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WORKING WITHOUT BORDERS

The Promise and Peril of Online Gig Work

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1818 H Street NW, Washington, DC 20433, USA.

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WORKING WITHOUT BORDERS

The Promise and Peril
of Online Gig Work

SIX KEY MESSAGES

MESSAGE 1

Online gig work now constitutes a growing and non-negligible part of the labor market, accounting for 4.4 to 12.5 percent of the global labor force.

Although online gig work is rapidly growing, there are no reliable data sources to estimate its size. Using an innovative combination of mixed methods that include data science and proprietary firm databases, along with a global web survey in 17 countries in six regions using the experimental random domain intercept technology (RDIT), we estimate that the number of global online gig workers ranges from 154 million to 435 million. The data science–based approach, relying on web scraping and website traffic, finds that the number of unique registered online gig workers is 154 million globally, but this may be an underestimate. Meanwhile, the survey-based approach suggests that there are 132.5 million *main* gig workers, but when we include those who engage in gig work as *secondary* or *marginal* workers, the estimate may be as high as 435 million online gig workers globally, providing an upper bound estimate. In other words, the estimates show that the share of online gig workers in the global labor force ranges from 4.4 to 12.5 percent. Our estimates are higher than others, partly because our methodology made a concerted effort to track gig workers on regional/local platforms that most literature has overlooked, but also because there has been rapid growth in recent years, especially triggered by the COVID-19 pandemic. Although our study contributes to the literature by using multiple and nontraditional sources of data, more research is needed to explore different methodologies to understand and monitor the development of the gig economy in the absence of reliable labor market survey data.

MESSAGE 2

Online gig work is not only a developed-country phenomenon but is also becoming a popular source of employment in developing countries, with the emergence of many local gig platforms as well as increasing demand from the developing world.

We identify 545 online gig work platforms across the globe, with headquarters in 63 countries and platform workers and clients located in 186 countries. One unique contribution of this study is the special effort it makes to identify and understand regional/local platforms (in addition to the major global ones) that are often ignored in the literature on gig work. The comprehensive database mapping shows that almost three-quarters of the platforms can be considered regional/local—connecting

employers and workers from one or a few countries within a region. Together, low- and middle-income countries account for 40 percent of traffic to gig platforms. One-fifth of the visitors (18 percent) are from low- and lower-middle-income countries (driven by India, Ukraine, the Philippines, Indonesia, Pakistan, and Nigeria) and 22 percent of the visitors are from upper-middle-income countries: the Russian Federation, Brazil, Mexico, Belarus, and Türkiye.

Although developed countries still dominate the demand for online labor, the demand from developing countries is increasing at a faster rate. Our survey of over 20,000 firms—conducted through social media and targeted email outreach using proprietary firm databases—reveals that demand for online gig workers has risen faster in developing countries than in developed countries. For example, almost 60 percent of surveyed firms in lower-middle- or low-income countries confirm that the share of work outsourced to gig workers increased over time, while less than half of surveyed firms in the upper-middle- or high-income countries did so. More firms in developing countries have indicated they plan to hire more gig workers in the future. These trends are corroborated by data from the Oxford Internet Institute’s Online Labour Index (OLI).

MESSAGE 3

Local gig platforms play a vital but less known role in the local landscape by lowering entry barriers, but they face challenges in establishing a viable business model.

The role of regional and local platforms is almost entirely missing from the literature. Nevertheless, these platforms are essential in regional/local markets, often catering to local micro, small, and medium enterprises (MSMEs), start-ups, and self-employed/single-owner businesses. Local platforms can help employers find gig workers with similar cultural backgrounds or in the same time zone or for cost-effective and flexible talent. Regional/local platforms adapt to local constraints, such as online payment regulations or lack of access to digital devices. Some regional/local platforms partner with governments on issues that support development objectives—for instance, by providing training and work opportunities for youth and low-skilled people. Moreover, these platforms lower the entry barrier for non-English-speaking populations, as revealed by our global survey, which was conducted in 12 local languages in addition to English. Our survey in Chinese, for example, was able to get additional data on the Chinese gig workforce, which most studies find challenging to penetrate.

However, many regional/local platforms face challenges in establishing a viable commercial business model. The smaller size of their user base constrains their ability to tap into network effects, requiring them to pivot their business models—for instance, by serving as staffing agencies. Most owners of regional/local platforms are entrepreneurs with a background in technology but with limited financial or business experience.

MESSAGE 4

Online gig work can support inclusion on the supply side by providing work opportunities for youth, women, relatively low-skilled workers, or people in areas with insufficient local jobs while also widening the talent pool for MSMEs on the demand side, although people without internet access could remain excluded.

Most online gig workers tend to be youth under the age of 30 who seek to earn income, learn new skills, or have the flexibility to combine gig work with school or another job. Women in most regions are participating in the online gig economy to a greater extent than in the general labor market, in the services sector, or in the informal sector, although a considerable wage gap still exists between men and women. For example, a female online gig worker's wage level is equivalent to 68 percent of her male counterparts' wage on a major gig platform in Latin America. Workers with a variety of skill levels are participating in the online gig economy, although intermediate to highly skilled workers still dominate. Regional and local online gig work platforms tend to attract a slightly greater share of workers with intermediate education than global platforms do and offer more opportunities for non-English-speaking workers. Microtasks especially provide opportunities for low-skilled workers. Online gig work is an important means of earning supplemental income. Gig work is a secondary activity for 4 in 10 workers. A surprising finding is that 6 in 10 gig workers live in smaller cities, which points to the role that online gig work could play in addressing regional inequalities in job opportunities.

Our study confirmed findings from other research that firms benefit from a flexible workforce and use online gig workers to access a larger talent pool of labor, skills, and expertise, to reduce start-up and transaction costs and overcome conventional hiring constraints, and to enhance productivity, which is fundamental for the growth of new jobs in any economy. MSMEs drive the demand for gig workers. Not only are smaller businesses more likely to hire gig workers, but they also outsource through platforms a larger share of their work than large firms do. Our firm survey finds that the self-employed are most likely to hire gig workers for business and professional support as well as for sales and marketing support.

While gig work is creating new work opportunities, it comes with significant challenges. Risks and inequalities still exist in the gig economy. Those without access to the internet or to digital devices such as laptops, smartphones, and tablets remain excluded. Many workers experience discrimination in accessing work or high-paying tasks, particularly women and workers in developing countries. Besides, gig jobs are sporadic, do not always provide clear career progression pathways for youth, and leave many people spending long hours searching for gig tasks without success.

MESSAGE 5

Gig work, although a relatively new form of work, resembles many long-standing work arrangements in developing countries [albeit with a digital tool that serves as an intermediary] where it needs to be examined within the context of high levels of informality and low levels of social protection in the labor market.

Gig work shares characteristics with informal work and other diverse forms of nonstandard work that are widely prevalent in developing countries, where most people work outside the purview of labor regulations and without access to social insurance and benefits. Social insurance coverage is low among gig workers. About half of surveyed gig workers do not subscribe to a pension or retirement program, but this proportion can be as high as 73 percent among surveyed gig workers in República Bolivariana de Venezuela and 75 percent in Nigeria. In Indonesia, only 34 percent of

gig workers have precautionary savings and around 60 percent of them are struggling to meet their financial obligations. As a benchmark, the International Labour Organization (ILO) estimates that about 70 percent of the world's population lacks social insurance coverage. In low-income countries, over 90 percent of the workforce is in the informal sector. In such a context, the most effective approach, in line with the World Bank's Social Protection Compass, would be to extend coverage to informal and self-employed workers more broadly, thus also including gig workers without segmenting the labor market. Some governments such as those of Brazil, Colombia, India, Kenya, Malaysia, Rwanda, Uruguay, and others are taking steps to extend social insurance to informal and self-employed workers (including gig workers).

In addition to traditional benefits, gig workers also desire unconventional benefits such as access to training and access to credit or loans to buy equipment, laptops, and internet access. These needs offer an entry point for innovative benefit programs for gig workers. To that end, private companies are developing solutions to facilitate tax planning, savings, and financial access for gig workers. Catch, a United States-based company, helps automate tax reporting for freelancers by linking the individual's bank account to the state and federal tax platforms. Kenyan firm Koa developed an application to allow gig workers to contribute to savings and often works with digital gig platforms to extend financial literacy training to gig workers. More innovation is needed in the design of social insurance products for workers with sporadic incomes.

MESSAGE 6

Governments can use the promise of the gig economy to build digital skills, increase income-earning opportunities, and engage with platforms to expand social protection coverage of informal workers through carefully designed targeted programs and improved access to digital infrastructure and payment options, while also safeguarding against peril and protecting gig workers through modern forms of collective bargaining.

Gig opportunities can be used as a short-term measure to support labor market inclusion for women and youth in areas that lack local jobs. Governments can partner with platforms to provide support and training for vulnerable and disadvantaged groups to access these income-earning opportunities. Training programs for gig workers need to include socioemotional skills such as teamwork, empathy, conflict resolution, and relationship management in addition to digital technical skills. Platforms create strategic opportunities for governments to extend social protection coverage to informal workers, offering some level of organization to the otherwise unorganized informal sector. Governments can use innovative partnership models to engage with platforms to design short-term social insurance products or to conduct outreach to increase enrollment in social plans or connect workers to social registries. Digital public works are another mechanism for providing opportunities for short-term income generation to low-income populations while also building digital skills and boosting demand for online workers. The capacity of local small and medium enterprises and other businesses also needs to be boosted for them to see the benefits of digital adoption, including the use of platforms to access talent.

Provision of equitable, affordable access to connectivity infrastructure, digital services, and devices for all—in particular to disadvantaged groups such as youth and women and to rural areas and poor neighborhoods—is essential to support new forms of work.

Despite the opportunities provided by gig work, governments must mitigate the risks associated with gig jobs (such as low wages, employer pressure, and harassment; “geofencing” that limits access to gig jobs to developing-country workers; and so on) by extending coverage of social protection and insurance to a broad range of workers outside standard employment, by supporting new models of collective bargaining and modern labor market institutions, and by building their own capacity to collect and monitor data.

OVERVIEW

INTRODUCTION

Jobs are crucial for individual well-being. They provide a livelihood and, equally important, a sense of dignity. They are also crucial for collective well-being and economic growth. Over the past decade, technology has fundamentally shifted traditional work patterns, creating new ways in which work is contracted, performed, managed, scheduled, and remunerated. New business models—digital platform firms—are allowing the effects of technology to reach more people more quickly, bringing economic opportunity to millions of people who do not live in industrialized countries or even industrial areas, simply with access to broadband and a digital device (World Bank 2019). Digital labor platforms play a role in the process of structural transformation especially by triggering organizational and occupational transformations—for example, by enhancing labor productivity and formalization in service sectors (Nayyar, Hallward-Driemeier, and Davies 2021). New forms of work, known as gig jobs, enabled by digital platforms, have now gained momentum (Eurofound 2020).

WHAT IS A GIG JOB?

The term “gig” comes from the music industry and can be understood as a one-off job for which a worker is paid for a particular task or for a defined period. Musicians with such gigs have no expectation of recording at the same studio the following day or playing with the same band the following night. The specific type of gig work discussed in this study is that mediated through internet platforms in which the worker is not an employee of the enterprise that operates the platform. The platform acts as an intermediary between the gig worker and the person or business that needs the work done. The paid tasks (or gigs) could be food delivery, ride hailing, care work, photo tagging, data entry, translation, design, software development, and so forth. The supply (gig worker) and the demand (business or person who wants the job done) are matched through either an app or a website. The platform provides a participative infrastructure for such interactions that includes governance structures and rules for the work to be carried out and is enabled by an algorithm. A gig worker is usually paid on a project, piece rate, or hourly basis. There are two types of platform-based gig jobs (figure 0.1):

1. **Location-based gig jobs**, in which digital platforms allocate work that is tangible and/or delivered to a client in a physical location (for example, taxi, delivery, domestic care, and home services or platform work through [Uber](https://www.uber.com/),¹ [TaskRabbit](https://www.taskrabbit.com/),² and so on).
2. **Online gig jobs**, which include tasks or work assignments such as image tagging, data entry, website design or software development that are performed and delivered online by workers. Online gig work is of two types.³

¹ See: <https://www.uber.com/>.

