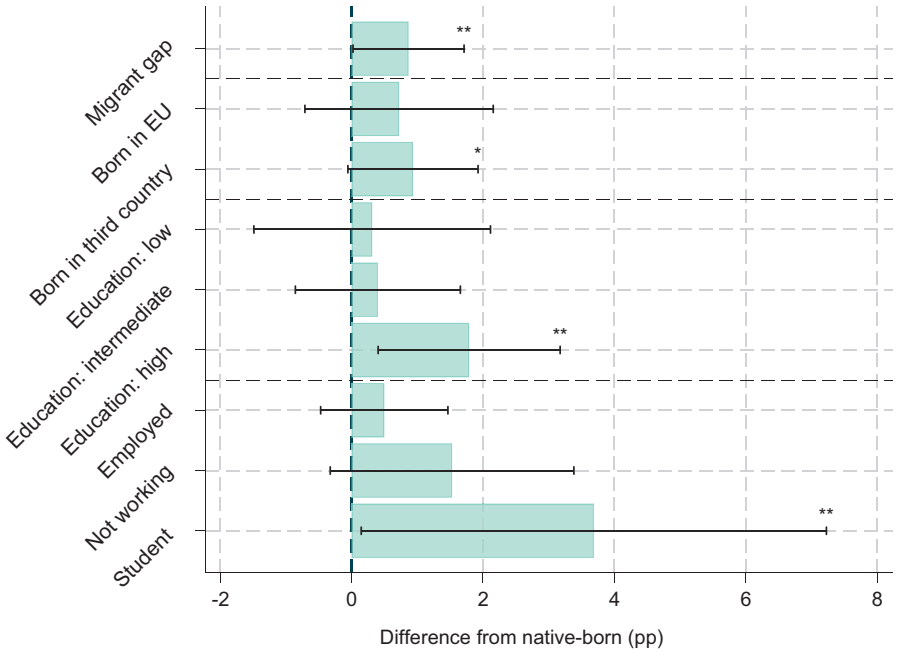
There is also variation between migrants related to their broad geographical region of origin, as shown in Figure 4. The largest overrepresentation in platform work is observed for those from relatively privileged groups of migrants from North America and Australia, but also from Asia and Central and South America. On the other hand, there are no statistically significant differences in our sample between the native-born majority and other EU migrants, those from non-EU European countries and those from Africa and the Middle East as regards engagement in platform work.

4.1.1 Sociodemographic differences between migrant and native-born platform workers

The next step of the analysis attempts to uncover whether migrants are indeed generally more likely to work on platforms than non-migrants, or whether their overrepresentation in this work can be simply explained by their other individual characteristics. The previous section (see Table 1 above) clearly indicated this is important: migrants in the IPWS sample are, overall, better educated, younger and more likely than non-migrants not to be employed in the traditional economy. This highlights the importance of comparing like with like when estimating the differences in platform work. These differences are now taken into account in order to make exactly that sort of comparison in terms of engagement in the platform economy.

