



Global Freelancer Market Report: Comparison of Europe and Asia

Version 1.0













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institution	27 Rakowicka Street, 31-510 Kraków, Poland
Project coordinator –	Grażyna Paliwoda-Pękosz
name	paliwodg@uek.krakow.pl
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Contributors

Vladan Ivanović, Faculty of Economics, University of Kragujevac, Serbia Zoran Kalinić, Faculty of Economics, University of Kragujevac, Serbia

Aleksandar Antić, Faculty of Law, University of Kragujevac, Serbia Mariusz Grabowski, Krakow University of Economics, Poland Paweł Konkol, Krakow University of Economics, Poland Dariusz Put, Krakow University of Economics, Poland Janusz Stal, Krakow University of Economics, Poland Robert Szydło, Krakow University of Economics, Poland Dana Simian, Lucian Blaga University of Sibiu, Poland Nancy Diana Panța, Lucian Blaga University of Sibiu, Romania Florin Stoica, Lucian Blaga University of Sibiu, Romania Lia Alexandra Baltador, Lucian Blaga University of Sibiu, Romania Mihaela Rotaru, Lucian Blaga University of Sibiu, Romania Francisco Jose Liébana-Cabanillas, University of Granada, Spain Francisco Muñoz-Leiva, University of Granada, Spain Elena Higueras-Castillo, University of Granada, Spain Dmytro S. Antoniuk, Zhytomyr Polytechnic State University, Ukraine Andrii V. Morozov, Zhytomyr Polytechnic State University, Ukraine Tetiana A. Vakaliuk, Zhytomyr Polytechnic State University, Ukraine Kholid Haryono, Universitas Islam Indonesia, Indonesia Beni Suranto, Universitas Islam Indonesia, Indonesia Mukhammad Andri Setiawan, Universitas Islam Indonesia, Indonesia Ratih Dianingtyas Kurnia, Universitas Islam Indonesia, Indonesia Febrianti Nurul Hidayah, Universitas Islam Indonesia, Indonesia

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Introduction

The rise of freelancing is one of the most remarkable features of the digitalisation wave initiated by the rapid development of IC technologies over the last several decades. Although minuscule compared to the value created in the traditional labour market, freelancing became a transformative phenomenon reflecting profound changes in the ways people earn for living and business operations of firms are organised. Throughout history, individuals "have needed to live relatively close to productive capital and their fellow workers" (Chen & Horton, 2016, p. 411), the fact that is changed with the rise of freelancing and possibilities opened by global online labour markets. Global pull of talents for business expanded exponentially in a short time, mitigating considerable limitations in size and quality of available human resources. Besides technological advancements and breakthroughs, which created infrastructural preconditions for the rise of the digital labour force, an important impetus for the development of freelancing came from an exogenous shock caused by the COVID-19 pandemic, pushing individuals and companies to adapt to new circumstances in which conventional ways of doing business were no longer possible. Changes in work practices stayed and became a new norm in business activities long after the pandemic was over.

The rise of digital labour platforms created new opportunities for those seeking to develop professional careers relying on more flexibility, autonomy and independence. It leads to a higher level of satisfaction of self-employed workers compared to traditional wage workers, deriving gains from "procedural utility", i.e., utility stemming from being "their own boss", which enhances work satisfaction of freelancers (van der Zwan, Hessels, & Burger, 2020). On the personal level, freelancing is a better career choice for those seeking to continuously work on self-development while continuously expanding their business network, which makes them more resilient (Salem, 2021). Advantages are highly dependent on geography, i.e., in which part of the world individuals live. In this regard, the knowledge workers from developing countries benefited more since new employment opportunities (in usually very tight national

labour markets) arose with the emergence of the global online labour market. Although attracted by more control and flexibility, some important challenges became obvious over time, reflecting in precarity. Specifically, the main aspects of precarity are related to uncertainty about expected income, low job stability, and limited access to social benefits. Lack of role clarity and time management issues (Nawaz, Zhang, Mansoor, Hafeez, & Ilmudeen, 2020), as well as algorithm dependency (Soni, Sinha, Shinde, & Jain, 2025), are among additional constraints making freelancing a burdensome choice. The consequence is constant financial uncertainty, negatively affecting their life quality and sense of stability (Zelma, 2024).

These negative aspects of freelancing are related to two features of the online labour markets. The nature of the freelancing jobs, i.e., dominance of short-term (micro) tasks, urges individuals to be dependent on constant search and obtaining new jobs, activities that are doubtlessly followed by uncertainty. The second reason reflects a pronounced imbalance between the demand and supply of the labour force on online labour markets, where supply far surpasses demand. In other words, the influence of competition is an important environmental factor, making freelancing a challenging profession (Pulignano, Muszyński, & Tapia, 2025). Such a competitive and unbalanced market structure leaves a lot of the workforce with scarce odds to provide an uninterrupted workflow and continuously obtain new jobs. For example, on one of the globally leading marketplaces, Upwork, there are yearly more than 18 million active freelancers, but only 5 million job postings (Upwork, 2025).

Concerns related to the status, rights and obligations of freelancers are at the heart of the explanation of why regulatory efforts are undertaken worldwide. They are directed toward regulatory accommodation in the existing legal framework, mostly in labour laws, and, less importantly, in creating a new regulatory framework. Moreover, in some cases, as with the European Platform Work Directive (The European Parliament & the Council of the European Union, 2024), the efforts emerge on a supranational (international) level. The main aims of every regulatory intervention are related to the establishment of a clear legal framework, strengthening supervision and enforcement, providing affordable social security, improving access to financial training and education, and increasing freelancer representation in policy formation

(Rhogust, 2023). Still, many caveats arise in the implementation, requiring continuous changes and adoption to effectively meet the needs of workers, but, at the same time, not to hamper their essential role in developing new business practices. They refer, among other things, to data and privacy protection and the influence of algorithmic management systems, but the main challenge lies in creation of effective enforcement mechanisms (Rainone & Aloisi, 2024).

On the side of business, freelancers are key drivers of the economic performance of the firms (Burke A., 2012). The main source of improved performance is cost efficiency, since employers hire individuals with adequate skills that best match specific projects without the costly long-term commitment of hiring full-time employees (Muthuvani & Samuel, 2024). This is of special importance for those enterprises that are confronted with budgetary constraints and cannot find appropriate resources locally. But freelancers "are less of a cheap shadow precariat workforce and more a skilled specialised workforce" (Burke & Cowling, 2015, p. 1) enabling businesses to reduce barriers to entry, risk and financial requirements while enhancing business agility, flexibility and efficiency. However, several criteria determine whether firms should appoint an external employee or not (Genicot, 2023). The first one is to determine in which services the freelancer will be engaged, i.e., is it part of a core activity of the enterprise, or is it about some peripheral activities. The second one refers to the reason why external employees are engaged, i.e., is it because of the growth of the enterprise, or is it related to the sustainability of business activities. Third is a broader setting of the corporate culture, i.e., are the external associates welcomed, or is there a resistance toward them? Finally, the availability of adequate mechanisms for effective governance of those resources further determines the payoff for companies when deciding whether to hire or not freelancers.