² See: <https://www.taskrabbit.com/>.

³ The recent International Labour Organization (ILO) study lists four categories of online gig work: microwork, freelancing, competitive programming, and medical consultation (ILO 2021).

- a. **Online freelancing**, also called e-lancing, tends to involve larger projects that are performed over longer times and typically includes complex tasks targeting more intermediate- or high-skilled workers—for example, software development, graphic design, and e-marketing (Raftree et al. 2017).
- b. **Microwork**, on the other hand, involves projects and tasks that are broken down into small subtasks that can be completed in seconds or minutes by remote workers through online platforms (Kuek et al. 2015). Microworkers are typically paid small amounts of money for each completed task, which can often be performed with basic numeracy and literacy skills. These tasks include image tagging, text transcription, and data entry (Raftree et al. 2017). Microwork has lower barriers to entry than online freelancing, making it an attractive income-generating opportunity for unemployed and underemployed individuals with few or no specialized skills.

In this study, we focus mainly on the second category of gig work—that is, *online gig work* (although the discussion on social protection does include some developments driven by location-based platforms).

FIGURE 0.1: Types of online gig work



Source: Elaboration by study team.
Note: IT = information technology.

IS GIG WORK DIFFERENT FROM OTHER FORMS OF WORK?

Although a relatively new form of work, from a labor market perspective gig work resembles many long-standing work arrangements in developing countries, albeit with a digital tool that serves as an intermediary (table 0.1) (Berg et al. 2018). Online gig work in developing countries should be examined within the context of *high levels of informality*⁴ as well as within the context of the growth and diversification of *nonstandard forms of work*.

TABLE 0.1: Diverse forms of work in developing countries

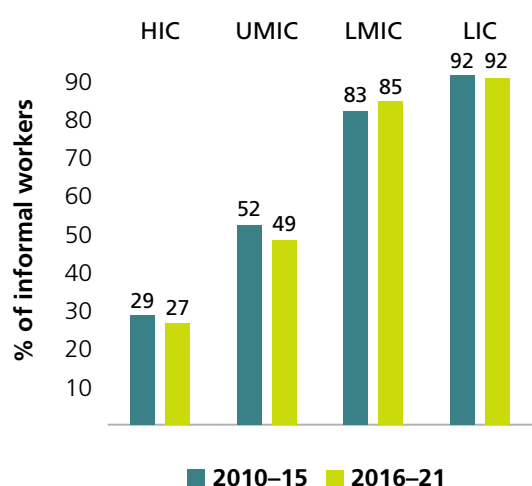
Classification criteria	Fixed term	Temporary agency work	Parttime	Casual work	On-call work	Working from home	Dependent self-employment	Gig work
1. Length of employment contract								
Specific period/task based	X	X				X		X
Occasional and intermittent				X		X		X
Specific number of hours, days, or weeks			X		X	X		
Permanent/continuous						X		
Unspecified time/no contract				X			X	X
2. Working hours								
Less than 35 hours per week	X	X	X	X	X	X	X	X
Full time	X	X		X	X	X		X
Highly variable				X	X		X	X
3. Relationship between employer and employee								
Direct	X	X	X	X	X	X	X	
Multiple party		X						X
4. Workplace								
With employer	X	X	X	X	X			
Not in the place of employer	X	X	X	X	X	X	X	X
5. Earnings								
Paid per hours, days, or weeks	X	X	X	X	X	X		
Paid per month	X					X		
Paid per task				X			X	X
6. National labor regulations								
Regulated by national labor law	X	X	X			X		
Not regulated by national labor law				X	X		X	X

Source: Developed by the study team in consultation with the World Bank Social Protection and Jobs (SPJ) team, Indonesia.

⁴ The International Conference of Labour Statisticians (2003) defines informal employment to include the following: (1) own-account workers and employers in their own informal sector enterprises, (2) contributing family workers, (3) members of informal producers' cooperatives, and (4) employees holding informal jobs.

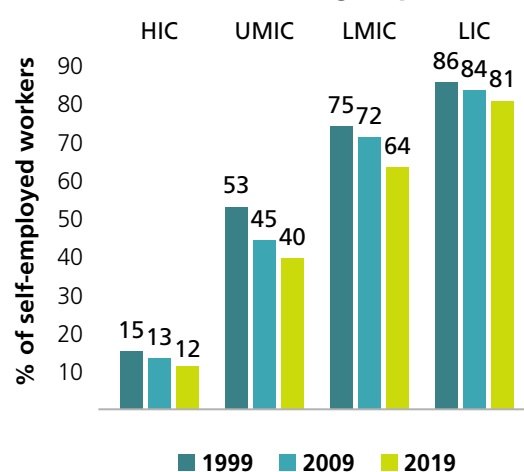
Gig work is yet another form of informal work, remaining well outside labor regulations or social protection coverage. Almost 90 percent of the labor force in low-income countries is doing informal work, such as agricultural day laborers and self-employed firm owners. This percentage has not shown much decline over time (figures 0.2 and 0.3) (Ohnsorge and Yu 2022).⁵ Informal workers are not covered by any national labor legislation, income taxation, social protection, or employment benefits that are normally associated with formal, full-time, direct employment contracts, such as advance notice of dismissal, severance pay, and paid annual or sick leave (Hussmanns 2004).

FIGURE 0.2: Average proportion of informal workers over time



Source: Study team calculations based on ILOSTAT.
 Note: The figure compares the average percentage of informal employment between 2010 and 2015 with the same average between 2016 and 2021. Data are missing for several countries, notably China, which has shown a fast transformation over the past few decades.
 HIC = high-income countries; LIC = low-income countries
 LMIC = lower-middle-income countries;
 UMIC = upper-middle-income countries.

FIGURE 0.3: Proportion of self-employed workers across income groups



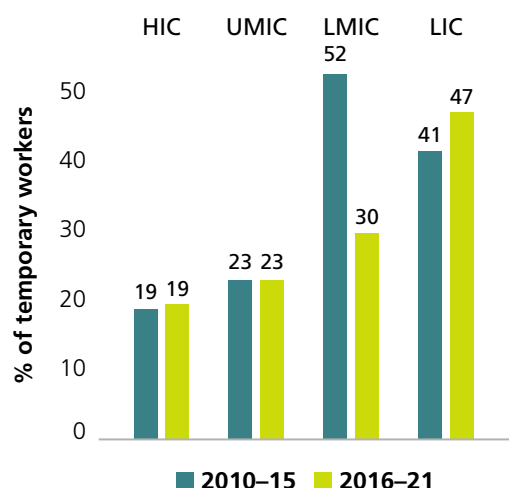
Source: Study team calculations based on ILOSTAT.
 Note: HIC = high-income countries; LIC = low-income countries
 LMIC = lower-middle-income countries;
 UMIC = upper-middle-income countries.

Gig work can also be understood as a part of an overall category of nonstandard work, in which standard work is classified as continuous and full-time work, with a direct linkage between employer and employees, and includes formal jobs with associated social protection and regulations governing minimum wages and other aspects of the work (ILO 2016). Although there is no generally agreed definition, nonstandard work is an umbrella term for work arrangements that deviate from the standard and often includes four types (ILO 2016): (a) temporary employment, (b) part-time work, (c) temporary agency or multiple-party work, and (d) disguised self-employment and dependent self-employment.⁶ Even in advanced economies, the payroll-based social insurance model is increasingly challenged by working arrangements outside standard employment contracts.

⁵ However, there could be within-group compositional changes. One caveat is that the available data do not include countries such as China, which has had tremendous transformation over the past few decades.

⁶ However, the International Labour Organization (ILO) definition doesn't include all types of self-employment as nonstandard employment. It particularly refers to disguised self-employment and dependent self-employment as part of nonstandard work.

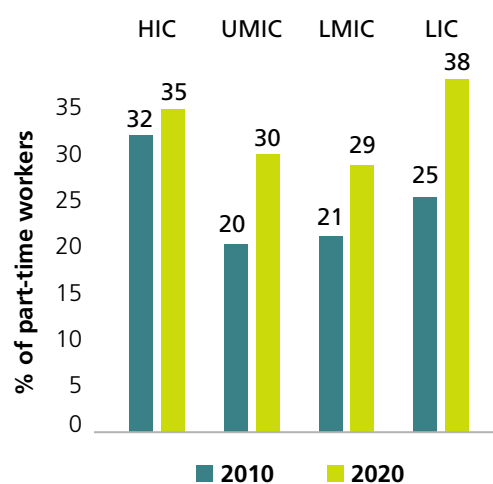
FIGURE 0.4: Average percentage of temporary workers across income groups over time



Source: ILOSTAT.

Note: To maximize country coverage, we compared the average percentage of temporary workers between 2010 and 2015 with the same measures between 2016 and 2021 for similar sets of countries. HIC = high-income countries; LIC = low-income countries; LMIC = lower-middle-income countries; UMIC = upper-middle-income countries.

FIGURE 0.5: Percentage of part-time workers across income groups between 2010 and 2020



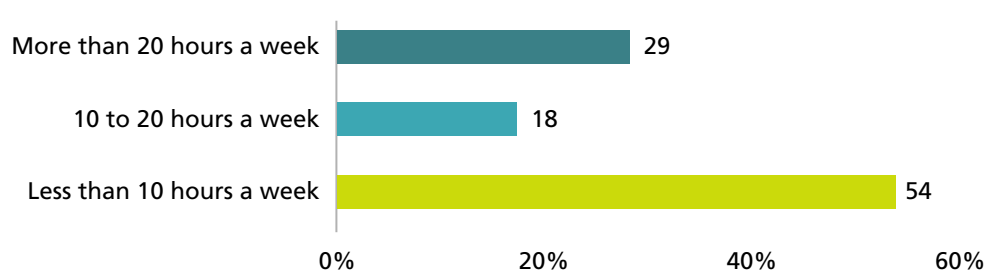
Source: ILOSTAT.

Note: HIC = high-income countries; LIC = low-income countries; LMIC = lower-middle-income countries; UMIC = upper-middle-income countries.

Most workers in developing countries, not just gig workers, are outside the definition of standard work.

For example, close to half of workers (46 percent) in low-income countries do *temporary work*, which is defined as engagements lasting for a specific period, including fixed-term and project- or task-based contracts as well as seasonal or casual work, including day labor (figure 0.4) (ILO 2016). Gig work shares some characteristics of temporary work, as most gigs are short-term projects or assignments, though some contracts could be long term. Similarly, gig work also shares some characteristics of *part-time work*, another form of nonstandard work that includes a significant number of workers in both low-income and high-income countries (figure 0.5).⁷ When an employee’s normal hours of work are fewer than those of comparable full-time workers, the employment is defined as part-time work (ILO 2016). By that definition, most gig workers work part time; 53 percent of online gig workers in non-high-income countries work less than 10 hours per week (figure 0.6).