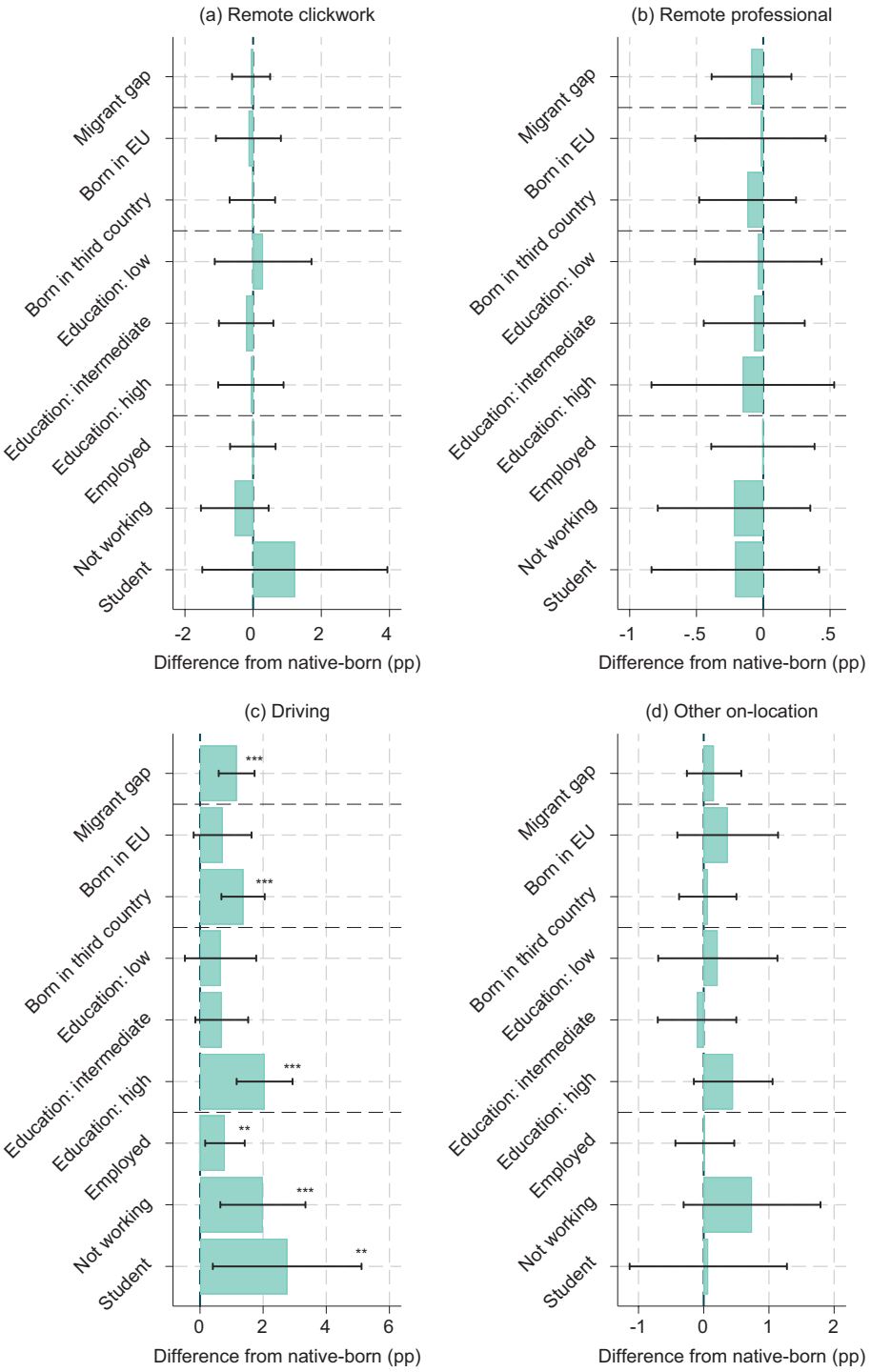
Figure 5 shows the results of a comparison between migrants and the native-born majority in the probability of having done any platform work, accounting for sociodemographic differences and country of residence. Detailed regression results are shown in Table A 2. On average, those not born in their country of residence are 0.9 percentage points more likely to be platform workers. This corresponds to a 13% increase over the average probability of doing platform work, which stands at 6.8% among the native-born majority. This probability is higher for third country migrants (p=0.06) than those born elsewhere in the EU. Third country migrants generally have fewer opportunities and face substantially more regulatory hurdles in the labour market than within-EU migrants.

Figure 5 **Difference between migrants and the native-born in likelihood of doing platform work (percentage points)**



Note: estimated gap (and 95% C.I.) between migrants and the native-born in having done platform work in the past 12 months, from a weighted logistic regression controlling for gender, age, the interaction of gender and age, urban situation, education, having a child under 12, employment, country and IPWS wave. Estimated in three different models: migrant by origin group; migrant interacted with education; and migrant interacted with employment.
*: p<0.1; **: p<0.05; ***: p<0.01.
Source: IPWS.

Figure 6 **Difference between migrants and the native-born in doing different types of platform work (percentage points)**



Note: estimated gap (and 95% C.I.) between migrants and the native-born in having done platform work of different types in the past 12 months, from a weighted logistic regression controlling for gender, age, the interaction of gender and age, urban situation, education, having a child under 12, employment, country and IPWS wave. Estimated in three different models: migrant by origin group; migrant interacted with education; and migrant interacted with employment.
*: p<0.1; **: p<0.05; ***: p<0.01.
Source: IPWS.