According to the project application (Krakow University of Economics, 2024, p. 44), the scope of this report is to depict essential aspects of the freelancing market in Europe and Asia, with a pronounced emphasis on project countries, which will enable a better understanding of all the relevant factors shaping the success of job seekers. For that purpose, we employed a methodology already developed in WP2/A1 phase of the project (Ivanović, et al., 2025) and implemented in the subsequent WP2/A2 phase

(Kholid, et al., 2025), while undertaking necessary accommodations to better respond to research questions and needs of this regional report. Detailed explanation of the applied methodology, similarities and differences with previously developed and employed methodological framework (Ivanović, et al., 2025; Kholid, et al., 2025), are the content of the chapter "Methodology: From Conceptual Issues to the Design of a Comprehensive Analytical Framework".

Although freelancing is an online phenomenon, it is under the decisive influence of offline factors that gravely shape freelancer market prospects in every country in the world. This is the subject of the second part of the report "How the Offline World Shapes the Online Freelancer Market: The Analysis of Contextual Factors", where the most important environmental traits reflecting the potential for freelancing development are depicted. The analysis is performed at the level of project countries, enabling a better understanding through a case study approach. Besides a short depiction of the current state of the research on freelancing in project countries, a brief analysis of economic conditions is performed, pointing to growth and employment dynamics, since these conditions gravely determine the desirability of freelancing as a profession, but also the need for freelancing services that the business sector generates. Research on human capital, innovation performance, aspects of national culture and digitalisation brings additional insights into potential and frontiers for freelancing development. The key difference compared to economic performance indicators is that they appreciate not only current capacity for the development of freelancing, but also reflect near- and midterm prospects for its development. Since entrepreneurship is one of the most remarkable features of freelancing, making this career path fundamentally different from traditional employment forms (in organisations), cultural traits are analysed. Its relevance especially determines long-run prospects for freelancing development, since culture is changing very slowly over time. Back to the present, an important part of the analysis is devoted to the regulatory framework and legal conditions in which freelancers are doing business in their home (project) countries.

The third, "Freelancing in Europe and Asia: Between Similarities and Differences in the Supply of the Global Labour Force", and the fourth section, "How does the Demand for Freelancing Services in Europe and Asia look?", depicts two sides of the online labour markets shaping the work opportunities for freelancers. Those parts try to answer the fundamental conditions freelancers are confronted with when choosing a freelance career. Different dimensions of geography, professional structure of the market and its relation to monetary rewards, on both the demand and supply side, are examined in detail. The role of geography, experience and gender concerning (potential) wages is further studied on the supply side, while characteristics of jobs offered and their relation to the price enterprises are ready to pay (on the demand side) are elaborated. The analysis in those parts enabled reaching the answers to some fundamental research questions defined within the research framework envisaged for WP2/A3 phase. Those questions may be summarised in the following two:

- 1. How do earnings vary across different professions in the digital labour market, and what is their relationship to geography, experience and gender?
- 2. What is the composition and underlying characteristics of the supply side of the online labour market shaping the current state and prospects for freelancing development in Europe and Asia?

The goal in answering those questions is to determine similarities and differences between Europe and Asia, to better understand which factors may exert a strong influence on freelancing career choice. Moreover, this aspect is of fundamental importance in designing adequate curricula for MOOCs, determining the impact they can achieve in entrepreneurship development through freelancing.

Finally, "CONCLUSIONS" section draws on previous analysis underlying key findings about environmental factors, demand and supply characteristics in Europe and Asia, with reflections, whenever it is appropriate, on project countries. The comprehensive view on the landscape of freelancer markets in both continents constitutes a valuable knowledge foundation for the next activities within the ENTEEF+ project. It refers particularly to WP3, both research on the competences of freelancers and the development of a competency assessment tool. However, there is a close connection to the deliverables within WP4 related to the development of MOOCs, since the knowledge about the freelancer market structure and its key features and principles of functioning is a precondition for effective integration in the online global labour markets.

1 Methodology: From ConceptualIssues to the Design of aComprehensive AnalyticalFramework

Building on the previous work in the *Methodology of Data Gathering and Analysis* (Ivanović, et al., 2025) developed for the "*Global Freelancer Market Report*" (Suranto, et al., 2025), we accommodate our approach within the ENTEEF+ project to identify and understand the current state, key trends, and multiple relationships that exist in the freelancer economy in Europe and Asia. The methodology is based on the use of data science methods to collect, process and analyse data from the dominant online labour platform. A Methodology is developed to enable us to identify key characteristics of the freelancer market, ensuring a comprehensive, reliable, and multidimensional understanding of the topic and providing insights based on methodological rigour and contextual relevance.

Three databases were created to analyse the freelancer market in Europe and Asia:

- Database on freelancer labour supply containing the information on more than 750 top-rated freelancers globally in Europe, and more than 3,974 freelancers from Asia. Additionally, a separate database is created with freelancers from the project countries, containing information on 10,534 freelancers¹.
- Database on demand for freelancer services postings, containing information on job postings from more than 160 countries and more than 33,000 job postings.

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¹ Thereby, there are 1,015 freelancers from Indonesia, 1,096 from Poland, 804 from Romania, 1,684 from Serbia, 1,074 from Spain and 4,861 from Ukraine.

 Diverse secondary databases are used to describe factors from the offline and online environment that grievously shape the dynamics and outcomes on the demand and supply side of the online labour market in Europe and Asia, as well as in the project countries.

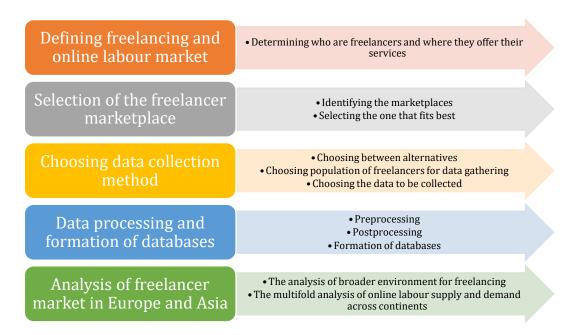


Figure 1. Methodology for analysing the freelancer market in Europe and Asia. Source: Own elaboration.

The methodology and its constitutive elements are depicted in

Figure 1, describing the workflow from conceptual design to the results of analysis. The **first step** in the methodological approach was to define who the freelancers are. Since the standard definitions of freelancers are usually too broad, we accommodate a definition of freelancers, based on WP2-A1 deliverable that covered the methods for data gathering and analysis, as individuals who "are self-employed, experienced professionals, working remotely with individual and/or organizational clients on short-and/or long-term projects, selling managerial, professional and/or technical services via general online digital labour platforms for monetary compensation" (Ivanović, et al.,

2025, p. 9)². The definition is accommodated in a way that we leave out the parts that refer to "whether they are newcomers" and "in a part- or full-time regime as their main or supplementary job in the form of primary or supplementary work activity", since the new definition is much more suitable and enables us to gather data more efficiently and warranties better outcomes of different deliverables in subsequent phases of the ENTEEF+ project.

Freelancers offer their services via different channels, from marketplaces (online digital labour platforms) or more traditional channels like recommendations of friends/clients/earlier coworkers/employers, social media introductions and emails. However, most freelancers, according to a Payoneer study (2023), find their jobs on online labour platforms such as Upwork, Fiverr, or People Per Hour. That is the reason why we initially decided to gather data from online digital labour platforms. An additional reason for that is related to the richness and comparability of different data when gathered from one source.