FIGURE 0.6: Average working hours of online gig workers per week

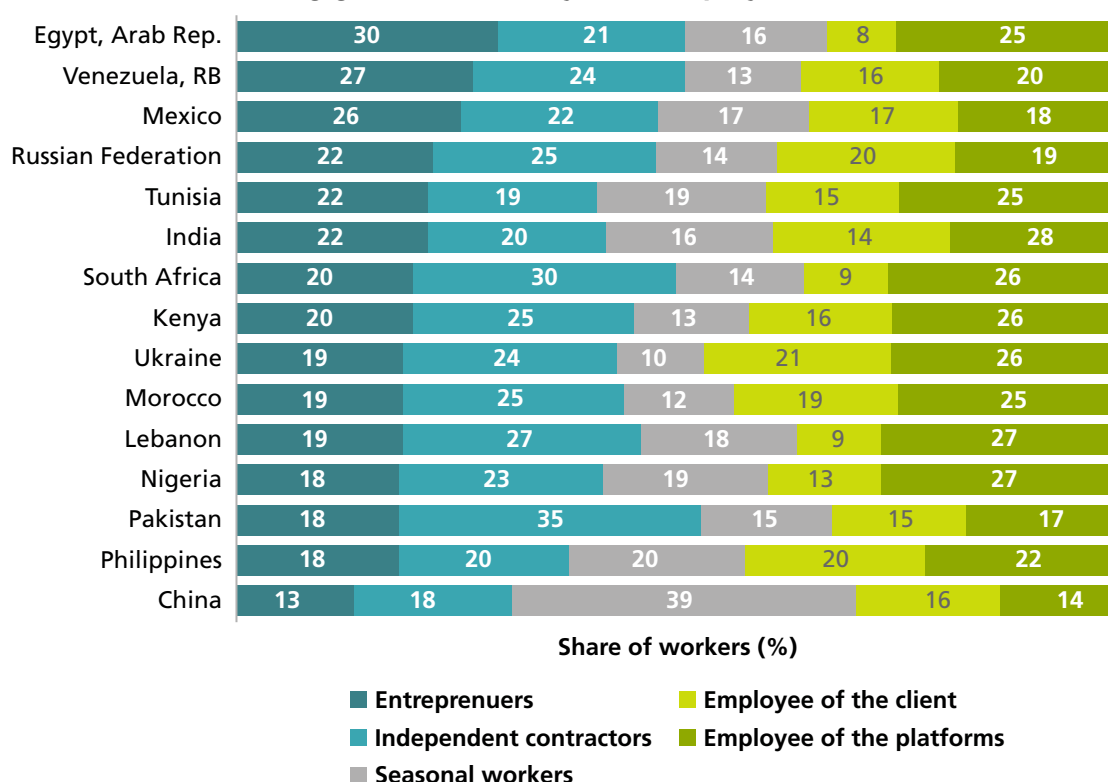


Source: Global survey conducted by the study team.

⁷ However, the data do not reveal whether the growth in part-time jobs is involuntary or voluntary.

While there is debate about whether *self-employment* constitutes nonstandard work, it is the dominant form of employment in developing countries (figure 0.3). The International Labour Organization (ILO) definition of nonstandard work includes only disguised self-employment and dependent self-employment. There is extensive academic, regulatory, and legal debate on whether gig workers have a dependent employment relationship with platform firms or are self-employed workers who use platforms to offer their services, discussed briefly in chapter 6. The surveys our team conducted show that a large proportion of online freelancers consider themselves self-employed or independent contractors (figure 0.7).⁸

FIGURE 0.7: How do gig workers classify their employment status?



Source: Global survey conducted by the World Bank study team.

Online gig work shares characteristics with informal work and other forms of nonstandard work that are widely prevalent in developing countries. This suggests that regulation of gig work cannot be an isolated exercise but must consider the overall context of a labor market that has diverse forms of work in which most people work outside the purview of labor regulations and without access to social insurance and benefits.

WHY SHOULD WE PAY ATTENTION TO THIS NEW FORM OF WORK?

Gig work is growing rapidly, but we still do not know much about the size, scale, and patterns of this emerging form of work, especially in developing countries. Demand for gig work has increased 41 percent between 2016 and the first quarter of 2023. Gig platforms reduce friction and transaction costs for firms when they hire specific expertise by improving supply-demand matching in the labor market, thus increasing productivity. This growth in demand for a flexible workforce has deep and wide-ranging implications for the geography, skill content, and modes of delivery of jobs that

⁸ However, survey data collected from the Microworkers platform show that most of the gig workers consider themselves employees of the digital platform or of the clients (employers).

challenge our traditional concepts of work but are not yet fully understood. These ramifications might further require shifts in policy and regulation that are complex and even less well understood. A key difficulty is navigating trade-offs between competing policy goals—for instance between incentivizing job growth and safeguarding workers' rights. Other challenges relate to the invisible nature of gig work (especially online work), the international nature of gig platforms, and the difficulty in measuring the size, growth, and patterns of this workforce.

Another significant regulatory challenge, especially for online gig work, is the cross-border coordination mechanisms that may be necessary between countries to determine the applicable tax, labor, and social security regulations. Not only is this form of work challenging for labor regulation, but also there are several other aspects of the policy and regulation that are affected—for example, competition (antitrust), tax, intellectual property, corporate governance, privacy, and data. While these regulatory challenges are beyond the scope of this report, they are particularly important and require new ways of thinking. For all the reasons previously discussed, measurement of and understanding of patterns in gig work are important for labor market, economic growth, and private sector development policies. Moreover, gig work offers a range of new economic opportunities but also several risks that policy makers need to understand, track, and assess in order to adapt policies.

WHAT ARE THE KEY QUESTIONS WE TRY TO ADDRESS IN THIS STUDY?

While there has been a recent increase in global and academic research on gig work, several critical knowledge gaps remain, some of which are addressed in this study.

Question 1: How many online gig workers are there?

Despite the recent rapid growth in digital labor platforms and studies of gig work, it has been challenging to estimate the size of the gig work market. Traditional labor market surveys do not capture gig work, which is often sporadic and supplemental work that may be classified with other forms of nontraditional work arrangements, such as day labor and independent contracts or self-employment.⁹ (More discussion is given in chapter 6). Tax returns also do not provide information about gig workers because these platforms are global in nature. Therefore, there are no reliable known sources of data, rendering this new workforce largely unknown and invisible. Thus, estimating the size and scale of gig work is an important issue for policy makers, which we address in chapters 1 and 2.

Question 2: In a market dominated by a few large global platforms, what is the role of local platforms?

In the literature, there is almost no systematic study of the regional/local labor platforms to understand their role in the ecosystem. Our study addresses that vital knowledge gap. Most studies of the gig economy have focused on the top 5 to 10 online global work platforms¹⁰ and omit data, experiences, and lessons learned from domestic and regional online platforms, which may have lower entry barriers for people in developing countries, especially those platforms where English is not the spoken language (Agrawal, Lacetera, and Lyons 2016; Online Labour Index 2020). How many such regional/local platforms are there? What are the differences between global and regional/local platforms in terms of how they work and the types of workers and firms they attract? Can regional/local platforms lower entry barriers for some types of workers or firms? Our study addresses these questions in chapters 1 and 3.

⁹ For a detailed discussion of challenges in systematic measurement of gig work through labor force surveys, see chapter 6 on social insurance.

¹⁰ Platforms tracked by the Online Labour Index (OLI) of the Oxford Internet Institute include the big five (Amazon Mechanical Turk, Fiverr, Freelancer, PeoplePerHour, Upwork). Although OLI did recently add another five platforms in Spanish and Russian to its index, the representation of regional platforms on the index remains limited.

Question 3: The supply side: How inclusive is the online gig economy?

How do gig workers compare with their peers in the labor force, those working in the informal or services sector, or those working in similar occupations in a country? How do they compare in six aspects—age, education, gender, location, occupation, and income? We use a global survey of 17 countries to address those question in chapter 4.

Question 4: The demand side: What types of firms are demanding gig workers, for what tasks, and why?

Very few studies have examined the demand side of gig work because it is hard to gather firm-level data. Our study uses a global survey sent to 20,000 firms, conducted through social media and targeted outreach using company lists in proprietary databases to understand the motivation of firms that hire through platforms and the trends in tasks demanded by different businesses. We also explore new emerging drivers of demand from governments, start-ups, and so on in chapter 5.

Question 5: How should developing countries deal with the lack of social insurance for these workers?

Although there has been plenty of recent study on the lack of social protection for gig workers, there has been limited analysis of viable solutions, especially in the context of developing countries, where informal and nonstandard work is the norm. These new forms of work require a new way of designing social protection and insurance that do not depend on a formal employer-employee relationship. Our report discusses recent developments and suggests possible innovative approaches, such as through public-private partnerships in the context of developing countries, in chapter 6.

Question 6: How can operational programs be designed to benefit from the opportunity but also safeguard workers?

COVID-19 has rapidly increased interest from client governments seeking operational support from the World Bank Group on new ways to bring digital jobs, obs to those who remain excluded from labor markets, especially taking advantage of the recent penetration of broadband and mobile phones. However, there are limited operational models that can support the design of programs while also addressing the risks associated with such types of work. This report provides practical tips for operational teams in chapter 7.

WHAT THIS REPORT DOES *NOT* COVER

As explained earlier, the study team has tried to focus on very specific knowledge gaps and has not attempted to be comprehensive on all aspects of gig work.

- This report **will not discuss location-based platforms** or e-commerce or retail platforms. While both types of gig work (online and location based) depend on technology-driven platforms, online gig platforms are more global in nature (which has implications for policy and regulation), while location-based platforms operate within more location-specific contexts. For this reason, online gig work has the potential to widen the job market for people in regions or countries that have limited domestic private sector demand and job opportunities. Furthermore, the online nature of this work creates opportunities for people with mobility constraints (for example, women, people with disabilities, and refugees). Most regulatory initiatives, including those in developed countries, have been driven by the emergence of location-based gig work such as taxi and food delivery services, which tend to be more visible to policy makers. Online gig workers, on the other hand, have remained largely invisible to policy makers in developing countries. Therefore, given the limited resources for this study, the team decided to focus on

only one category of platforms, not both, although the location-based platforms merit a separate study of their own.

- This report complements other work within the World Bank. While the regulatory challenge is a complex issue, this study **will not address issues regarding labor regulations** because another, ongoing investigation at the World Bank “Better Labor Regulations for the Digital Economy and Beyond: Protecting Workers and Facilitating Labor Markets for the New Forms of Work” (P176553) will study this aspect in more detail.
- This report will also **not cover the issue of regulations on competition law, taxation, data privacy, and so on**, which are the subject of another Advisory Service and Analytics project, “Digital Platforms for Development: Opportunities and Policy Options to Boost Take-Up and Mitigate Risks” (P178019) and another by colleagues in Finance, Competitiveness and Innovation in the Latin America region. “A Digital Economy Framework for Inclusive Growth” (P179481).
- This report is mainly an empirical data-driven analysis of online gig work from both the demand and the supply sides. It will contribute to the development of a more detailed conceptual framework that will build on the upcoming Jobs Flagship report and will include a more comprehensive understanding of other types of digital-platform-enabled forms of work.

OUR EMPIRICAL STRATEGY

In the absence of systematic data on gig work, the study develops a new approach that combines (a) data science methods and website traffic data and (b) a global RDIT survey in 17 countries and 12 languages, in addition to other survey instruments and country deep dives. Detailed methodology sections are in the appendixes. Our methods include the following:

- 1. Data science-based methods.** Data science-based methods, including web scraping and natural language processing, were combined with web traffic data to create a consolidated database of firms and estimate the number of workers. The team used two proprietary databases of businesses (CB Insights and Pitchbook) and an openly accessible database of 500 online gig work platforms (EC 2021; Kässi, Lehtonvira, and Stephany 2021),¹¹ which were filtered by a keyword approach and then combined with website traffic indicators, such as clickstream data from Semrush, a software-as-service (SaaS) platform in the search engine marketing industry, complemented with venture indicators. See appendixes B and C for detailed methodology.
- 2. Global survey using the experimental RDIT patented by RIWI¹² in 17 countries and 12 languages in addition to English.** The RDIT methodology assumes a random distribution of the survey to the internet population in the targeted countries.¹³ The opt-in survey was accessible on a variety of devices (desktop, mobile, tablet) and was designed to take as little time as possible to complete. Respondents could leave the survey at any point, resulting in complete responses (from respondents who filled out the entire survey) and partial responses (from respondents who completed only several questions in the survey). The survey was conducted in 12 languages in addition to English to reach non-English-speaking populations. **One of the key advantages of the global RDIT survey is the ability to reach a broad audience in a variety of countries.** In addition to collecting data from non-English-speaking populations, this method allowed the team to gather data on the Chinese supply of online gig workers, a market for which capturing

¹¹ In addition to these two sources, World Bank colleagues and private interviews with counterparts provided inputs to this initial database.