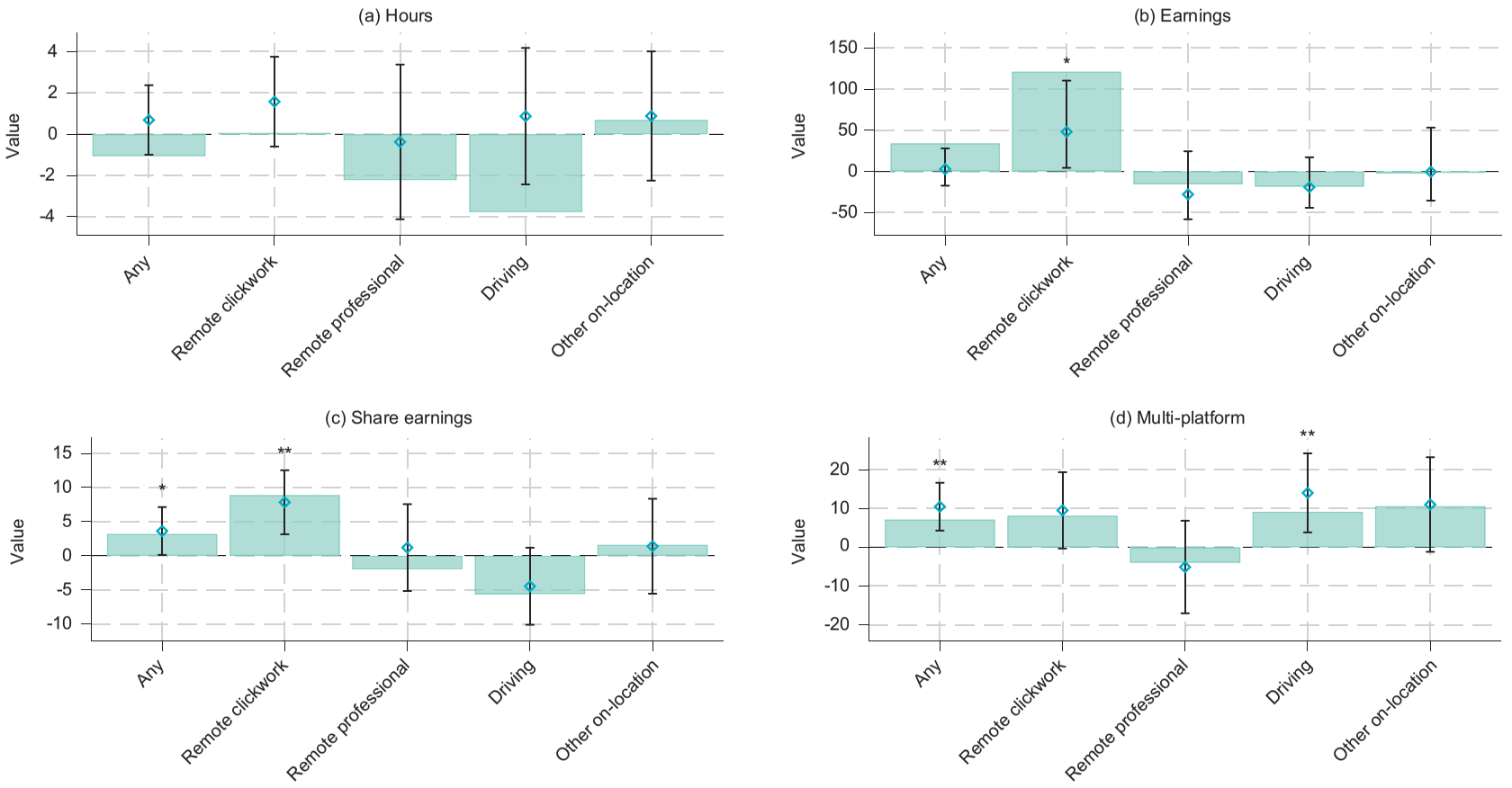
The difference between all migrants and the majority is then allowed to differ by education and labour market status. This reveals that, while all migrants are more likely to do platform work than the native-born population, this is driven by a difference among those with university qualifications: highly educated migrants are much more likely (by 1.8 pp, or 28%) to engage in platform work. Migrants are generally more likely to do platform work when not employed in the traditional economy, with the difference being very high and statistically significant among students. Migrant students are around 3.7 percentage points more likely than native-born students to work through platforms. This follows expectations and previous research in that migrants are lured to platform work by having fewer appropriate alternatives, which is the case for third country migrants, as well as among the more highly qualified and when there is a greater need for flexibility to fit around other schedules, as is the case for students (van Doorn and Vijay 2021; Lam and Triandafyllidou 2022). It might also be that economic migrants apply for student visas as these are easier to obtain and are thus formally combining work with education.

Figure 6 repeats this analysis separately for different types of platform work. Here it is particularly clear that the higher prevalence of migrants in platform work is truly driven by their much higher probability of doing delivery or driving work. On average, migrants are 1.2 percentage points more likely than the native-born to engage in delivery or ride-hailing platform work, with this finding driven by third country migrants (1.4 percentage points). Again, this is especially the case for migrants with university qualifications and for students, but it is also much more likely for the non-employed (2 percentage points). This is in line with earlier research pointing to on-location delivery work as a relatively low hurdle and attractive for migrant workers (van Doorn and Vijay 2021).

4.2 Differences in working conditions in platform work between migrant and native-born populations

Besides the prevalence of migrants in platform work, it is also important to consider whether their experiences in terms of working conditions in this type of work are comparable to those of the native-born majority. On average, platform workers in our sample work 12 hours per week and earn about 320 euros per month, with platform work accounting for around a fifth of their annual income. Migrant workers on average work slightly fewer hours per week but report higher earnings, at 365 euros, with platforms accounting for 23% of their annual earnings (see Table 1).

Figure 7 **Difference between migrant and native-born platform workers, with 90% C.I.**



Note: estimated gap between migrants and native-born in hours worked per week, monthly earnings in euros, share of income from platform work in total annual income (%) and the share who are multi-apping (%), showing the raw difference (bars), identified as the difference between migrants and the native-born estimated from a linear regression [hours, earnings, share of income] or a binary logistic regression [multi-apping] and indicated as the predicted difference, with 90% C.I.. The regression models control for gender, age group, gender by age, urbanity, education, having children under 12, IPWS wave, labour market status and country of residence. Models are weighted.
*: p<0.1; **: p<0.05; ***: p<0.01.
Source: IPWS.

Figure 7 shows the results of a more focused analysis, aimed at comparing like with like, of the differences between migrants and the rest of the population in several aspects of platform work, based on the raw gaps between them. Due to the smaller sample size when restricting the analysis to platform workers, there is relatively greater uncertainty around these estimates. For that reason, it is the 90% confidence intervals that are shown in this figure, but these still indicate overall statistical significance.