Setting the conceptual background, i.e., determining who the freelancers are and where they usually find their jobs, the **next step consists of choosing the right online labour platform**. In pursuing this task, we followed several principles (Ivanović, et al., 2025, pp. 13-14):

3. *Global Reach*: The platform should have a significant global market share to ensure a diverse sample of freelancers. Also, the platform should be one with the highest share of the (global) market, in terms of the number of registered freelancers (supply side of the freelancer market) and job postings from the side of companies (demand side of the freelancer market). But, the platform should also be a representative platform across all project partner countries, i.e. one of the most significant in each of these countries.

² This definition doesn't change the nature of the work the freelancers perform. Namely, freelance work encompass, same as by Fulker & Riedl (2024, p. 2) "work that is knowledge intensive (rather than capital intensive), requires specialized skills, is relatively long-term (hours, rather than minutes), and leans toward a more complex spectrum (compared to pure "microtask" crowdsourcing that is unlikely to benefit much from collaborative work)".

- 4. *General nature of platform*: The platform to be selected should be general, i.e. it should be the one that attracts a wide range of freelancers in terms of skills and occupations and contains as much as possible diverse job postings. The platforms specialised in just one area should be excluded (such as 99Designs, narrowly oriented toward freelancers in graphic design occupations).
- 5. *Availability of data*: The platform, i.e. freelancer profiles, should provide a variety of data in each freelancer profile including demographics and work experience, i.e. the data such as title, description, hourly rate, skills, work experience and history, ratings, reviews, gender, age, education, etc.
- 6. *An option to filter freelancers by country*: Since one of the important topics in further analysis will be the comparison of the various characteristics of freelancers in each project country, it should be possible to filter freelancers by country and collect data country by country.
- 7. Appropriateness for data collection method (web scraping): The platform's architecture must support web scraping since the data from freelancer profiles will be collected using this method. Every technological constraint, such as strong anti-scraping protection, could significantly constrain data extraction.

Apart from general principles in selecting an adequate source for data (platform), four additional principles were implemented to warranty the feasibility and efficiency of the data collection process and formation of a fully operable database (Ivanović, et al., 2025, pp. 14-15):

- 1. *Initial screening*: Conduct an initial screening using relevant sources (such as reports, scientific papers, and web searches). As a result, the list of potential labour platforms should be identified, taking into account the selection criteria previously defined. Some examples include Freelancer.com, Upwork, Guru, Fiverr, PeoplePerHour, etc. The list should include the most representative platforms, identified during the literature review.
- 2. *Comparison of the platforms*: The initially selected platforms-proposals should be compared, following the criteria listed above. Concerning size and dominance, the platform to be selected doesn't have to be the most significant (with the

highest number of freelancers compared to other platforms), but it should be representative in each of the countries. For instance, the platform should hold at least a 20% market share relative to others on the shortlist (the list should include the most representative platforms) or rank among the top three platforms by freelancer numbers in each country.

- 3. *Pilot Study*: A small-scale pilot study on one or two best-rated platforms should be conducted to assess the feasibility of data collection and analysis and check for potential obstacles that may arise during the data gathering.
- 4. *Final Selection*: Based on the selection criteria, pilot study, and overall analysis, one global platform should be selected as the primary source for data collection and further research.

Results from all previous steps leading up to the choice of Upwork as a marketplace which satisfies the most defined framework for selecting the platform. Because of a huge number of online digital labour platforms³, the selection is a nontrivial task. Upwork is selected, among other things, as a marketplace whose data is probably most frequently used in research and since it is the most popular online labour platform⁴, a globally leading marketplace with over 18 million active freelancers and more than 5 million job postings yearly (Upwork, 2025)⁵, where the highest diversity of freelancer

³ Several studies tried to capture the number of online-based digital labour platforms. First is the study of the International Labour Organisation, which estimated 283 online labour platforms (ILO, 2021). Kässi, Lehdonvirta & Stephany (2021) estimated 351 online web-based platforms, while the European Commission estimated that there are 253 online or combined online labour platforms, but active only in the EU (European Commission, 2021). However, the newest study of the World Bank mapped 545 online gig work platforms globally, with headquarters in 63 countries and platform workers and businesses coming from 186 countries (Datta, et al., 2023). This is a much higher number than those determined in previous studies, and the explanation for that lies in more comprehensive methodology, as well rising significance of gig work, which attracted new businesses (platforms) into the market.

⁴ For example, Martindale & Lehdonvirta (2023) identify Upwork, Freelancer, Fiverr and PeoplePerHour as the most popular freelancer platforms in the world.

⁵ This is remarkable growth over time. For example, Upwork maintained in 2017 a substantial network of businesses and freelancers: it hosted 9.3 million freelancers and 3.7 million employers across 180 countries, with more than 2.7 million jobs posted annually (Popiel, 2017).

professionals and corresponding skills could be found⁶ and accessibility and popularity in the project countries.

The third step refers to the choice of web scraping technology/tool. This aspect is dependent on many factors such as the technical expertise of researchers, the complexity of the (labour platform) website, the existence of anti-scraping protection on the platform, the desired level of automation, or the richness and scale of data gathering, among other things. Moreover, a computational method based on web scraping enables the extraction of structured information from web interfaces. It is particularly useful for acquiring large volumes of data. Through this approach, content designed for user display was programmatically captured and stored for further processing. Web scraping serves as an efficient alternative to manual data copying by enabling mass and systematic data collection in standardised formats, which is especially critical for supporting rigorous quantitative analyses (Ahmed, Khan, & Ishtiaq, 2023). Regarding the webscraping, there are two major technical approaches (Ivanović, et al., 2025, p. 16):

1. Commercially available software: These tools are generally ready-to-use and easy-to-use, user-friendly and no-code solutions. They could also include some sort of solution for existing anti-scraping protection on the website (platform). Although these software solutions generally require licensing and subscription, there are some freemium versions, which could be used for limited web scraping without paying for it. Some of the examples are Octoparse, ParseHub, Import.io, and Diffbot.

⁶ Upwork recognizes 10 different professions: Development & IT, AI Services, Design & Creative, Sales & Marketing, Writing & Translation, Admin & Customer Support, Finance & Accounting, HR & Training; Legal; Engineering & Architecture. However, every occupation entails its own "three of occupations", i.e., further could be disaggregated into "niche occupations". For example, within writing and translation, one could identify Content Writers, Translators, Editors, Ghostwriters, Copywriters, Proofreaders, Creative Writers, Grant Writers. It is important to notice that although there is a high degree of specialisation on lower levels of aggregation, the specialised individuals from one profession in the majority of cases possess skills and knowledge from other domains of writing and translation profession or even from other professions (Ivanović, et al., 2025). Across all the professions, there are even 4,417 different skills and specialities among the freelancer population (Upwork, 2025).

2. Development of own web scraper: Another solution is to develop your own web scraper. It would require much more effort and time, but as a custom-made solution, it would provide more freedom and possibilities for data collection and further analysis. One of the suggestions in this option is to use Python as a programming language, and its already existing libraries for web scraping, such as Beautiful Soup or Scrapy, which would significantly reduce development time.

After carefully considering the pros and cons of both approaches, we chose the second approach, i.e., to develop a custom-made web scraper using Python operating through browser-based JavaScript execution. The decision to build a custom tool rather than rely on commercial scraping software is primarily based on the need for greater flexibility and control. Moreover, the scraper was specifically tailored to Upwork's page structure and configurations. It addressed technical challenges such as pagination, dynamically loaded content, and anti-scraping mechanisms by incorporating features like user-agent rotation and request delay management. Moreover, regulatory considerations, including respect for platform terms of service and ethical crawling practices, were also embedded into the tool's design (Kholid, et al., 2025).