¹² See <https://riwi.com/technology>

¹³ This methodology has recently been used by other World Bank studies, such as those of Hoy (2022), Mellon et al. (2021), and Soundararajan et al. (2019), among others.

data has been difficult.¹⁴ Complete responses were collected from 7,015 respondents in the 17 countries, with 956 responses from online gig workers and the rest from respondents who had never done any gig work.¹⁵ The 17 countries, **representing some of the largest gig work countries in each of the six regions, are** Arab Republic of Egypt, Argentina, Bangladesh, China, India, Kenya, Lebanon, Mexico, Morocco, Nigeria, Pakistan, the Philippines, República Bolivariana de Venezuela, Russian Federation, South Africa, Tunisia, and Ukraine. See appendix D for detailed methodology.

3. **Five country deep dives.** Our team worked with World Bank country teams from Social Protection and Jobs (SPJ), Social Sustainability and Inclusion (SSI), and Digital Development (DD) to conduct country deep dives in **Bangladesh, Indonesia, Kosovo, Malaysia, and Pakistan**. See appendix E for a detailed description of the country-level surveys. The team received platform data from Malaysia-based platform eRezeki (2016–20) and the GLOW PENJANA program (2020–21),¹⁶ provided by the Malaysia Digital Economy Corporation (MDEC) and analyzed with the support of World Bank colleagues in Malaysia. In Indonesia, our team collaborated with the SPJ team, who also provided data analysis, to conduct a large survey of over 4,000 informal workers. In Pakistan, we worked with the SSI country team, which had implemented an operation in Khyber Pakhtunkhwa and was keen to roll out an end-of-operation survey. We worked with the team to conduct the survey. In Kosovo, we worked with the DD team to trace beneficiaries of a DD pilot on gig work. In Bangladesh, we worked with client counterparts in the Ministry of Information and Communication Technology to roll out a small-scale survey on gig workers. See appendix E for details.
4. **Ten platform-based surveys.** Ten platform-based surveys, including nine online freelancing platforms and one microwork platform, were conducted between April and December 2022. All nine online freelance platforms were regional/local in nature. The surveys were conducted in collaboration with the nine freelancing platforms, relying on a variety of distribution channels, including emails sent by the platforms to gig workers and promotion of the survey on the platforms. The survey conducted on the microwork platform was posted as a task, and online gig workers were invited to complete the survey just as they would complete any other task (see appendix E for a detailed description of the platform surveys). Table 0.2 lists the platform surveys conducted. Platform-level information was collected from several platforms, in addition to data from our surveys.¹⁷ Our team partnered with the Inter-American Development Bank (IDB) Labor Markets Division to conduct the survey on the Latin American platform Workana.

¹⁴ For instance, the OLI features limited data on the supply of online gig workers from China, given that the index is based on a selection of top online gig work platforms that does not include Chinese platforms. For more information, please see <http://onlinelabourobservatory.org/oli-supply/>.

¹⁵ RIWI allows internet users around the globe to opt in to anonymous surveys on any web-enabled device. As people are using the web or apps, there is a chance of their coming across a RIWI survey via dormant domains (websites that are no longer in use), incorrect URLs, and links within apps and websites. Instead of encountering a “page does not exist” notification or an advertisement, a RIWI survey or message test is rendered full site on the page. Web users then decide whether they would like to anonymously participate in the research and do so without incentivization. Some strengths of using RIWI technology include rapid data collection, diverse respondent sets, and respondent anonymity. Because of the scale of internet users and the ability to sample the entire population of a country using the internet it is possible to obtain very large samples in a short time and to engage large samples of previously unengaged voices. Respondents are not part of a panel or discussion group, which usually come from specific demographic subsets. The survey was a questionnaire of 12 queries. A total of 20,010 respondents completed the first question in the survey.

¹⁶ The GLOW PENJANA program was developed by MDEC as a spin-off to the eRezeki platform to support individuals affected by the COVID-19 pandemic. The program provides training to aspiring online gig workers.

¹⁷ The interview with YouDo was conducted on February 10, 2022, days before the Ukraine crisis.

TABLE 0.2: Platform surveys

Platform	Region / Country	Number of responses
Workana	Latin America (HQ in Argentina; active in EAP; regional office in Malaysia)	3,702
SoyFreelancer	Latin America (HQ in El Salvador)	324
SheWorks!	Latin America (HQ in United States)	36
Truelancer	South Asia (HQ in India)	746
Flexiport	South Asia (active only in India)	11
Wowzi	Africa (active primarily in Kenya)	960
Onesha	Africa (active primarily in Kenya)	82
Jolancer	Africa (HQ in Nigeria)	19
Elharefa	MENA (HQ in Egypt, Arab Rep.)	41
Microworkers	Global microwork platform	1,073

Sources: World Bank, except for Workana, which was conducted in collaboration with the IDB Labor Markets Division.

Note: EAP = East Asia and Pacific; HQ = headquarters; MENA = Middle East and North Africa.

5. **Firm survey to understand the demand side.** Our team worked with the World Bank External and Corporate Relations (ECR) team to conduct a global survey of firms through (a) social media—distributed via Twitter, LinkedIn,¹⁸ World Bank’s Jobs and Development blog,¹⁹ and Facebook groups used to hire gig workers—and (b) direct emails targeted to 14,083 firms from a proprietary database (Pitchbook), which had contact details and another 6,202 firms through their generic email addresses. The team was able to gather 1,174 responses, including 366 from firms that hire gig workers. See appendix H for methodology.
6. **Three focus group discussions with online gig workers.** Focus group discussions were held to collect qualitative information about the challenges and benefits of online gig work. Working with the SSI Global Practice team in the Pakistan country office, two discussions were organized with Pakistani online gig workers (one with women and one with men). A third focus group discussion was organized with the Kenya-based platform Onesha.
7. **Interviews with 28 platforms.** Of 28 platforms interviewed, 24 are regional/local platforms and 3 are global (including Freelancer and Upwork).²⁰ The regional platforms selected were among the top platforms by traffic data in each of the six regions to draw context-specific insights, their business models, and so forth. Descriptions of the platforms and questions asked of representatives are presented in appendix F. The platform stakeholders interviewed are listed in table A.1 in appendix A.
8. **Interviews with policy makers, partners, and practitioners.** Interviews were conducted with representatives from governments, development organizations, and a variety of programs designed to promote online gig work and train aspiring workers (see appendix A).
9. **Interviews with the private sector.** The team also interviewed representatives from businesses, private banks, and financial institutions working with platforms to offer health insurance or savings plans to online gig workers, as well as other organizations supporting the inclusion of vulnerable groups in the online gig economy (for instance, refugees) (see appendix A).
10. **Consultations with World Bank Group teams/team task leaders:** The team has consulted a wide variety of World Bank colleagues in the process of developing this report.

¹⁸ See <https://www.linkedin.com/company/solutions-for-youth-employment>.

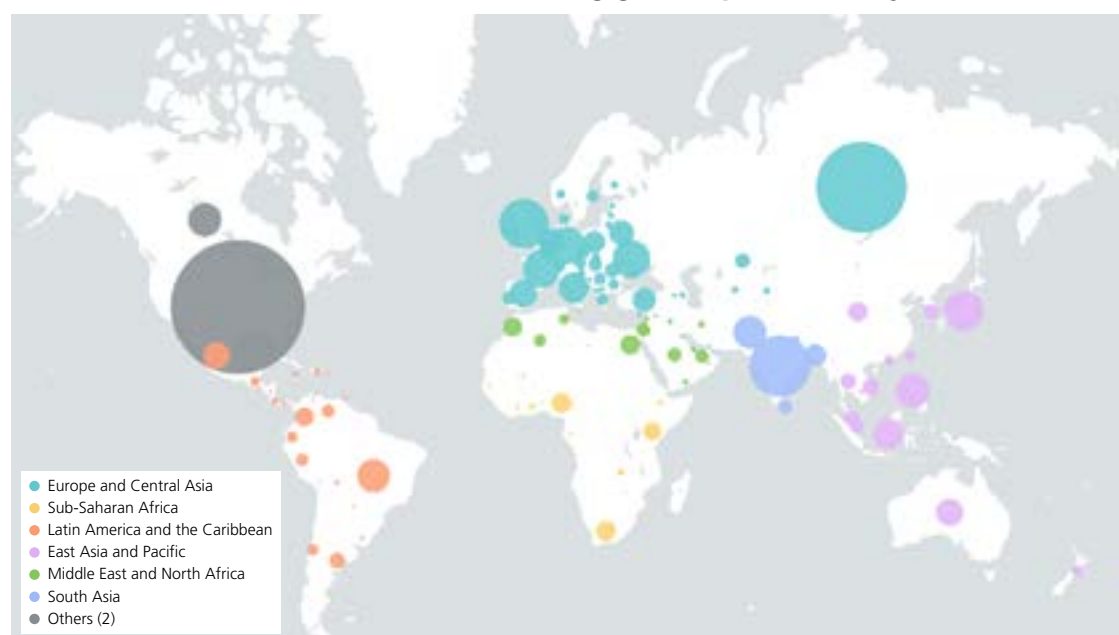
¹⁹ The blog post aimed to promote the survey and engage more businesses to respond. The blog post is available at <https://blogs.worldbank.org/jobs/help-world-bank-figure-out-piece-puzzle-gig-jobs>.

²⁰ Representatives of the following platforms were interviewed: Apna, Asuqu, BeMyEye, Bookings Africa, The Bot platform, Elharefa (previously Al7arefa), Findworka, Flexiport, Freelancer, Hsub (the company that runs the Khamsat and Mostaq platforms), Jolancer, Karya, M4JAM, MDEC (which runs the eRezeki and GLOW programs), Meaningful Gigs, Motionwares, Native Teams, Onesha, SheWorks!, SoyFreelancer, Truelancer, UREED, Voices.com, Workana, Wowzi, and YouDo.

KEY FINDINGS: THE PROMISE AND THE PERIL

The study identified a total of 545 online gig work platforms across the globe, with headquarters in 63 countries and platform workers and clients located in 186 countries (figure 0.8). The team used a data science methodology to develop a database of online gig work platforms. Employing information from prior lists of gig platforms and using keyword analytics platforms and natural language processing methods, the study team developed a list of keywords that are relevant for identifying gig platforms. These were applied to two proprietary databases of firms (CB Insights and Pitchbook) to identify a comprehensive list of online work platforms across the globe.

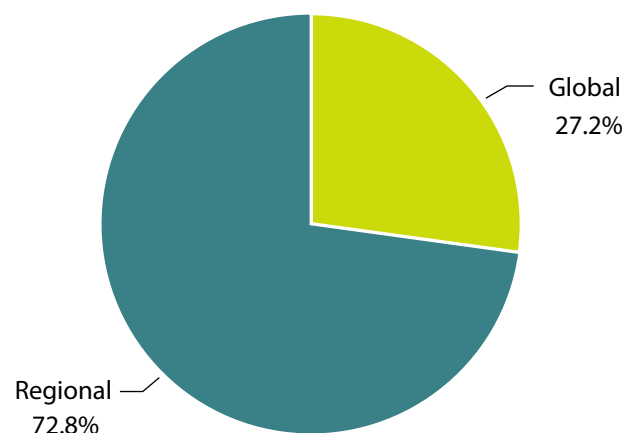
FIGURE 0.8: Global distribution of online gig work platforms, by traffic



Source: Team database from CB Insights, Pitchbook, and Semrush.

Note: The figure shows the traffic towards gig work platforms, with size depicting magnitude and colors showing different WB Regions.