Regarding hours worked, there are no substantial or statistically significant differences between migrants and the native-born. Migrants and native-born platform workers have very similar earnings overall, although migrant clickworkers make more money from platform work: around 50 euros per month more, on average. While average earnings do not differ so much for migrant platform workers overall, they do make up somewhat more of their total annual average income, by about three percentage points. This is driven by the higher earnings for migrant workers on remote clickwork. Finally, platform workers are, on average, 10 percentage points more likely to work through multiple platforms. This holds for all forms of platform work with the exception of remote professional work.

While this part of the analysis can only be exploratory due to the small sample size, these findings may indicate that migrants work somewhat more intensely through platforms and are more economically dependent on them than the majority – they make more of their annual income on average through platforms, work slightly more hours, although not significantly so, and use multiple platforms. This exemplifies the possible risk of platforms trapping migrants into work that is relatively easy to obtain but which may offer few opportunities for advancement and integration in the long term.

5. Limitations and robustness checks

This paper is based on a cross-national survey aimed at capturing the full residential population aged 18-65 and not specifically targeted at migrants. While everyone with a mobile phone number could have been sampled, some groups of the most vulnerable migrants are likely not to have been captured – either because they do not have a country specific phone number, do not know the language well enough or were more reluctant to respond. This is likely to mean that these estimates are the lower boundary of the differences between the native-born majority and migrants, as the more vulnerable migrants could be expected to have even higher rates of participation in the platform economy (see e.g. van Doorn et al. 2022). Relatedly, the research is only able to distinguish first generation migrants, not second generation ones, with the latter grouped with the native-born population in terms of the comparison. It should be acknowledged that discrimination and differences in labour market integration are likely to persist beyond the first generation, and also depend on country of origin (Zwysen et al. 2021). Further, we cannot differentiate by duration of stay for migrants, which is important as platform work may be especially important for more recent migrants.

To test the extent to which specific groups of migrants may have been under-captured, publicly available data from Eurostat (EU-LFS) can be used as an indication of the share of the working age population in each survey country that is from a given broad region of origin, gender and education. The EU LFS is a large representative survey aiming to capture the residential population in each country. It tends not to capture recent migrants, but does capture the longer-term resident population. Table A 3 shows that the IPWS generally estimates the share of foreign-born people in the country of residence to be slightly higher than indicated by the EU-LFS. Exceptions – that is, where the IPWS reports a much higher percentage – include Greece, where 19.5% of the IPWS sample is born outside the country of residence compared to 8% in the EU-LFS; and Hungary, where it is 8% and 3% respectively. The educational level of migrants is generally captured rather accurately by the IPWS, although in Spain the share of low-qualified migrants is underestimated while in Estonia and Hungary it is substantially overestimated. The IPWS generally estimates a higher amount of third country migrants than within-EU ones. Overall, the differences in composition are not one-sided and do not give the impression that the group of migrants is underestimated, particularly in countries with a sizeable migrant population.

Figure A 1 repeats part of the analysis, reweighting the data by the extent to which the share of migrants by region of origin, age and gender in the IPWS differs from that of the 2020-21 LFS in the same country. This shows somewhat larger effects, but no substantial differences in the patterns of the relationships, which is a strong indication of the robustness of these findings.

A second limitation is that, while this study allows for a good estimation of the prevalence of platform work and the differences between migrants and the native-born majority, the data used can, at most, indicate the direction of variation in the conditions of platform work between migrants and native-born as the sample of platform workers is relatively small.

6. Discussion and conclusions

This study set out to analyse the prevalence of and patterns in platform work among migrants across Europe. In line with earlier studies (e.g. Altenried 2021; van Doorn et al. 2022; Lenaerts et al. 2023), migrants are indeed substantially more likely to work on platforms than non-migrants. The difference is around one percentage point in the prevalence of platform working, which translates to migrants being a fifth more likely than similar native-born residents to work on platforms. This greater prevalence is mainly driven by migrants from outside the EU who are likely to face more regulatory hurdles and who may also experience greater disadvantage and discrimination in the labour market. The difference is further driven by migrants with high qualifications who are likely to see the biggest mismatch in the traditional labour market as their skills are generally downgraded. Finally, students are generally more likely to do platform work and, among this group, there is a sizeable overrepresentation of migrants. Migrant workers are also primarily engaged in ride-hailing and delivery platform work.

Migrants are somewhat more economically dependent on platform work in terms of the share of total annual income and the more widespread simultaneous use of multiple platforms. While ride-hailing and food delivery platform work may offer some opportunities for integration into the labour market for the foreign-born population, there is a pay gap for migrant workers relative to those that are native-born. While this requires further analysis, it is indicative of digitally-mediated labour markets operating in an exploitative way, benefiting from migrants having few alternatives.