Further, the data retrieval process involved the following steps (Dymek, et al., 2025):

- 1. Authentication Layer Integration,
- 2. API Endpoint Interaction,
- 3. Controlled Pagination,
- 4. Rate-Limited Execution.

This approach was selected to minimise detection risks while ensuring ethical data collection practices (Dymek, et al., 2025):

- Only publicly accessible data or data that the researcher has legitimate access to was collected,
- 2. We have applied rate limiting to prevent server overloading,
- 3. Data was collected during off-peak hours to minimise the impact on service availability,

4. No personally identifiable information unessential to research was stored.

After selecting Upwork for web scraping purposes, the next step was to choose the targeted population for collecting data. Namely, some workers only have registered profiles but are not actively working⁷, workers who have worked but not all the time on the platform⁸, and freelancers who choose platform work as a career. We found the latest population fits the best to the aims of the project and is more appropriate for the analysis and other deliverables of the ENTEEF+ project: reports, surveys, trainings and workshops, and, finally, MOOCs.

Since the aim of data collection is to constitute two databases, one for the global population and the second for project countries, we need to differentiate the approach in collecting data. However, both approaches required a framework which would enable the collection of data that would eventually enable integration of both databases, i.e., the same set of principles should be applied to make integration possible. From those reasons and from technical issues, sampling was oriented toward the best workers at the platform or those workers who are classified at the platform as "top rated". It enabled the comparability of data, the integration of two datasets (later in research) and enough diversity of data for preparing report(s) and designing other project-related outcomes.

To ensure that the sample was representative of platform dynamics, for the global sample, based on which we constituted a subsample for comparison of Europe and Asia, the freelancer profiles were selected using Upwork's native sorting mechanism. This method reflects the platform's internal ranking system and prioritises profiles with higher visibility and relevance to client searches. As a result, the dataset, for which the data are collected between January 20 and January 27, 2025, aligns closely with real-world patterns of freelancer exposure and engagement within the digital labour economy.

⁷ It means that they haven't finished jobs and/or any income generated on the platform.

⁸ This refers to those individuals who use platform work/freelancing as a supplementary source of income and work only part-time or irregularly, from time to time, on a platform.

The fourth part of the methodology encompasses activities on data processing and **the creation of databases**. Namely, once the raw data were collected, the next step encompasses data preprocessing and postprocessing. This included the removal of duplicate entries, handling of missing values, standardisation of country and skill naming conventions, and normalisation of income data. Where certain indicators, such as gender, were not directly available, inference methods were used to estimate values based on available metadata. To further enhance the analysis and extract deeper insights from the (raw) data, a dedicated Python script was also developed to integrate the ChatGPT API. This script allowed for the application of advanced natural language processing techniques in various stages of data processing. Specifically, the model was used to assist with gender detection, skill set categorisation, professional classification (see Table 1), and interpretation of historical employment patterns. By leveraging the contextual understanding capabilities of ChatGPT, the team was able to improve the accuracy of data labelling and extract thematic patterns that would be difficult to classify using traditional rule-based methods. This hybrid approach of rule-based and AI-supported processing contributed significantly to the analytical depth and reliability of the dataset. Furthermore, all pre-processed data were converted into structured formats suitable for analysis, including CSV and Excel files, and securely stored using encryption protocols that comply with institutional data governance standards. An important aspect of adequate formatting of data is not only to enable analysis of the global or regional freelancer market, but also to enhance and facilitate data sharing and wider use by other researchers.

Online work category	Characteristic jobs
Clerical and Data Entry	Administrative support, data entry, typing, proofreading
Creative and Multimedia	Animation, graphic design, audio/photo/video editing, logo design, website design
Professional Services	Accounting, architecture, business services, consulting, legal, tax, research support, proofreading, bookkeeping
Sales and Marketing Support	Customer service, digital marketing, sales and marketing, social media marketing, search optimisation
Software Development and Technology	Networking, programming, software development, web development, back-end and front-end developers
Writing and Translation	Translation, technical writing, blog writing, ghost writing

Table 1. Online work categories and examples of jobs9.

Source: Own elaboration based on Martindale & Lehdonvirta (2023).

From collected data, after preprocessing, postprocessing and filtering, data on 4,724 freelancers from Europe and Asia form the database used for the regional report. In a case of top-rated workers in project countries, we obtained the data on 9,519 freelancers in five European project countries and 1,015 freelancers in Indonesia, as an Asian project country.

Ethical considerations were integrated not only throughout the data collection process but also in further steps regarding data usage. During the data collection process, only publicly available information was accessed, and all personally identifiable information was excluded from the dataset. Freelancer profiles were anonymised, and no usernames, images, or personal contact details were collected or

ilar classification is to be found by Datta *et al.* (2023, p. 8), with the

⁹ Similar classification is to be found by Datta *et al.* (2023, p. 8), with the difference that they identify business and professional support and business and professional management instead of professional services (all the other occupations are the same).

retained. Later, during the data usage, access to the full dataset was restricted to designated members of the research team, and strict measures were taken to protect confidentiality. All procedures adhered to data protection laws and standards, including the General Data Protection Regulation (GDPR), ensuring legal and ethical compliance.

The fifth step of the methodology, the analysis and comparison of the European and Asian freelancer market, consists of two parts:

- 1. The *analysis of the context* in which the demand and supply of freelancing services take place.
- 2. The *analysis of the supply and demand of the freelancing market* in Europe and Asia based on the original dataset formatted in previous phases.

While no element of the social, economic, educational or technological environment is without an influence on the demand/supply of freelancer services, we firstly analyse those aspects of the environment. These aspects are of relevance since they are producing the strongest, long-term and as well as short-term influence on the development of the freelancer market. In particular, the analysis encompasses characteristics of the economic environment, with an emphasis on economic performance and labour market outcomes, human capital development, innovativeness and level of digitalisation, as well as more profound influences coming from institutional structure, informal one (cultural dimensions based on Hofstede's cultural dimensions) as well as formal one (based on the regulatory environment).

The second part of the analysis refers to the analysis of the freelancer market in Europe and Asia in a comparative context, based on the genuine datasets produced within ENTEEF+ project. When it was appropriate, we augmented the analysis with a comparison encompassing the data referring to the project countries. Comparisons are made based on the most important variables in the datasets and their mutual relationships, supplementing the results of the analysis with the findings of other sources (scientific articles, industry reports and governmental and policy documents). Key variables refer to the professional structure of the online labour market (based on

Oxford Internet Institute classification), gender, and hourly wages¹⁰, work experience, and diverse dimensions that refer to skills, knowledge and even other signalling strategies freelancers use to acquire clients.

The overall methodology was designed to achieve a balance between data quality, research efficiency, and ethical responsibility. The resulting analysis offers reliable, diverse, and comprehensive insights into regional dynamics in the freelance market, supporting future stages of the ENTEEF+ project, particularly the goal of fostering entrepreneurship through evidence-based training and policy support.

¹⁰ Pay is determined not alone, with the help of an algorithm: "Upwork also provided workers with automated advice on how much pay they should be asking for, based on a statistical analysis of how much employers have been willing to pay for similar work in the past" (Martindale & Lehdonvirta, 2023, p. 1950).