Contrary to popular perception, most online gig work platforms are regional/local, connecting employers and workers from one country or a few countries within a region (figure 0.9). One special contribution of our study to the gig work literature is the effort to identify and understand regional and local platforms. Identifying such local platforms is not straightforward, given a lack of publicly accessible transaction data on the platform level. In the absence of firsthand data, we used a second-best method that relies on web traffic as a proxy indicator for platform operations. We used data from Semrush, a proprietary SaaS platform, on how many people visit specific URLs, the number of unique visitors, the average duration and pages visited, clickstream data, and bounce rates (when a person visits a website but leaves the home page in seconds) over the course of 2022. We then developed a model to classify platforms as global or regional/local on the basis of the share of web traffic from one region, accounting for the number of internet users. The results show that 73 percent of platforms in the mapping can be considered regional/local. However, they attract only 29 percent of the overall traffic, which can be interpreted as network effects in favor of global platforms at work.

FIGURE 0.9: Global and regional/local online gig platforms

Source: Team database.

While regional/ local platforms may not have received as much attention as global platforms, they seem to play an important role not just for the local labor market but also for the local private sector ecosystem in many developing countries (figure 0.10). First, local platforms have several advantages over global platforms that may make them better suited for some types of work (for example, work requiring understanding of cultural context). Second, they often have features (use of local languages, local payment mechanisms) that may make it easier for groups previously excluded from global platforms to participate in the gig economy. Third, regional/ local platforms play an important role for local private sector development in terms of being talent resources for local MSMEs and start-ups in developing countries, which often don't have the capacity to hire expensive talent. Finally, because regional/local platforms are concentrated in one or a few select countries or regions, such platforms may be more inclined to collaborate with national governments on development policy goals, such as training or social insurance measures initiated by the government. Nevertheless, many regional/local platforms struggle to reap the benefits of network effects or establish a sustainable business model and are likely to seek alternative business models (for instance, becoming staffing agencies) to be able to grow.

Online gig workers are now a non-negligible part of the global labor force, with about 154 million to 435 million people doing gig jobs, which is almost 4.4 to 12.5 percent of the total. The last World Bank study on this topic, in 2015, estimated that there were 48 million registered online gig workers at that time (Kuek et al. 2015). Our study almost eight years later shows a much higher number, partly because our methodology made a concerted effort to track gig workers on regional/local platforms that most literature has overlooked, but also because there has been a rapid growth in recent years, especially triggered by the COVID-19 pandemic. While all estimates are based on several assumptions in the absence of clear data, there is no doubt that gig work is growing and hence needs policy attention.

For two in three workers, gig work is a secondary occupation or performed only sporadically. Gig workers often vary widely in terms of how much time they spend doing gigs and what fraction of their overall income is generated by them. The team's global survey in 17 countries conducted in 12 languages estimates that there could be about 132.5 million main, 173.7 million secondary, and 106.2 million marginal gig workers globally (figure 0.11).²¹

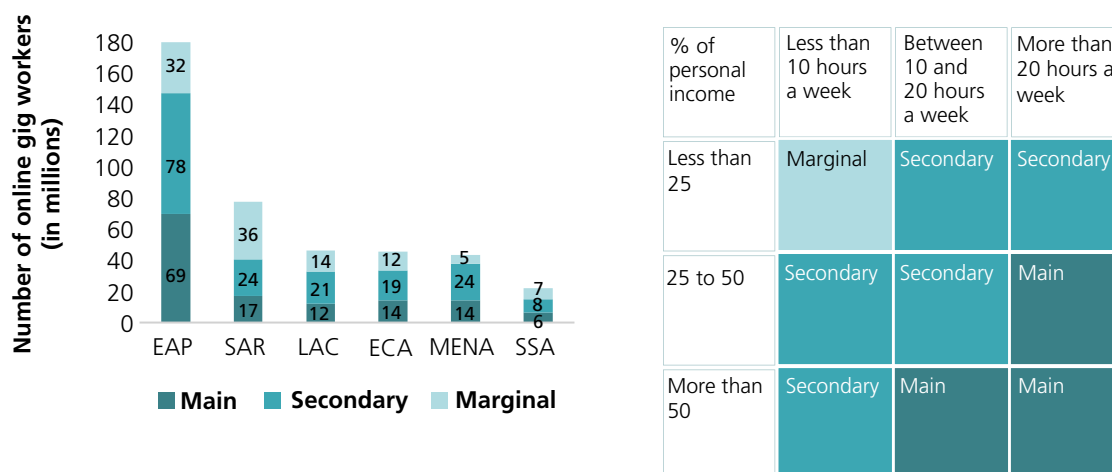
²¹ Figure 0.11 doesn't include North America.

FIGURE 0.10: Classification of interviewed global and regional/local platforms

Demand side /clients	Global, clients in diverse countries	B.O.T.	Findworka, Jolancer, M4JAM, Meaningful gigs, Native Teams, SheWorks!, Truelancer, Workana	Appen, Freelancer, Upwork, Voices.com
	Clients from a few countries in a region		BeMyEye, Bookings Africa, Elharefa, Khamsat, Mostaq, Ureed, YouDo, SoyFreelancer, Wowzi	
	Clients from a single country	Apna, Asuqu, eRezeki, Flexiport, Karya, Onesha		
		Workers from a single country	Workers from a few countries in a region	Global, workers in diverse countries
Supply side/online gig workers				

Source: Study team.

FIGURE 0.11: Classification of gig workers based on earnings and working hours

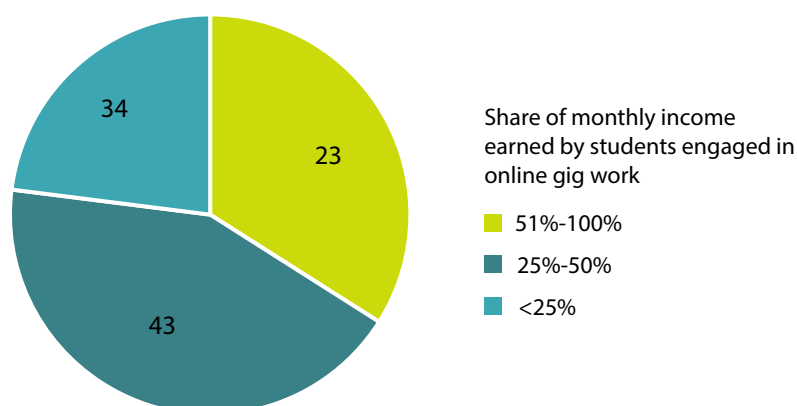


Sources: Table adapted from Urzi Brancati, Pesole, and Fernández-Macías 2020; team analysis based on the global RDIT survey.

Note: EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and Caribbean region; MENA = Middle East and North Africa; SAR = South Asia region; SSA = Sub-Saharan Africa.

Gig work attracts people because it provides workers the flexibility to learn digital skills while earning an income. Gig income can help manage risk and smooth income during periods of shock or transition, acting as almost a type of unemployment insurance where none exists, in the event of job loss, for example. For youth still in school, a side gig is a way to earn income while also attending school (figure 0.12). This supplemental income was especially important for many during COVID-19.

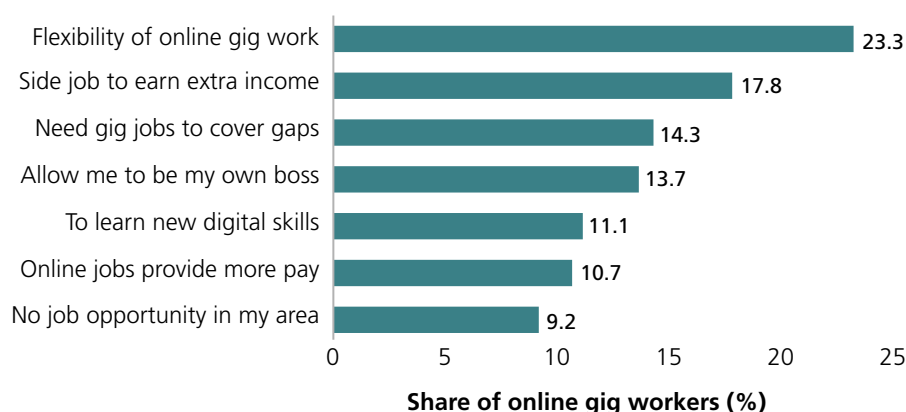
FIGURE 0.12: Share of monthly income earned by students engaged in online gig work



Source: Team analysis of global survey conducted by the team.

Gig work can support inclusion in the labor market but is not a panacea in addressing inequality and poverty. Gig jobs, especially those performed online (not location based), can be important for people who face mobility constraints in accessing offline labor markets (figure 0.13)—for example, people with disabilities, young women who have caretaking responsibilities, or low-income youth who require flexibility in work schedules to earn extra income while still in school. Nevertheless, landing a gig job is not straightforward. Workers need access to the internet and to internet-enabled devices. In addition, workers need some level of digital literacy. Gig work is also becoming increasingly competitive, with gig workers not finding enough well-paid tasks or having to spend long hours searching for and landing a task (Wood, Lehdonvirta, and Graham 2018). There are also concerns about finding enough career progression pathways to move out of gig work to a more secure, stable job.

FIGURE 0.13: Motivation to engage in online gig work

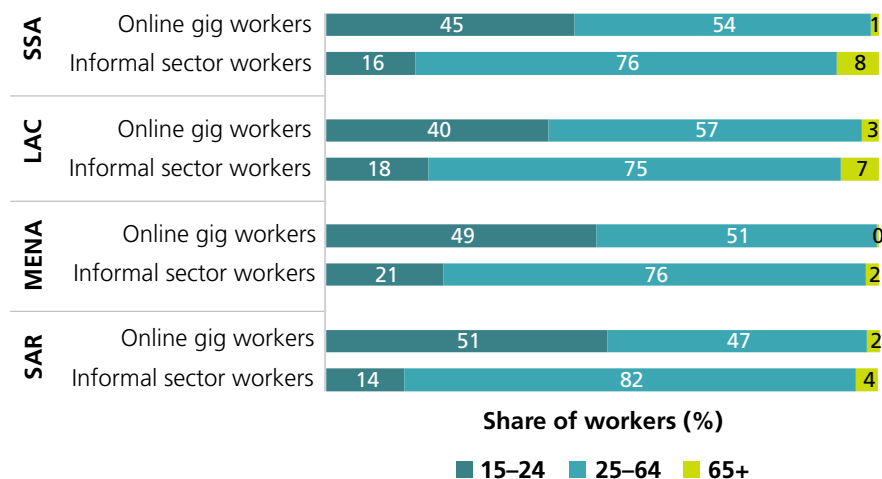


Source: Team analysis of global survey conducted by the team.

Over half of online gig workers are youth. The team conducted a global survey using the experimental RDIT patented by RIWI in 17 low- and middle-income countries, which represent among the largest gig work countries in each region. We used the survey findings to assess how online gig work compares with the labor force in each country on six aspects of inclusion (gender, age, location, skills, language, and occupation), by examining differences between online gig workers and average workers in the labor force, in the services sector, in the informal sector, or in similar occupations in each country (figure 0.14). Most online gig workers tend to be younger than workers in the services

sector and workers in the informal sector for countries for which data were available. For countries with growing cohorts of youth as well as high youth unemployment rates, online gig work can provide young people with work opportunities beyond what is available in the traditional labor market.