When attempting to uncover the mechanisms at play, a clear pattern can be found in which migrants with, on average, fewer resources and who are from groups that are more disadvantaged in employment are more likely to engage in platform work. These differences may reflect that lower barriers of entry are a key mechanism behind more migrants engaging in platform work, as particularly third country migrants, and those not working in the traditional economy, are more likely to be doing so. This is important as migration and labour market policies can be targeted to address this issue directly. Migrants are at risk of being trapped in platform jobs with few opportunities open to them and, importantly, they tend to experience worse outcomes than majority workers on the same platforms (McMillan Cottom 2020; van Doorn and Vijay 2021). Therefore, while the platform economy may offer short-term integration into the labour market for the foreign-born population, it may

severely harm their long-term prospects and lead to the accumulation of disadvantage and, in the long run, economic and social exclusion.

This paper is, to the best of the authors' knowledge, the first to examine the overrepresentation of migrants in platform work across Europe using a representative dataset on the take-up of platform work and the working conditions it offers. The contribution it makes is also found in its inclusion of different types of platform work beyond the best researched on-location services. This provides some much-needed context on the role that digitally-mediated labour markets play in migrants' employment integration and trajectories.

First, the evidence is that platform work is not 'migrant work' – while foreign-born workers are more likely to engage in ride-hailing and delivery work than native-born ones, the vast majority of the platform workforce in our data is still native-born. This is important when discussing the need to regulate this work, since calls for regulation are prone to be dismissed on the grounds of the positive function of platform work as an entry-level job for migrants and as a stepping stone to further labour market integration. Importantly, platform work is not done by just one group of workers, but is rather widespread among diverse groups of workers who are stuck in precarious positions.

Second, there is evidence that migrants are more likely to work on platforms when they have fewer other options. This is consistent with previous findings showing that the prevalence of internet and platform work is higher in regions where there are fewer alternatives of better quality in the traditional labour market (Zwysen and Piasna 2023). Platform work thus appears to be a symptom of labour market integration problems for migrants who are unable to find suitable jobs in the traditional economy, on top of the challenges it delivers to the quality of jobs in traditional labour markets. A key consideration should thus be to ensure that platforms do not bypass existing regulation and that conditions are not enabled or reproduced which see the exploitation of vulnerable migrant workers.

References

Altenried M. (2021) Mobile workers, contingent labour: migration, the gig economy and the multiplication of labour, Environment and Planning A: Economy and Space. https://doi.org/10.1177/0308518X211054846

Berger T., Frey C.B., Levin G. and Danda S.R. (2019) Uber happy? Work and well-being in the 'gig economy', Economic Policy, 34 (99), 429–477. https://doi.org/10.1093/epolic/eiz007

Damas de Matos A. (2017) Firm heterogeneity and immigrant wage assimilation, Applied Economics Letters, 24 (9), 653–657. https://doi.org/10.1080/13504851.2016.1218421

Damas de Matos A. and Liebig T. (2014) The qualifications of immigrants and their value in the labour market: a comparison of Europe and the United States, in OECD/EU (eds.) Matching economic migration with labour market needs, OECD Publishing, 153-186.

Dustmann C. and Fabbri F. (2003) Language proficiency and labour market performance of immigrants in the UK, The Economic Journal, 113 (489), 695–717. https://doi.org/10.1111/1468-0297.t01-1-00151

Giulietti C., Schluter C. and Wahba J. (2013) With a lot of help from my friends: social networks and immigrants in the UK, Population, Space and Place, 19 (6), 657–670. https://doi.org/10.1002/psp.1787

Granovetter M. (1995) Getting a job, University of Chicago Press.

Holtum P.J., Irannezhad E., Marston G. and Mahadevan R. (2022) Business or pleasure? A comparison of migrant and non-migrant Uber drivers in Australia, Work, Employment and Society, 36 (2), 290–309. https://doi.org/10.1177/09500170211034741

Jeon S.-H., Liu H. and Ostrovsky Y. (2021) Measuring the gig economy in Canada using administrative data, Canadian Journal of Economics/Revue canadienne d'économique, 54 (4), 1638–1666. https://doi.org/10.1111/caje.12558

Kowalik Z., Lewandowski P. and Kaczmarczyk P. (2023) Job quality gaps between migrant and native gig workers: evidence from Poland, Working Paper 09/2022, IBS. https://ibs.org.pl/wp-content/uploads/2023/01/Job_quality_gaps_migrant_native_gig_workers_IBS_WP_09-222.pdf

Lam L. and Triandafyllidou A. (2022) Road to nowhere or to somewhere? Migrant pathways in platform work in Canada, Environment and Planning A: Economy and Space. https://doi.org/10.1177/0308518X221090248

Lancee B. (2021) Ethnic discrimination in hiring: comparing groups across contexts. Results from a cross-national field experiment, Journal of Ethnic and Migration Studies, 47 (6), 1181–1200. https://doi.org/10.1080/1369183X.2019.1622744

Lenaerts K. et al. (2023) Personen met een (grote) afstand tot de arbeidsmarkt en de platformeconomie in vlaanderen, HIVA - onderzoeksinstituut voor arbeid en samenleving. https://lirias.kuleuven.be/retrieve/710910

Mahuteau S. and Junankar P.N. (2016) Do migrants get good jobs in Australia? The role of ethnic networks in job search, in Junankar P.N. (ed.) Economics of immigration: immigration and the Australian economy, Palgrave Macmillan, 273-300.