2 How the Offline World Shapes the Online Freelancer Market: The Analysis of Contextual Factors

2.1 Introduction

The rise of the freelancing economy is one of the most prominent phenomena of the ongoing technological changes driven by the strong, ever-spreading use of ICT and related digitalisation of business processes. The value creation in the new knowledgebased economy (KBE) shifted from material inputs and (natural) resources toward knowledge and intellectual capabilities. Moreover, it fundamentally changed the nature of work and the structure of the economy (Kenney & Zysman, 2016). The development of the platform economy, through which most freelancing services are delivered, became a question of global competitiveness (Bollen, 2018). Businesses worldwide benefit from efficiency gains driven by lower labour costs and the acquisition of talents from the global market, improving supply-demand matching and reducing friction and transaction costs, which leads to greater productivity and innovativeness (Datta, et al., 2023). On the other side, for individuals across the globe, new work opportunities are created, attenuating the importance of physical distance, which is especially important for professionals in less developed countries where scarce job opportunities exist. However, many challenges related to the rise of the freelancing economy remain unresolved: from regulatory aspects and influences on traditional labour markets to further technological transformation and ways in which other pillars in KBE should be adapted to accommodate the new economic and technological reality.

Although the unprecedented growth of the global online labour market represents one of the most striking phenomena following the disruptive technological change over the last few decades, the capacities of individual countries to participate in this change and effectively integrate in this global change are shaped dominantly by national characteristics of a multifaceted economic, technological, and regulatory environment. Some of the characteristics of national environmental conditions are shaping the supply side of the freelancing market, while others dominantly influence the demand side.

One of the most important from countless factors influencing the online labour market is the level of economic development and the state of the traditional labour market, which is closely related to it. This factor indirectly determines the demand for freelancing services, since a higher level of development (generally) means more sophisticated goods and services produced in the economy. This process requires acquiring talents outside the traditional organisational structures/firms. In contrast, higher levels of development and economic growth produce more diverse work opportunities in the traditional labour market, causing lower interest among freelancers for online work¹¹.

The innovation capacity of every economy, expressed through the composite Global innovation index, reflects a broader socio-economic and technological capability to create economic value over time. The consequences of the level of innovation activity in the economy for the digital labour market are obvious. On one hand, a rich innovative environment relies on a sophisticated workforce, with skills and knowledge that could be offered on the global market. On the other hand, it constrains the labour supply by generating employment on the traditional labour market. While the influences on labour supply could be ambiguous, a demand for freelancing services is univocal, i.e., the more innovative the economy is, the higher will be the demand for talents outside

¹¹ Maybe one of the rare exemptions from this rule is the US economy, where the supply (alongside the demand) of online labour services is flourishing. One of the plausible explanations is related to profound structural changes in the business models by the firms in the US, whose operations increasingly rely on hiring freelancers. Moreover, the companies from the Fortune 500 are shaping their workflow by combining freelancers and permanent employees (Solomon & Blumberg, 2021).

the firms. Our data are in line with this claim, since the most demand for freelancers' services comes from the most innovative economic environments.

According to the human capital theory, education increases people's skills, causing their higher productivity, which in turn facilitates economic outcomes (Wheelahan & Moodie, 2022), important aspect of every economy's capacity to develop sustainably refers to human capital stock and characteristics. Moreover, human capital by freelancers is central to their success on a global online labour market, emphasising their skills, knowledge and expertise for the success (Sattayathamrongthian & Vanpetch, 2023). From the supply/demand nexus, human capital represents a pivotal dimension determining the overall capacity of a national economy to secure the supply of the workforce with adequate skills and knowledge, and, more indirectly, to generate (global) demand for freelancing services. For that reason, landscapes of human capital stock and its characteristics are depicted for every project country.

The state of digitalisation is another important environmental factor shaping both sides of the freelancer market. Namely, the ever-increasing penetration of ICT in businesses and everyday activities of consumers causes disruptive influences on the world of work and employment patterns (Gaublomme, Gevaert, & Kruithof, 2023). More broadly, digital technologies are underpinning a wide range of products, services, processes, and business model innovations that are significantly transforming industries, organisations, and society (Huđek, Tominc, & Širec, 2023). An ever-increasing role in these processes is linked to the services provided by freelancers. On the other side, capacity, measured by the level of digital skills in every society, determines the capacity to consume various digital products, but also to provide services for their production.

From deep determinants of economic success, which include institutions, geography and trade (Rodrik, 2003), the most important, besides being profound in consequence, for freelancing refers to institutions. While institutional structure belongs to one of the most complex research fields in economics, consisting of formal and informal institutional elements, with many reversible and irreversible ties between them (Pejovich, 2006), we observed cultural features in project countries, since they are tightly related to freelancing. Namely, cultural traits not only determine

the work outcome, but they also profoundly determine the entrepreneurial "spirit", which is the pivotal dimension of the freelancing profession (Van den Born & Van Witteloostuijn, 2013). Namely, since cultural milieu shapes entrepreneurship activity heavily (Jourdan Jr & Smith, 2021; Khan M., Panditharathna, Hossain, & Bamber, 2022), Hofstede's 6-D model of national culture is examined across the project countries (Hofstede G., 2011).

Many regulatory issues regarding the work status and related rights and obligations of individuals pursuing a freelance career remain vague in many countries. The way the regulatory issues are resolved in an individual country may considerably incentivise individuals to choose or not to choose freelancing as a career choice. Moreover, exactly this aspect attracts a lot of attention regarding freelancing as an area that is often insufficiently regulated, producing one of the most important hurdles for freelancers' career development (Trajano, 2022). For this reason, different dimensions of the regulatory environment represent another environmental aspect covered by the analysis.

At the continental level, Europe and Asia show huge diversity regarding the societal, economic, and technological landscape. Both continents are not only distinct compared to each other, then there are profound differences within the continents (Gregory & Stuart, 2014), where quite distinctive institutional and economic structures are established, largely making every national economy a unique entity. This is one of the reasons for choosing to present the detailed specification of different environmental factors for every national partner. Concerning the freelancing market, freelancing may flourish under different environmental settings, but the medium and long-term prospects are determined by those environmental factors. Moreover, the insights provided through analysis of the economic, technological and institutional environment of the project countries are rich and warrant an appropriate understanding of the role of the offline environment for the development of the online labour market and employment perspectives in it.

2.2 Country profile: Poland

2.2.1 Economic and innovation environments and human capital development

This report outlines the economic and innovation landscape of Poland, alongside its human capital development, to provide context for individuals considering freelance work. Poland exhibits a growing economy with increasing GDP per capita, although it remains below the EU-27 average. The labour market shows high employment rates and low unemployment, suggesting the availability of traditional job opportunities. However, Poland's innovation performance, as measured by the Global Innovation Index (GII), reveals strengths in market and business sophistication but weaknesses in institutions, knowledge and technology outputs. Human capital development (WIPO, 2024) shows a significant portion of the population with secondary and tertiary education, but digital skills remain a point of development for a considerable part of the EU population. These factors, combined with the increasing, albeit still moderate, trend of remote work and the insights from a study comparing freelancers to traditional and platform workers, offer a multifaceted view of the conditions influencing the choice of freelancing in Poland. While a stable economy and educated workforce could support freelancing, regulatory challenges and the innovation ecosystem's specific characteristics may present both opportunities and hurdles.