FIGURE 0.14: Age composition of online gig workers compared to informal workers in labor force surveys, by region

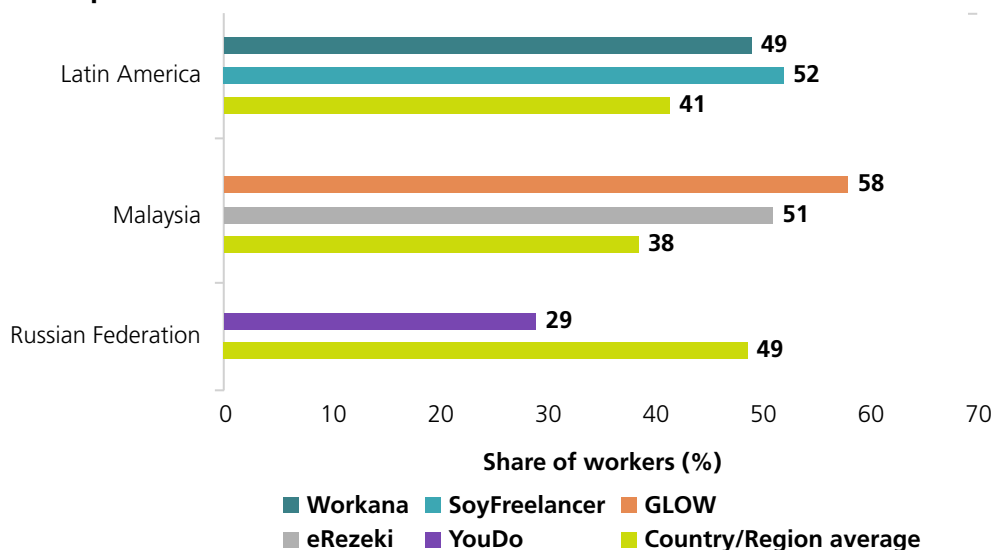


Source: Analysis based on the global survey conducted by the study team and labor force and household surveys (<https://ilostat.ilo.org/data/>).

Note: LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SAR = South Asia region; SSA = Sub-Saharan Africa.

While men make up the majority of online gig workers, in some regions women are participating in the online gig economy to a greater extent than in the general labor market, the services sector, or the informal sector. The key drivers of women’s participation in this market are the ability to earn additional income and the flexibility that online gig work offers (figure 0.15). Women are more likely than men to do online gig work because they want to earn additional income and because they don’t have other job opportunities, while men appreciate more the ability to learn new digital skills and the chance to be one’s own boss.

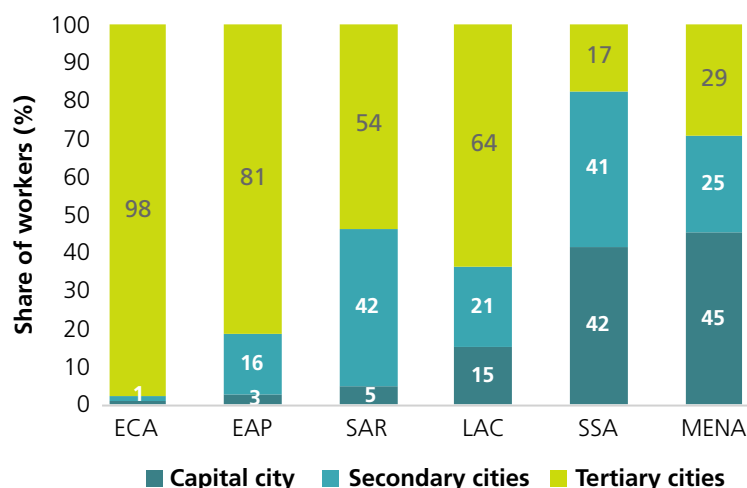
FIGURE 0.15: Women’s participation in the labor force and in select online gig work platforms



Source: Analysis based on the platform surveys conducted by the study team.

Surprisingly, more than 6 in 10 gig workers live in smaller cities, which points to the role that online gig work could play in addressing regional inequalities in access to jobs, but good digital infrastructure and digital devices are critical. Our online global survey enabled us to record geolocation data for each respondent, which we used to classify gig workers as based in **three types of cities:** (a) capital cities, (b) secondary cities (the top 10 largest cities in a given country, not including the capital city), and (c) tertiary cities (smaller cities and towns beyond the capital city and the top 10 largest cities in a given country). Patterns may differ at the platform level, but generally a good percentage of online gig workers comes from cities beyond the capital city (figure 0.16). On the India-based Truelancer platform, for instance, over 60 percent of the online gig workers surveyed lived in secondary or tertiary cities and villages, while 40 percent lived in capital cities. However, there are strong differences between regions; for example, in Sub-Saharan Africa and in the Middle East and North Africa, a much greater proportion of online gig workers is in capital cities.

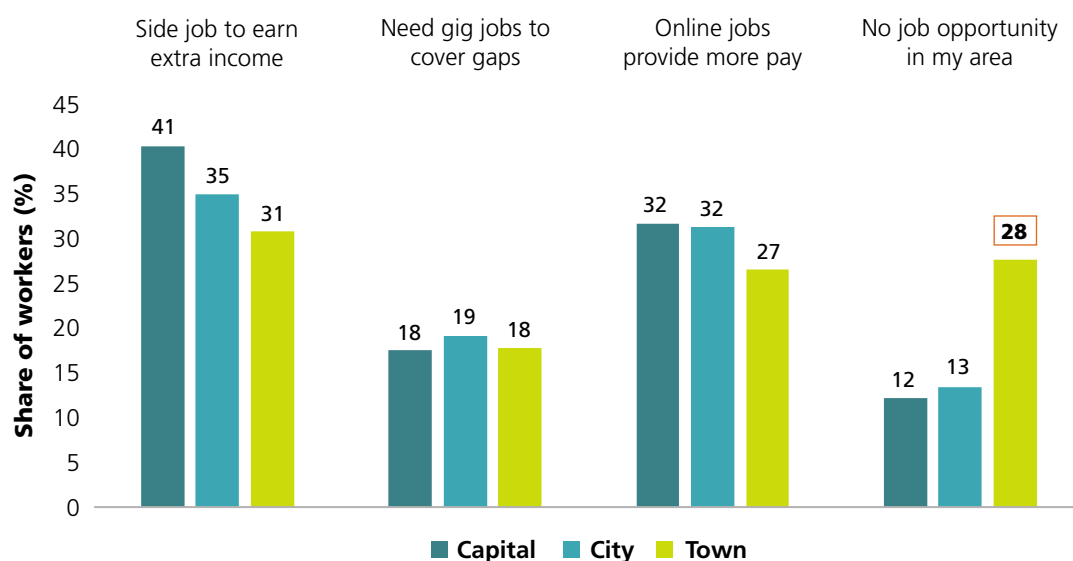
FIGURE 0.16: Distribution of online gig workers by city size and region



Source: Analysis based on the global survey conducted by the study team.

Note: ECA = Europe and Central Asia; EAP = East Asia and Pacific; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SAR = South Asia region; SSA = Sub-Saharan Africa

FIGURE 0.17: Motivation to engage in online gig work across locations



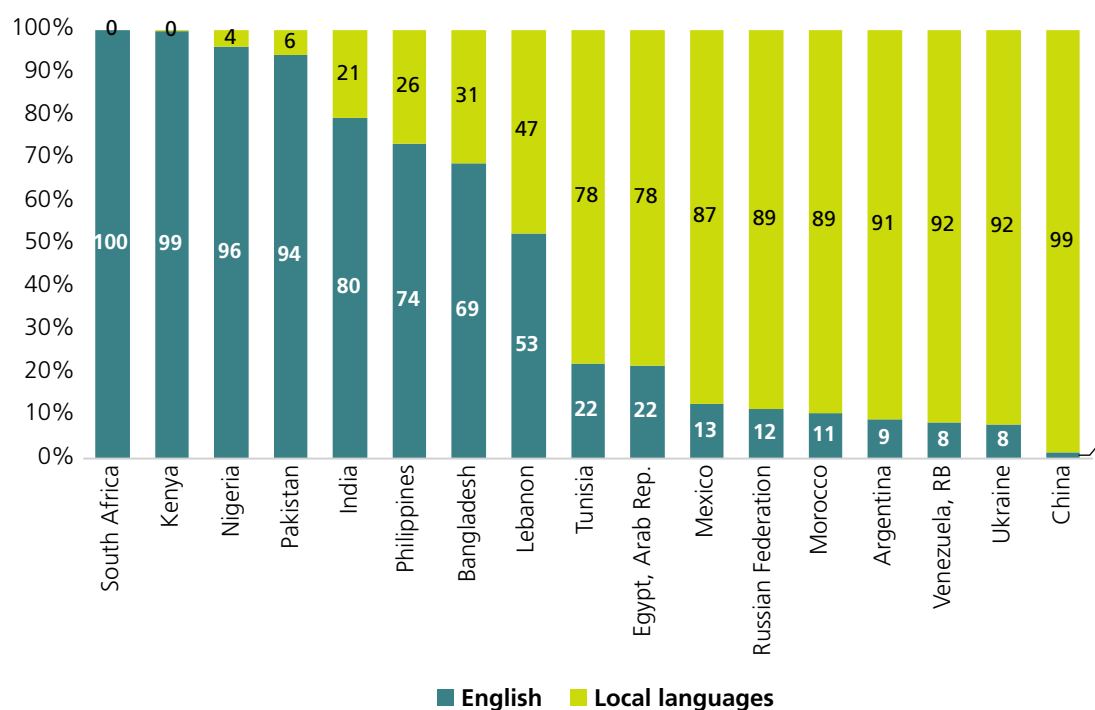
Source: Workana survey.

Note: Respondents were allowed to select multiple options. Only income- and job-related responses are included in this figure.

In regions where there simply aren't enough good jobs available, gig work can bring new opportunities. Most workers in low-income countries already perform a portfolio of low-skilled jobs in gig-type arrangements in the informal sector, with high levels of insecurity, low wages, and poor working conditions (as discussed previously). For job-scarce contexts, gig opportunities can often (though not always) be better than the alternative. In small countries or fragile and conflict-affected situation (FCS) countries or regions with limited availability of local jobs, online gig jobs can provide a way to access a wider job market and tap into international demand, without the need to physically migrate to job-rich regions. For example, residents in towns and villages are more motivated to engage in online gig work since job opportunities are limited within their neighborhoods (figure 0.17).

Language can be a significant barrier in accessing online gig work opportunities. Of online gig workers, 33 percent confirm that one of the main challenges they face to work on global platforms is English language skills. The global supply of online gig work is dominated by workers of English-speaking countries. Three countries in particular—India, Bangladesh, and Pakistan—account for over 50 percent of the supply of online gig work on the basis of data collected by the Online Labour Index (hereafter, OLI 2020),²² signaling that workers from non-English-speaking countries are likely to face language barriers to enter the online gig work market. Surveys conducted in English not only tend to exclude perceptions of non-English-speaking populations but also might underestimate the overall size of the online gig workforce. The team's global survey was translated into 12 languages to ensure a wider reach. A substantial number of responses (57 percent) were in languages other than English (figure 0.18). Local platforms could help address this barrier by including non-English-speaking populations on digital platforms.