McMillan Cottom T. (2020) Where platform capitalism and racial capitalism meet: the sociology of race and racism in the digital society, Sociology of Race and Ethnicity, 6 (4), 441–449. https://doi.org/10.1177/2332649220949473

Patacchini E. and Zenou Y. (2012) Ethnic networks and employment outcomes, Regional Science and Urban Economics, 42 (6), 938–949. https://doi.org/10.1016/j.regsciurbeco.2012.01.004

Piasna A. and Zwysen W. (2022) New wine in old bottles: organizing and collective bargaining in the platform economy, International Journal of Labour Research, 11 (1–2), 35–46. https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---actrav/documents/publication/wcms_875933.pdf

Piasna A., Zwysen W. and Drahokoupil J. (2022) The platform economy in Europe: results from the second ETUI Internet and Platform Work Survey (IPWS), Working Paper 2022–05, ETUI. https://www.etui.org/publications/platform-economy-europe

Urzì Brancati M.C., Pesole A. and Fernández-Macías E. (2020) New evidence on platform workers in Europe: results from the second Colleem survey, Publications Office of the European Communities. Dustmann C. and Fabbri F. (2003) Language proficiency and labour market performance of immigrants in the UK, The Economic Journal, 113 (489), 695–717. https://doi.org/10.1111/1468-0297.t01-1-00151

van Doorn N. (2017) Platform labor: on the gendered and racialized exploitation of low-income service work in the 'on-demand' economy, Information, Communication & Society, 20 (6), 898–914. https://doi.org/10.1080/1369118X.2017.1294194

van Doorn N., Ferrari F. and Graham M. (2022) Migration and migrant labour in the gig economy: an intervention, Work, Employment and Society, 37 (4), 1099-1111. https://doi.org/10.1177/09500170221096581

van Doorn N. and Vijay D. (2021) Gig work as migrant work: the platformization of migration infrastructure, Environment and Planning A: Economy and Space. https://doi.org/10.1177/0308518X211065049

Vandaele K. (2021) Collective resistance and organizational creativity amongst Europe's platform workers: a new power in the labour movement?, in Haidar J. and Keune M. (eds.) Work and labour relations in global platform capitalism, Edward Elgar.

Zwysen W. (2018) Different patterns of labour market integration by migration motivation in Europe: the role of host country human capital, International Migration Review, 53 (1), 59-89. https://doi.org/10.1177/0197918318767929

Zwysen W. and Demireva N. (2018) An examination of ethnic hierarchies and returns to human capital in the UK, Social Inclusion, 6 (3), 6–33. https://doi.org/10.17645/si.v6i3.1457

Zwysen W., Di Stasio V. and Heath A. (2021) Ethnic penalties and hiring discrimination: comparing results from observational studies with field experiments in the UK, Sociology, 55 (2), 263–282. https://doi.org/10.1177/0038038520966947

Zwysen W. and Longhi S. (2018) Employment and earning differences in the early career of ethnic minority British graduates: the importance of university career, parental background and area characteristics, Journal of Ethnic and Migration Studies, 44 (1), 154–172. https://doi.org/10.1080/1369183X.2017.1338559

Zwysen W. and Piasna A. (2023) Pushed online: what characteristics of regional offline labour markets influence the expansion of internet and platform work?, New Technology, Work and Employment.

All links have been checked on 28.02.2024.

Appendix

Table A1 **Description of the sample by category of place of birth**

	Native-born		Born in EU		Born in third country	
	Non-platform	Platform	Non-platform	Platform	Non-platform	Platform
N	29,940	2,175	1,383	100	2,658	226
Share women	50.2%	45.3%	52.0%	54.8%	47.2%	45.8%
Born in country of residence	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Born elsewhere in EU	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
Born in third country	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Age: 18-29	18.8%	32.0%	19.7%	27.6%	22.6%	29.7%
Age: 30-49	44.6%	44.0%	50.3%	56.8%	50.1%	55.9%
Age: 50-65	36.6%	23.9%	30.0%	15.6%	27.3%	14.4%
Share with child under 12	32.0%	32.2%	28.7%	35.5%	33.1%	37.8%
Education: low	16.4%	10.7%	21.3%	12.1%	28.5%	15.7%
Education: intermediate	54.6%	52.6%	44.2%	47.1%	39.8%	35.6%
Education: high	29.0%	36.7%	34.5%	40.8%	31.7%	48.6%
Dummy: big city or suburb	41.0%	53.1%	44.7%	57.8%	50.6%	55.3%
Share employed	70.6%	74.5%	71.5%	69.8%	66.3%	62.8%
Share unemployed	8.8%	9.5%	13.5%	13.6%	17.2%	17.4%
Share student	5.7%	9.8%	4.2%	8.7%	5.2%	12.0%
Share inactive	14.9%	6.3%	10.8%	7.9%	11.3%	7.7%
Platform – remote clickwork	0.0%	47.4%	0.0%	36.7%	0.0%	38.3%
Platform – remote professional	0.0%	19.2%	0.0%	13.3%	0.0%	13.6%
Platform – driving	0.0%	25.7%	0.0%	36.7%	0.0%	45.4%
Platform – other on-location	0.0%	21.5%	0.0%	24.1%	0.0%	18.4%
Platform work: earnings (euros)		307.3		355.1		368.6
Platform work: share of annual earnings		20.4%		24.4%		22.0%
Platform work: hours worked		12.1		11.2		11.1
Platform work: share who multi-app		52.1%		49.7%		60.7%

Note: weighted averages of IPWS sample.
Source: IPWS.