2.2.1.1 The Economic Environment

Poland's economy has demonstrated growth in recent years (Figure 2). The gross domestic product (GDP) per capita reached EUR 17,300 in 2022, a 33% increase from 2018, although this was still 51.1% lower than the EU-27 average of EUR 35,400. Regionally, there is significant variation in GDP per capita adjusted for price levels (PPS) compared to the EU-27 average. For instance, in 2023, Dolnośląskie (54.8%) and Pomorskie (48.9%) showed figures at or above the national average (48.9%), while Lubelskie (33.3%) and Podkarpackie (33.3%) were significantly below. This regional

disparity may influence the demand and potential income for freelancers depending on their location and target market.

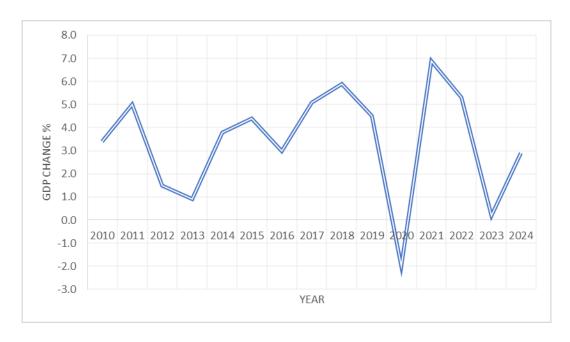


Figure 2. GDP Change in % year-on-year at constant prices of the previous year.

Source: Statistics Poland (2025b).

The labour market in Poland is characterised by a high employment rate, reaching 72.4% in 2023, which is above the EU-27 average. The unemployment rate is also low, standing at 2.8% in 2023, consistently below the EU-27 average (Figure 3). This suggests that individuals have a relatively good position on the labour market. However, for those seeking more flexibility or with specialised skills, freelancing might still be an attractive option. While full-time employment under stable contracts is dominant in Poland (72.4% in 2023, 2 percentage points higher than the EU-27 average), the trend towards remote work is present, with 8.9% of employed persons sometimes working from home and 5.4% usually working from home in 2023. This indicates a growing acceptance of more flexible work arrangements, which could favour freelancing.

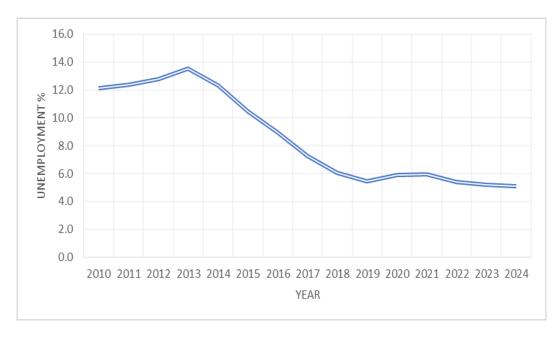


Figure 3. Unemployment in Poland in 2010-2024.

Source: Statistics Poland (2025d).

Inflation has seen an increase, reaching 4.9% in March 2025, primarily driven by rising costs in housing and utilities, as well as food and non-alcoholic beverages (Figure 4).

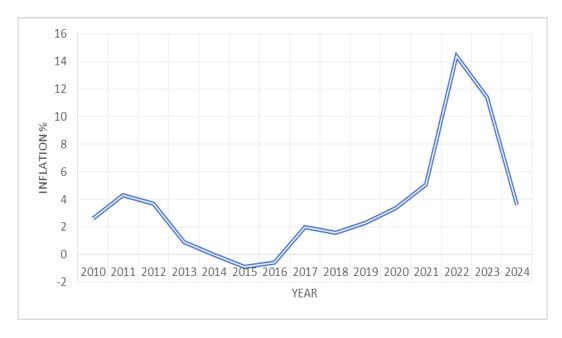


Figure 4. Inflation in Poland in 2010-2024.

Source: Statistics Poland (2025c).

While freelancers might have the potential to adjust their rates to account for inflation, economic uncertainty could also pose a risk in securing consistent work. An important factor determining the work of freelancers for international clients is also changes in currency rates, which may affect the level of freelance employment.

2.2.1.2 The Innovation Landscape

The Global Innovation Index (GII) 2024 places Poland at an overall rank of 40 (WIPO, 2024). Examining the individual pillars provides a more nuanced understanding of Poland's innovation environment.

- Strengths: Poland performs relatively well in Market sophistication (Rank 35),
 benefiting from a strong domestic market scale (Rank 24). Business sophistication (Rank 35) is another relative strength, although knowledge absorption (Rank 76) indicates room for improvement.
- Weaknesses: Significant challenges exist in Institutions (Rank 95), with low rankings in areas such as regulatory quality (Rank 124) and rule of law (Rank 110). This unstable regulatory environment can hinder business operations, potentially impacting freelancers through increased bureaucracy and risk. Knowledge and technology outputs (Rank 120) also represent a major weakness, particularly in knowledge creation (Rank 117). This lower level of new knowledge generation might limit opportunities for freelancers in highly advanced technological sectors. Creative outputs (Rank 60) show average performance, with mobile app creation (Rank 103) being a notable area for potential growth.

The GII framework suggests that a strong innovation environment, characterized by robust institutions, sophisticated markets, and high knowledge outputs, typically creates greater demand for specialized skills, thereby generating more opportunities for freelancers. Poland's mixed performance, with strengths in market and business sophistication but weaknesses in the regulatory environment and knowledge creation, suggests that freelancers might find more opportunities in established market sectors but could face challenges in highly regulated or cutting-edge innovation areas.

2.2.1.3 Human Capital Development

Poland boasts a significant pool of educated individuals. In various regions across the country in 2023, the percentage of the active labour market with tertiary education ranged from 34.2% in Mazowieckie to 45.5% in Pomorskie, with a substantial portion also holding secondary education. This level of education suggests a workforce with the potential to offer a wide range of freelance services (Statistics Poland, 2025a).

However, the "Digitalization in Europe – 2024 edition" (Eurostat, 2024) indicates that 44% of EU citizens lack basic digital skills. While Poland's specific figure isn't provided in the sources, this broader EU context suggests that developing digital competencies remains crucial for individuals aiming to participate effectively in the digital freelance market. The report also notes that only 1 of 5 EU businesses train their staff to develop ICT skills, highlighting a potential gap in continuous skill development that freelancers might need to address independently.

The Human Capital Index (HCI) (Nagy, 2016), not specified for Poland in the new sources, measures the expected human capital attainment by age 18, considering health and education. Other studies indicate its correlation with GDP per capita. A higher HCI generally suggests a more productive future workforce, which could indirectly benefit the freelance market through increased demand for skilled services.

The study on psychosocial working conditions in Poland found that freelancers reported higher mean responses in terms of influence at work and possibilities for development compared to platform and traditional workers. This perceived autonomy and potential for growth could be a significant driver for individuals choosing freelancing. However, freelancers also need to navigate the lack of employer-provided benefits and potential income instability, factors that might deter some individuals from choosing this work arrangement.

2.2.2 Digitalisation in Poland

Digitalisation in Poland is a dynamic process that is transforming the economic and social landscape, including work models. This transformation is part of a broader trend known as Society 4.0, where daily life and professional activities are increasingly

integrated with technology. The phenomenon of remote work and freelancing is gaining significant traction, becoming a more integrated element of the labour market, propelled by the development of digital technologies. Kolisnichenko (2025) shows that digitalisation has significantly impacted Poland's labour market, leading to the emergence of new employment opportunities, including remote and project-based work. The development of digital platforms (e.g., freelancer.pl) is highlighted as expanding income-generating options beyond traditional employment models and enabling broader participation in the labour market, including for women, freelancers, and rural populations. Digitalization transforms work patterns, job opportunities, and labour demand. The opportunities arising from this process include the growth of remote work, economy platforms, and automation tools that enhance efficiency. Digitalization facilitates the creation of new types of jobs, offers flexible employment forms, and opens access to a global talent pool (Jarzębowski, et al., 2024).