FIGURE 0.18: Distribution of the language of responses by online gig workers by country

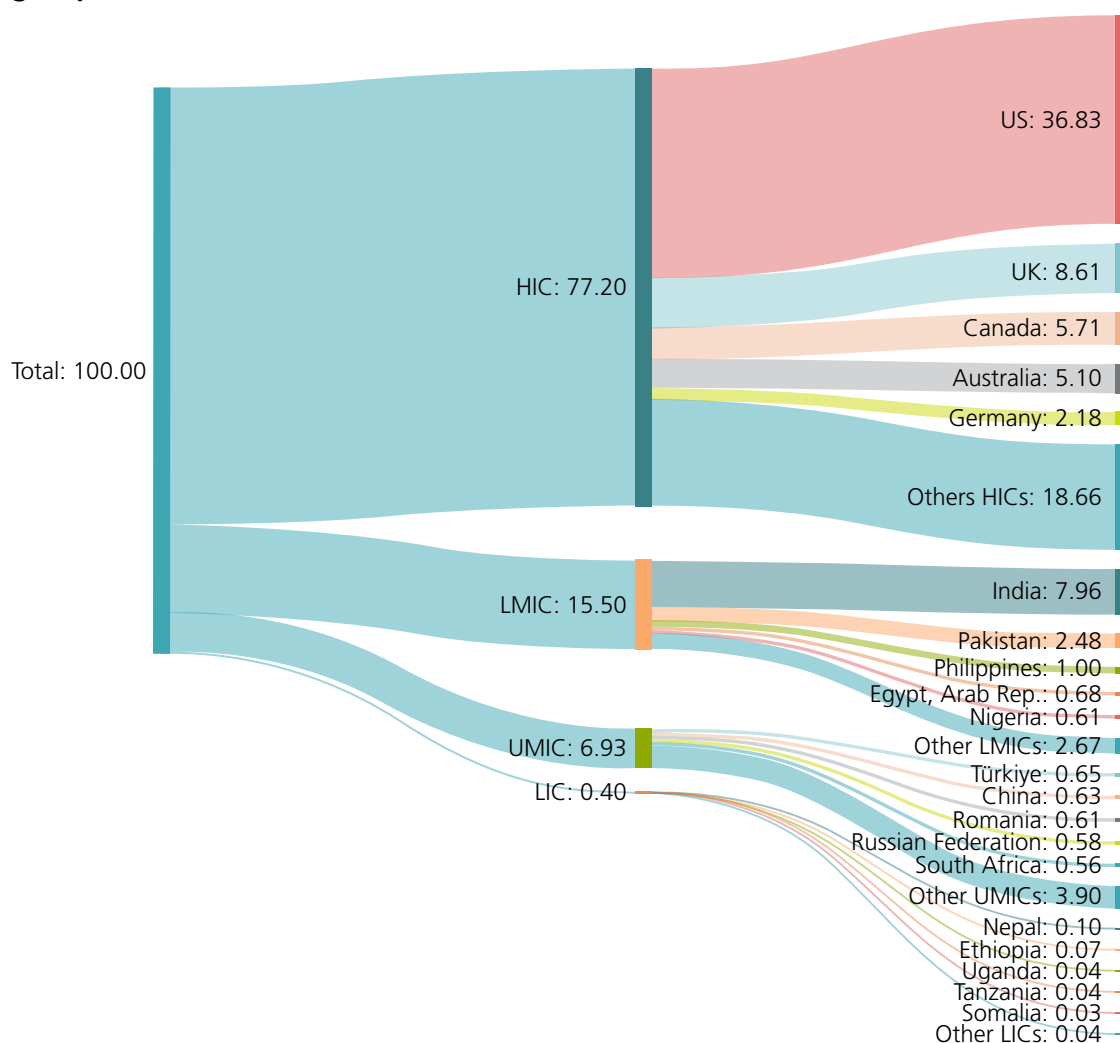


Source: Analysis based on the global survey conducted by the study team.

²² The OLI collects data from the five largest English-language online gig work platforms and six non-English-language platforms (three in Russian and three in Spanish). See <http://onlinelabourobservatory.org/oli-supply/>.

Developed countries dominate the demand for online labor, but lower-middle-income—rather than upper-middle-income—countries are the second most important contributors (figure 0.19). The demand for gig work increased by 41 percent between 2016 and the first quarter of 2023. More than three-quarters of the global demand comes from high-income countries, but the demand from developing countries is rising faster than that in the developed countries (figure 0.20). Growth in the number of jobs posted on one of the largest global platforms by companies in North America was roughly nine times slower than that in Sub-Saharan Africa. Moreover, a global survey of firms conducted through social media and targeted emails using contact details in a large proprietary firm database shows that the demand for online gig workers is expected to continue rising, especially in low- and lower-middle-income countries. MSMEs drive the demand for gig workers. Not only are smaller businesses more likely than big businesses to hire gig workers, but they also outsource a greater share of their work through platforms than large firms. Governments also generate local demand.

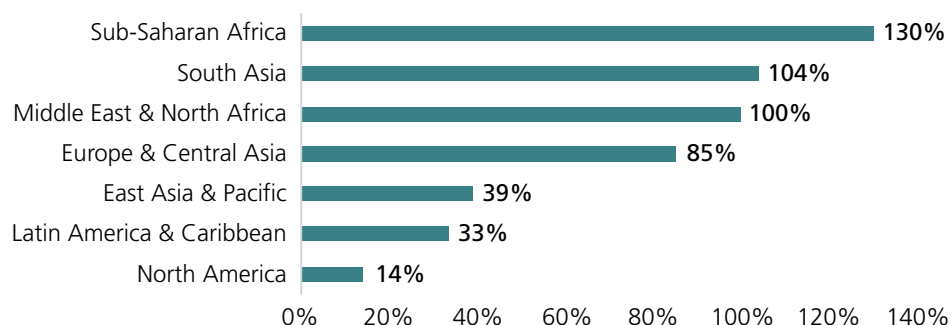
FIGURE 0.19: Demand for online labor, by country and country income groups—2022



Source: World Bank illustration based on Online Labour Index data.

Note: HIC = high-income countries; LIC = low-income countries; LMIC = lower-middle-income countries; UK = United Kingdom; UMIC = upper-middle-income countries; US = United States.

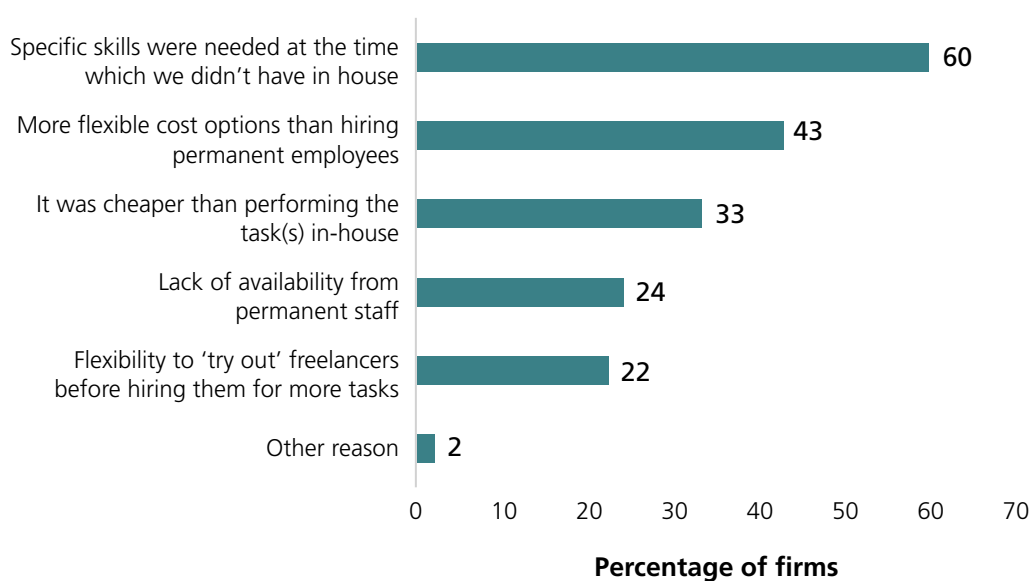
FIGURE 0.20: Growth rate of job postings on one of the largest digital labor platforms for 2016–20, by region



Source: World Bank illustration based on data shared by the Online Labour Index team.

Businesses benefit from a flexible workforce, as it helps them improve efficiency and enhance productivity, which is fundamental for the growth of new jobs in any economy. Digital labor platforms allow businesses to set up tasks and requirements, which are then matched by the platforms to a global pool of workers who can complete the tasks within the specified time and budget. This task distribution process helps businesses, large and small, to easily outsource a diverse range of activities to a geographically dispersed crowd. Our study confirmed findings from other research that firms, not just Fortune 500 multinationals but also MSMEs and start-ups, are increasingly using online gig workers to access a larger talent pool of labor, skills, and expertise, to reduce start-up and transaction costs and overcome conventional hiring barriers (figure 0.21). According to the survey conducted for the purposes of this study (see chapter 5 for details), 44 percent of MSMEs turned to digital labor platforms to access a wide range of skills. Labor platforms allow firms to remain nimble and adjust their workforce in terms of size and composition in response to peaks and dips in demand in an increasingly dynamic market. A vibrant, agile, and growing private sector is the engine for a robust jobs agenda and therefore of great importance from a development perspective.

FIGURE 0.21: Reasons for hiring gig workers

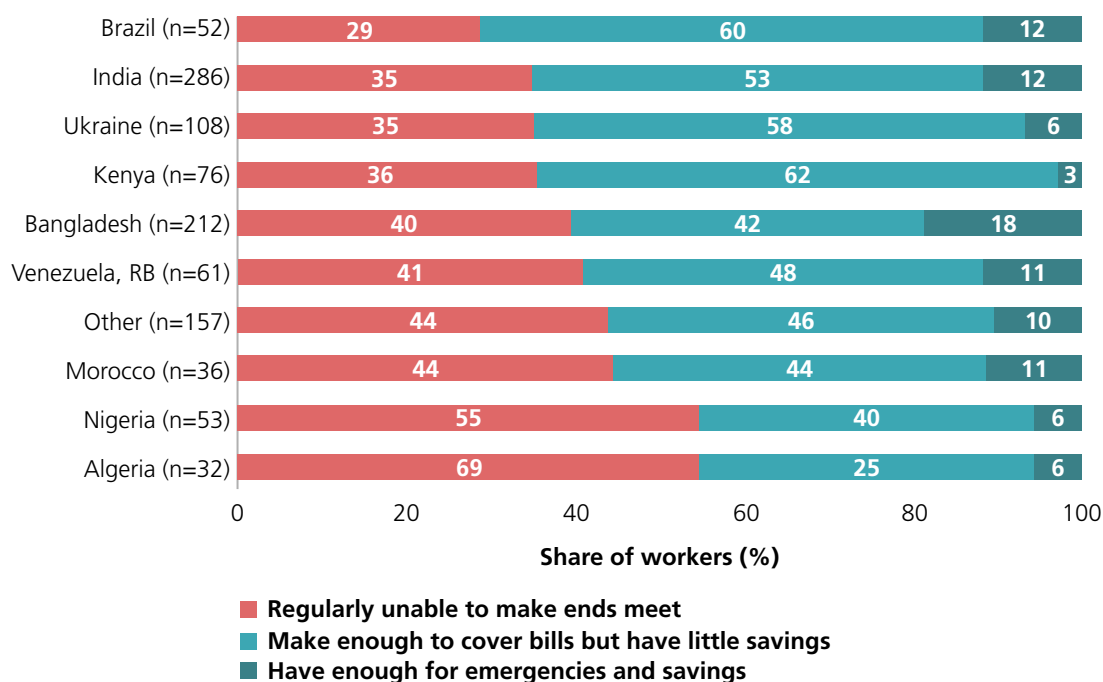


Source: Team survey of firms hiring through digital labor platforms, 2022.

Note: Respondents could choose more than one option, so the values do not add up to 100.

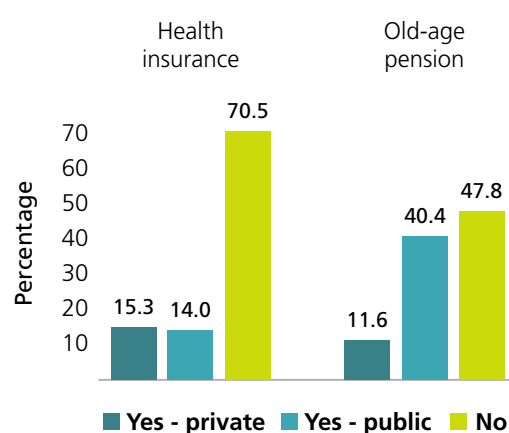
Gig workers, like many other self-employed individuals, typically fall into a “missing middle” when it comes to social insurance—they are sometimes not poor enough to be eligible for social safety net benefits and not well-off enough to be part of social insurance programs mandated for the formal sector. However, in relatively lower-income countries, gig workers are likely to belong to households needing short-term consumption-smoothing support (figure 0.22).

FIGURE 0.22: How would you best classify your financial position?