Table A2 **Main model on doing any platform work by migrant status, log odds and standard error**

Log odds	M1-base	M2-education	M3-employment
Education: intermediate	0.407***	0.406***	0.393***
	(0.118)	(0.132)	(0.118)
Education: high	0.611***	0.580***	0.588***
	(0.122)	(0.136)	(0.122)
Migrant		0.138	0.100
		(0.256)	(0.0994)
Migrant * intermediate		-0.0342	
		(0.286)	
Migrant * high		0.153	
		(0.277)	
Greece	0.118	0.121	0.164
	(0.170)	(0.170)	(0.170)
Spain	-0.0184	-0.0159	0.00791
	(0.131)	(0.132)	(0.130)
France	0.0128	0.0197	0.0201
	(0.137)	(0.137)	(0.136)
Ireland	0.536***	0.526***	0.535***
	(0.162)	(0.163)	(0.162)
Italy	-0.116	-0.112	-0.0809
	(0.142)	(0.142)	(0.142)
Austria	0.356**	0.355**	0.368**
	(0.158)	(0.158)	(0.157)
Bulgaria	0.0988	0.0983	0.125
	(0.124)	(0.124)	(0.124)
Czechia	0.0629	0.0590	0.0637
	(0.130)	(0.130)	(0.130)
Estonia	1.297***	1.300***	1.315***
	(0.107)	(0.107)	(0.107)
Hungary	-0.334*	-0.336*	-0.321
	(0.195)	(0.196)	(0.195)
Poland	-0.483**	-0.483**	-0.490**
	(0.245)	(0.245)	(0.245)
Slovakia	0.177	0.176	0.182
	(0.132)	(0.132)	(0.132)
Woman	-0.0749	-0.0769	-0.0982
	(0.132)	(0.132)	(0.132)
Age 25-34	-0.476***	-0.480***	-0.486***
	(0.123)	(0.123)	(0.123)
Age 35-44	-0.579***	-0.584***	-0.596***
	(0.127)	(0.127)	(0.127)
Age 45-54	-0.702***	-0.705***	-0.731***
	(0.133)	(0.133)	(0.133)
Age 55-65	-0.848***	-0.850***	-0.933***
	(0.147)	(0.147)	(0.146)

Log odds	M1-base	M2-education	M3-employment
Woman * age 25-34	0.0427	0.0448	0.0496
	(0.169)	(0.169)	(0.170)
Woman * age 35-44	-0.0414	-0.0369	-0.0239
	(0.173)	(0.173)	(0.173)
Woman * age 45-54	-0.281	-0.279	-0.264
	(0.186)	(0.186)	(0.186)
Woman * age 55-65	-0.293	-0.292	-0.284
	(0.195)	(0.195)	(0.195)
Big city or suburb	-0.308***	-0.307***	-0.314***
	(0.0653)	(0.0654)	(0.0653)
Rural areas	-0.330***	-0.330***	-0.337***
	(0.0744)	(0.0744)	(0.0744)
Child under 12	-0.00417	-0.00281	-0.00967
	(0.0593)	(0.0593)	(0.0593)
Autumn wave	0.572***	0.572***	0.574***
	(0.0604)	(0.0604)	(0.0603)
Unemployed	0.220**	0.218**	
	(0.0972)	(0.0974)	
Student	0.144	0.140	
	(0.117)	(0.117)	
Inactive	-0.369***	-0.372***	
	(0.117)	(0.117)	
Migrant: within-EU	0.131		
	(0.143)		
Migrant: third country	0.212**		
	(0.0955)		
Not working			-0.0675
			(0.0890)
Student			0.0271
			(0.126)
Not working * migrant			0.206
			(0.198)
Student * migrant			0.651**
			(0.267)
Constant	-2.960***	-2.945***	-2.910***
	(0.179)	(0.190)	(0.180)
Observations	32,785	32,785	32,785