The potential of Poland's workforce to fully engage in these "digital businesses" is closely linked to the availability of digital infrastructure and the level of digital skills among the population. Poland has made substantial progress in the Internet connectivity, with 95.9% of households having the Internet access at home in 2024, which is slightly above the EU average of 94% and marks a significant increase from 80% in 2014. Mobile broadband usage has surged, with smartphones becoming the dominant access point for digital services. However, disparities in connection quality persist, particularly between urban and rural areas. In remote regions, where reliance on mobile broadband is more prevalent (used by 75.9% of households in 2024) and access to high-speed Internet may be limited, the potential for full utilization of remote work and freelancing might still be insufficient. While Poland's urban-rural gap is narrower than in some other EU countries, it is still noticeable in specific remote regions and risks reinforcing existing socioeconomic divides if not addressed.

A key challenge for the development of remote work and freelancing in Poland is the significant digital skills gap. According to Eurostat data (Eurostat, 2024), in 2023, only 45% of adults aged 16-74 in Poland possessed at least basic digital skills, which is considerably below the European Union average of 56%. This skills deficit, particularly pronounced among older and less educated demographic groups, represents a

substantial barrier to inclusive participation in the digital labour market, including freelancing. Insufficient digital competence limits the ability to effectively use remote work platforms, online collaboration tools, specialized software, and maintain digital security. The demand for digital skills in Poland continues to outpace the supply. This gap threatens economic growth unless addressed through extensive upskilling and reskilling programs.

Furthermore, while digital platforms play a crucial role in facilitating freelancing and remote work in Poland, the pace of digital technology adoption among Polish enterprises, particularly SMEs, remains uneven. In 2021, only 40% of Polish SMEs had a basic level of digital intensity, below the EU average of 55%. Only 4% of businesses in Poland used AI technologies in 2023, compared to the EU average of 8%, or 5.9% of Polish enterprises compared to over a quarter in the most advanced EU countries (Eurostat, 2024; Choczyńska, Rani, & Tora, 2024). This lag in adopting advanced technologies like AI and cloud computing among SMEs represents a missed economic opportunity and can influence the demand side of the freelance market for certain specialized digital services. While the number of ICT specialists in Poland has increased significantly (over 30% between 2017-2023), indicating growth in the digital workforce supply for specialized roles, the economic benefits of digitalization are still unevenly distributed, often concentrating in urban technology centres, which might affect opportunities for freelancers in different regions.

In conclusion, while digitalization in Poland has built a solid infrastructural foundation and is fostering the growth of remote work and freelancing through digital platforms, expanding market participation, the full potential of the Polish workforce in "digital businesses" is significantly impacted by the digital skills gap and disparities in infrastructure access. Leveraging this potential for inclusive growth requires further targeted actions to bridge the digital skills gap at all levels of society and ensure equal access to high-quality digital infrastructure across the entire country. Addressing these challenges is crucial to ensure that the benefits of digitalization, including the growing opportunities in freelancing and remote work, contribute to social inclusion and sustainable economic development.

2.2.3 Brief look at the freelancing market

The scholarly literature on freelancing in Poland is dominated by the topic of self-employment. The publications presented in this section are either comparative, examining Poland about other countries or situating it within a broader international context (Batrancea, et al., 2022; Cieślik & van Stel, 2024; Dvouletý & Orel, 2020; Höppner, 2021; Krajewska & Krajewski, 2021), or they focus exclusively on self-employment in Poland (Matuszewska-Kubicz & Warwas, 2023; Nikulin, 2021; Pauli, 2016; Puzio-Wacławik, 2013; Ślebarska, Stremska, & Kowalski, 2023).

The popularity of this type of job contracting in Poland is driven by relatively high labour costs and the attractiveness of tax optimization practices (Krajewska & Krajewski, 2021). However, it is worth noting that self-employed workers from post-communist countries, including Poland, tend to demonstrate higher tax compliance and are less likely to engage in tax evasion compared to their counterparts in non-post-communist countries (Batrancea, et al., 2022).

Matuszewska-Kubicz and Warwas (2023) indicate that the Polish labour market is currently characterised by the growing importance of flexible forms of employment, including economically dependent self-employment (EDSE). In this form, the entrepreneur provides services exclusively or primarily to a single client, in a manner that closely resembles work performed under an employment contract. It is worth noting that this form of freelancing differs significantly from the type typically associated with the gig economy, which, as described in this report, is characterised by highly flexible and temporary work arrangements.

The sentiment of the publications has been evolving over the years. The early publications adopt a more optimistic perspective, highlighting the flexibility and responsiveness of this form of job-employee relationship, particularly in adapting to economic downturns (Puzio-Wacławik, 2013) and providing entry opportunities for young people into the job market (Pauli, 2016).

In contrast, later publications increasingly emphasize limitations of selfemployment and adopt a more critical stance. Nikulin (2021) highlights the problem of false self-employment as a predominant form of job contracting in the construction industry, and to a lesser extent in the services as well as in retail sectors particularly within micro and small enterprises. These firms are led by owners or managers with lower tax morality. Tax avoidance remains a significant challenge for the Polish economy. The issue of fictitious self-employment as a means of tax avoidance is also acknowledged by Krajewska and Krajewski (2021).

Another drawback of self-employment is its negative impact on retirement security (Höppner, 2021). Self-employed individuals often fail to allocate sufficient funds from their current earnings toward future retirement needs. This issue is particularly significant in aging societies, including Poland.

Self-employed people also must face some additional stressing situations as compared to people working in traditional job contracts. Ślebarska, Stremska, and Kowalski (2023) emphasize that Polish small business owners must proactively cope with stress to prevent adverse events. This ability is crucial for sustaining their ventures in the long term.

Although the topic of self-employment is undoubtedly important and interesting, considering the subject of this study, publications on the issue of the gig economy and in particular the use of freelance platforms deserve special attention. It should be noted, however, that in Polish scholarly literature this topic is relatively rare.

Ostoj (2023) emphasizes the need for regulations governing job platforms, including the establishment of minimum wages, the adoption of an independent worker status, and the introduction of universal rules for platform operations as well as worker training. In another paper written by the same author, i.e. Ostoj (2024), it was indicated that platform-mediated work is an underestimated phenomenon in Poland and is expected to gain higher popularity in the future. Tusińska (2024) acknowledges that, although digital labour platforms often exert downward pressure on earnings and tend to favour lower worker incomes, most freelancers in Poland have reported higher incomes since starting work on these platforms compared to their previous earnings.

A valuable comparative study on Serbian and Polish freelancers using gig economy platforms was presented by Ivanović, Radonjić, & Kalinić (in print). The authors admit

that the gig workers per capita ratio in Serbia accounts for 227 per 100,000 inhabitants, whereas in Poland, this figure accounts only for 34. This indicates a substantial difference (6.7 times more in Serbia). It can be concluded that Serbia qualifies as a gig economy country (ranking 12th globally), whereas Poland does not. The availability of traditional employment opportunities and a low unemployment rate in Poland leads many Polish workers to prefer standard forms of employment over participation in the gig economy. This tendency is proved by a very high Hofstede's Uncertainty Avoidance Index in Poland (see section Cultural dimension). The other interesting outcome from Ivanović, Radonjić, & Kalinić (in print) study is no substantial differences in gender distribution among freelancers in both countries. Creative services and multimedia dominate both markets; however, Poland exhibits a stronger concentration in software development. In terms of earnings, Poland reports higher average wages than Serbia.