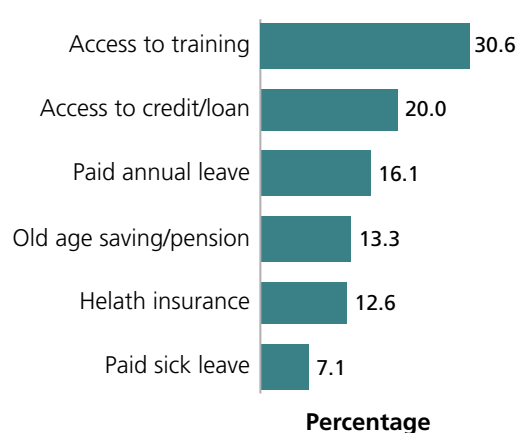
Source: Survey on Microworkers platform.

FIGURE 0.23: Do you subscribe to health insurance and an old-age pension?



Source: Workana survey.

FIGURE 0.24: What is the top benefit you would like gig platforms to provide?

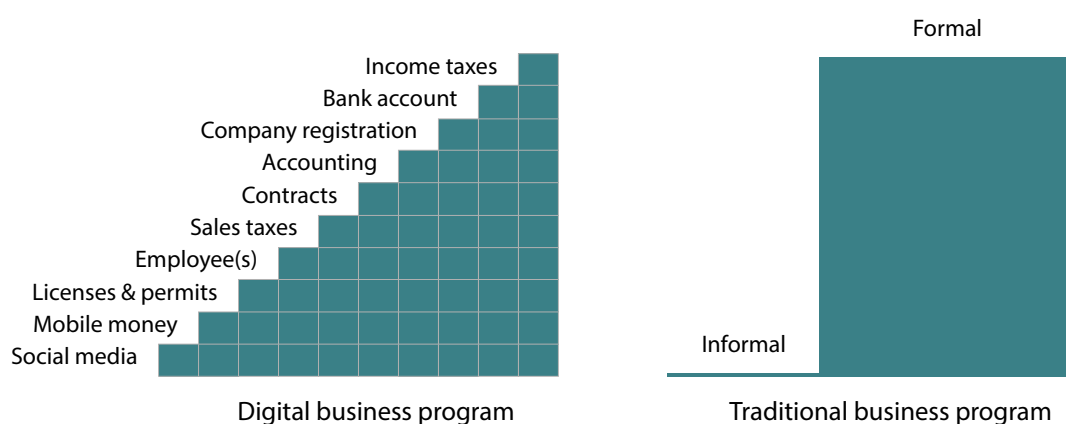


Source: Global survey conducted by the study team.

Although about half of gig workers do not subscribe to a pension or retirement program and are not covered by other benefits that accompany formal employment, gig workers also desire unconventional benefits, such as access to training and credit or loans to buy equipment, a laptop, and internet access (figures 0.23 and 0.24). This means that social programs to cover workers could be more attractive if they also included support for insertion into the labor market.

While the issue of classification of gig workers has attracted considerable debate and court cases in developed countries, in developing countries the issue needs to be assessed in the context of high levels of informality in the labor market. While the estimated gig worker population is small compared to the informal worker population (about 90 percent of the labor force in low-income countries is informal), there are overlaps between these worker arrangements. Both are diverse and fluid—people move in and out of jobs regularly, can hold several market engagements at the same time, and may hold jobs with characteristics of both economic formality and economic informality. Chapter 6 has a detailed account of some of the developments in the classification debate, relevant mostly for developed countries. For most low-income countries, the most practical and effective approach would be to extend coverage to all informal and self-employed workers, including gig workers, without segmenting the labor market.

From a social protection policy perspective, governments can partner with gig platforms to widen coverage of social programs for informal workers. Workers in the informal sector are hard to identify and reach, making them almost invisible to policy makers. Online gig platforms can help increase observability and may provide entry points toward accessible, low-cost incremental steps to collect data and link informal workers to social registries and social protection programs (figure 0.25). This is because digital platforms have identity information and use mobile payments, features which make gig workers easier to identify, reach, and enroll in government programs designed for informal workers (Ng'weno and Porteus 2018). Platforms can serve as intermediaries for social registries, which in turn link eligible individuals to existing social protection programs. The ability of the government to reach vulnerable informal workers and quickly disburse cash support through online payments was critical during the COVID-19 pandemic. This is one reason digital gig platforms could be critical allies for policy makers seeking to expand coverage of social protection or social insurance programs for vulnerable people. There is also an opportunity to leverage the platforms for other, broader policy goals such as digital skills training for low-skilled workers (examples in chapter 7) and digital public works. The novelty of this potential social protection instrument (digital public works) is that it offers short-term employment, in the style of traditional labor-intensive public works programs, while leveraging platforms that gig workers are familiar with. Program beneficiaries are also provided with digital skills training, which they can use to further signal capabilities in the formal labor market. (More details on pilots are in chapters 6 and 7.)

FIGURE 0.25: Digital versus traditional formalization process

Source: Ng'weno and Porteus 2018.

Innovative models of social insurance, especially those working with the private sector, and the platforms themselves can help expand the protection of workers.

There are now several examples of governments partnering with platforms in ways that also create incentives for platforms. For example, the Malaysian government collaborated with Grab, a large location-based digital labor platform, to provide an additional 5 percent matching contribution—provided by Grab—to its Gold- and Platinum-tier drivers who register with i-Saraan, the government's retirement savings program for self-employed workers. The case of Hilfr, a Denmark-based platform, is another example of platforms themselves creating tiered categories among their workers; the Super Hilfr workers who work long enough are awarded the status of employees (with pensions, leave, and so on), while Freelance Hilfr workers remain freelancers. Such programs are also attractive to platforms, because they create incentives to retain and reward their top workers. In addition, there might be an emerging market opportunity for private insurance providers. AXA Mansard Insurance, a leading insurance provider in Nigeria, provides insurance plans to self-employed artisans and freelancers by adapting its models to account for infrequent gig earnings. Other companies, such as Catch in the United States, work with gig platforms to target individuals who do not receive health insurance coverage through employment and offer them a package of services, including support with filing tax returns and so forth. New start-ups like Koa in Kenya work with platforms to enable gig workers to make small, infrequent contributions to savings (often as little as 100 shillings), invest the savings in money market funds, and obtain financial literacy training. Governments, too, can use a regulatory sandbox approach to design better-calibrated schemes. The Inter-American Development Bank's Retirement Savings Laboratory studies how behavioral tools can promote pension savings through nudges to save, including automatic savings mechanisms on digital platforms. For example, in Peru, through the Cabify app, drivers were invited to voluntarily save part of their earnings, leading 18 percent of them to sign up for an automatic savings debit.

New and modern models of collective bargaining are crucial. Collective bargaining has an even more important role to play in a sort of regulatory vacuum that exists for gig workers to ensure that they have a voice and are protected against unfair business practices. But traditional models may not work because workers are geographically dispersed, tend to work informally, and work with multiple clients and platforms, making any form of organization difficult. Besides, collectivization often violates competition law (an aspect being studied in more detail by another team in the World Bank). In this context, more innovative and tech-enabled forms of collective action may be a better fit. One example is application of the very mechanism of ratings used by platforms (to rate workers) to the

platforms themselves. Such third-party or crowd ratings could be an effective way to align platform incentives with those of workers and policy makers. Another example is that of Turkopticon, a web application and browser add-on that allows workers to rate their clients on Amazon Mechanical Turk, a gig work platform. Workers can now look up client records and make an informed decision on the task posted by a certain client. Self-initiated groups on Facebook, Reddit, WeChat, and WhatsApp are already bringing gig workers—including those working on location and online—together from across the world. Some gig workers are also exploring partnerships with existing unions. There has also been some discussion about platform cooperatives as an option (discussed in chapter 6).

Several governments are beginning to use online work to provide income-earning opportunities for low-income populations, youth, women, and people in areas where the availability of good-quality jobs is limited. In order to develop a strategy for an online gig jobs program in a country or local context, important preconditions are essential: practitioners need to possess clear motivation, assess readiness in the local context, include stakeholders, identify a champion government agency for implementation and sustainability, and preferably develop a phased strategy that will enable pilots, learning, and scale. Access to digital infrastructure is key. Policy makers should find innovative ways to partner with platforms and other private sector players to provide support and training for vulnerable populations. However, programs would need to ensure that appropriate safeguards are in place and that beneficiaries are aware of the short-term and volatile nature of such jobs.

Recent developments in artificial intelligence (AI) are also likely to have a profound impact not just on online gig work but also on work more broadly. At the time of writing of this report, there was an upsurge in media discussion on the impact of AI with the release of ChatGPT (box 0.1). While on the one hand these technologies have the potential to increase the productivity of workers, on the other hand, they may also lead to job displacement and reduced earning opportunities. To illustrate, a recent randomized control trial revealed that programmers who were paired with generative AI completed their tasks 55 percent faster than their counterparts who did not use AI support (Peng et al. 2023). However, generative AI could also potentially replace human labor altogether. For instance, a recent study showed that ChatGPT outperformed crowdworkers in text annotation tasks and completed them at a significantly lower cost—20 times less, to be precise (Gilardi, Alizadeh, and Kubli 2023). Moreover, studies also show various effects on workers with different skill levels (Yilmaz, Naumovska, and Aggarwal 2023). Overall, it is likely that generative AI will affect the labor market, bringing both productivity benefits and likely job displacement. These developments need to be studied further.

For policy makers in developing countries, regulating gig work is a complex task. One of the key regulatory challenges for governments, especially in low-income countries that lack enough good-quality jobs, is to balance two sets of competing objectives. Policy makers want to promote flexibility in the labor market to enable job creation and access to jobs, but they also want to protect job quality and worker rights and protections. It is not easy to determine the right balance. Overregulation or poor regulation is risky. Within a newly emerging market, work opportunities could rapidly shift from one jurisdiction to another in the face of regulatory pressure. Furthermore, as a new form of work that is rapidly changing, with little or no available data about it, gig work leaves policy makers in developing countries with limited evidence or knowledge about what strategies would succeed in the context of their countries. While there have been several regulatory and legal initiatives in the United States and Europe, those efforts have limited relevance in the developing-country context and cannot simply be transplanted. This makes it even more important for governments to build the capacity to collect and monitor data. International efforts to systematically gather data through labor force surveys are a welcome step (see chapter 6 and appendix M).

Governments can use the potential of online gig work to build human capital, develop the nation's digital skills, and provide opportunities to supplement household income. Digital public works offer promising opportunities for short-term income generation to low-income populations while also building digital skills and boosting demand for online gig workers. Promoting access to digital infrastructure is a must. Digital devices such as laptops, smartphones, and tablets can open new doors to work. Wider social protection coverage for all types of informal workers is the best way to protect gig workers without segmenting the labor market. Countries should experiment with different pilots and methods to establish effective social protection and insurance for online gig workers.

BOX 0.1: BUT WHAT ABOUT ChatGPT?

The team posed this question to ChatGPT itself. Here is what ChatGPT thinks about its own impact on freelancing.

Question posed by the team to ChatGPT: How will ChatGPT impact online gig jobs?

ChatGPT, as a language model, can potentially have a significant impact on online freelance work in a variety of ways. Here are a few examples:

- 1. Content Creation:** ChatGPT can generate high-quality text content, such as articles, blog posts, and product descriptions, which can be used by online freelancers who provide writing services.
- 2. Virtual Assistance:** The model can also be used to provide virtual assistance services, such as responding to customer inquiries and handling routine tasks, which can free up time for online freelancers to focus on more complex tasks.
- 3. Translation:** ChatGPT can also be used to translate text from one language to another, which can be useful for online freelancers who provide translation services.
- 4. Automation:** ChatGPT can be integrated into various software and used for automating repetitive tasks such as data entry, it can also be used to create chatbots, which can help online freelancers automate their customer service.

Source: ChatGPT, on January 26, 2023.

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