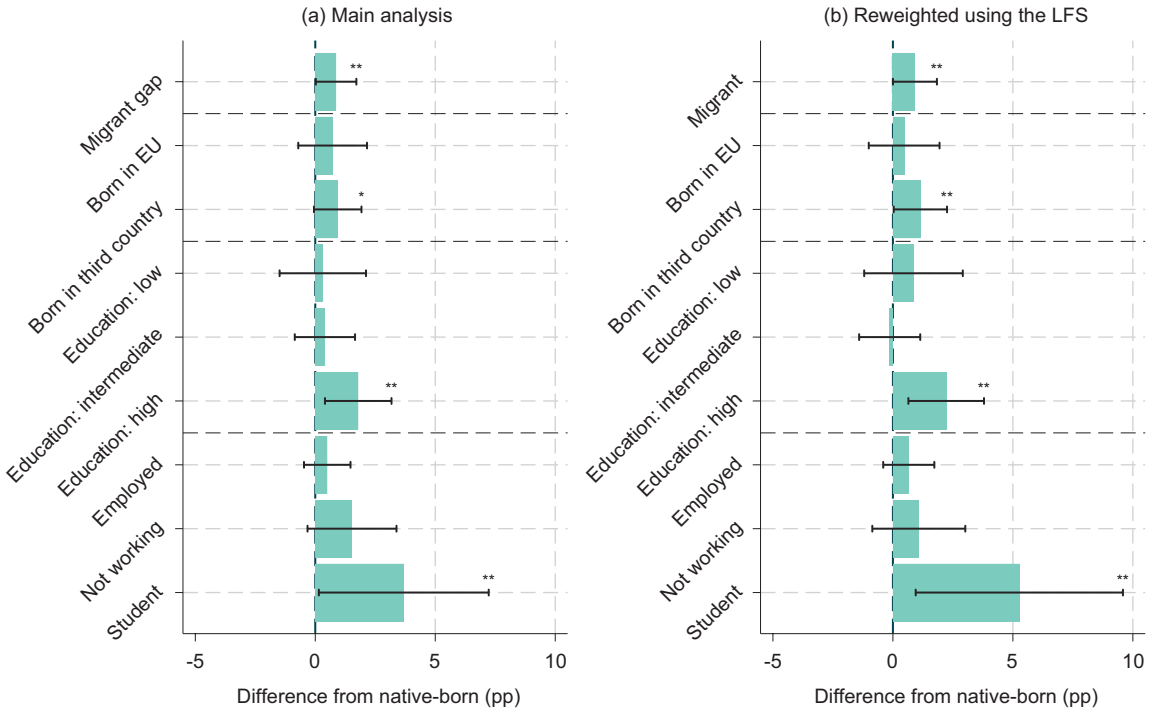
Note: robust standard errors in parentheses.
*** p<0.01; ** p<0.05; * p<0.1.
Source: IPWS.

Table A3 **Comparing the share and composition of migrants in ETUI IPWS with LFS**

	Share of migrants			Ratio of share: education-levels for migrants			Origin	
Country	migrant_IPWS	migrant_LFS	Ratio	Lower	Intermediate	High	European	Non-European
IE	0.315	0.248	1.3	1.0	1.0	1.0	0.8	1.4
AT	0.241	0.236	1.0	0.9	1.0	1.0	0.8	1.7
DE	0.210	0.203	1.0	0.8	1.1	1.2	0.9	1.1
FR	0.198	0.133	1.5	0.9	1.3	0.9	1.3	0.9
GR	0.195	0.077	2.5	1.3	0.6	1.4	0.8	1.8
ES	0.148	0.186	0.8	0.7	1.0	1.5	1.0	1.0
IT	0.138	0.136	1.0	0.9	1.1	1.0	1.1	0.9
EE	0.086	0.105	0.8	1.6	1.1	0.8	0.9	2.2
HU	0.084	0.028	3.0	2.7	0.9	0.5	0.9	1.6
CZ	0.059	0.045	1.3	0.8	1.1	0.9	1.1	0.5
SK	0.044	0.010	4.4	0.3	1.1	0.9	0.8	3.2
PL	0.026	0.005	5.6		1.4	0.8	0.9	
BG	0.025	0.003	9.4	9.8	0.9	0.8	0.7	
RO	0.005	0.002	2.8	1.8	0.7	0.9	1.4	

Note: table compares the share of migrants, the shares of education levels among migrants and the share of European and non-European migrants in the IPWS with that of the weighted LFS for the population aged 16-64 in 2020-21. Ratios of over 1.25 (grey) or under 0.75 (green) are colour coded.
Source: IPWS and EU LFS.

Figure A1 **Estimated difference between migrants and native-born in the prevalence of platform work, reweighted**



Note: estimated gap (and 95% C.I.) between migrants and native-born in having done platform work in the past 12 months from a weighted logistic regression controlling for gender by age, urban situation, education, having a child under 12, employment, country and IPWS wave. Estimated in three different models: migrant by origin group; migrant interacted with education; and migrant interacted with employment. Panel (a) shows the original results and panel (b) with the data reweighted by the inverse of the ratio between the prevalence in IPWS and LFS 2020-21 by a combination of region of origin [6 regions], gender [2], age[3], in a country.
*: p<0.1; **: p<0.05; ***: p<0.01.
Source: IPWS and LFS.

European
Trade Union Institute
Bd du Jardin Botanique, 20
1000 Brussels
Belgium
etui@etui.org
www.etui.org

D/2024/10.574/11
ISSN: 1994-4446 (print version)
ISSN: 1994-4454 (electronic version)

etui.