2.2.4 Cultural dimension

Cultural factors that shape entrepreneurial attitudes and influence the willingness to engage in different forms of self-employment, such as freelancing, allow for the identification of specific characteristics attributable to countries and national cultures. This observation is also applicable in the Polish context. The description of these cultural influences can be related to G. Hofstede's theory, within which these features can be systematically categorised under several key dimensions as defined in the model. This theory provides a framework to analyse cross-cultural features. It allows the analysis impact of different aspects of culture on the motivation of employees and methods of management. Elaboration of Hofstede's theory was based on his research on national cultural differences in the IBM company, with its various global subsidiaries and branches (Geraghty, 2022). The data obtained allowed for the identification of four primary dimensions of national cultural differences, namely Power Distance (PDI), Individualism vs. Collectivism (IDV), Uncertainty Avoidance (UAI), and Masculinity vs. Femininity (MAS). Later, the theory expanded the model to six dimensions by adding Long-term vs. Short-term Orientation (LTO) and Indulgence vs. Restraint (IVR).

Regarding the first dimension, namely the Power Distance Index (PDI), Poland registers relatively high values. This suggests a greater tendency toward centralization of authority and control, alongside a cultural acceptance of clear hierarchical dependency between subordinates and superiors (Mikuła, 2010). The size of the index in this category for Poland indicates a predisposition toward more autocratic leadership styles and supports the classification of Polish organizational culture within the framework of a hierarchical society. Subordinates are more likely to expect strong guidance, while leaders are often perceived as benevolent autocrats.

Individuals originating from societies with a high PDI tend to accept economic disparities more readily, which may result in a diminished inclination to initiate independent business activities, including freelance work. A high PDI may also imply a lower propensity to assume risk, something more closely associated with autonomous activity in the labour market than with traditional regular full-time, salaried employment. This relatively limited tolerance for risk may further act as a barrier to independence in the professional sphere and discourage entrepreneurial initiatives based on self-employment. In societies with higher PDI values, one can also observe reduced tendencies toward occupational mobility and lower engagement with new technologies and innovative work models.

The second dimension in Hofstede's model – Individualism versus Collectivism – may also be applied to the sphere of freelancing. This cultural dimension reflects the tendency to organize individuals into cohesive, homogenous groups with clearly delineated roles and responsibilities. Societies characterized by collectivism place less emphasis on individual accomplishments and instead focus on the role and interests of the group.

In Poland, where the index value for this dimension is 47, the society cannot be clearly categorized as either collectivist or individualist (The Culture Factor Group, n.d.). Rather, both tendencies coexist simultaneously. As a result, it is difficult to determine whether Polish workers are culturally predisposed to undertake independent projects in the labour market (such as freelancing), or if they regard employment in larger teams as inherently less attractive.

Another of Hofstede's cultural dimensions relevant to entrepreneurial behaviour and to decisions concerning self-employment is the dimension associated with Success and Achievement oriented motivation. In earlier versions of Hofstede's theory, this was described by the Masculinity versus Femininity axis. The score attributed to Poland in this area is 64, which reflects a strong emphasis on competitiveness, personal achievements, and success (The Culture Factor Group, n.d.). Such an orientation supports the decision to undertake individual labour market initiatives and encourages entrepreneurial activity, thus contributing to greater readiness to work as a freelancer. This relatively high index contributes to a cultural climate that is conducive to self-employment, as it promotes the recognition and valuation of personal success.

When analysing the remaining cultural dimensions proposed by Hofstede, it is possible to point to certain cultural limitations that may hinder the pursuit of individual work projects and discourage decisions to become self-employed or work as a freelancer. A clear example of such a limitation is found in the dimension describing Uncertainty Avoidance. The index for this dimension in the Polish context is significantly high (93), indicating a low level of comfort with uncertainty, a strong preference for avoiding potential risks, and a high emphasis on stability and predictability. Consequently, there is a stronger inclination toward maintaining permanent, stable employment and a marked reluctance to change employers. These cultural tendencies may significantly discourage participation in freelance work, which is typically characterized by fixed-term contracts, variability, and a lack of long-term employment guarantees (Mikuła, 2010).

The next dimension, namely Long-term versus Short-term Orientation, does not show a distinct preference in Poland for either of the two approaches. Therefore, it is difficult to establish a direct relationship between this cultural characteristic and the willingness to enter the freelance labour market and engage in self-employment.

As far as the final cultural dimension is concerned (Indulgence versus Restraint), Poland scores relatively low. When attempting to correlate this dimension with the propensity to engage in self-employment or freelancing, it is useful to refer to the tendency toward pessimism often observed in cultures with low indulgence scores.

Consequently, a higher level of cultural pessimism may constitute a barrier to the adoption of individual forms of employment, which are frequently associated with elevated levels of risk and uncertainty compared to traditional salaried employment, which offers a greater sense of long-term security and predictability.

2.2.5 Regulatory/legal framework

There is no specific category of freelancing in the labour law or any other official documents in Poland. Freelancers still have a few ways of working, basically with or without self-employment.

Without self-employment, one of the possibilities for freelancers to regulate their status is based on a civil contract (Mandate contract). This is one of the most popular forms of freelancers' work in Poland. Through a mandate agreement, the mandatary undertakes to perform a specific legal act on behalf of the mandator. As a main duty, a freelancer is obliged to provide all the necessary information to the principal about the progress of work and hand over everything that the freelancer obtained during the execution of the order (Civil Code, 2024). If it is the only source of income, it obliges the contractor to pay social insurance contributions (pension, disability, accident) and health insurance. If the contractor has other sources of income (e.g., employment contract), only health insurance is mandatory. Another possibility is a business incubator (Rojek, 2024). In this case, organisations opened for science and politics to business relations, providing a place for budding entrepreneurs at their early career stage. Although the main drawback of this form is that the support by incubators is often limited to time or the size of the activities, it is still suitable for freelancers due to their offer (Hightekers.com, 2024):

- services/solutions for managing work,
- settling taxes,
- keeping accounting,
- formal contact with contractors,
- wide range of developmental methods (mentoring, training).

The third possibility (out of self-employment) for freelancers is to act under an unregistered business activity (Gov.pl, 2025b). This option is available in Poland only for a small-scale commercial activity. It does not require any registration. Allowed only until the income obtained in each month does not exceed 75% of the minimum wage – 3499,50 PLN in 2025, and if in the period of the last 60 months (5 years) the person was not conducting any business activity (owning a company). If the monthly income is more than 75% of the minimum wage, it is mandatory to register the business activity.

Main advantages of this form:

- no need to register,
- no need to pay contributions for compulsory social insurance or health insurance for your business activity,
- no need to pay monthly (or quarterly) tax advances,
- no need to pay VAT unless you sell goods or services that require VAT registration from the first sale,
- no need to keep complicated accounting, only simplified sales records.

Disadvantages in this form:

- keeping simplified sales records,
- settling income from unregistered activity (after deducting costs) in the annual
 PIT-36 tax Return according to the tax scale,
- observe consumer rights,
- issue invoices or bills at the buyer's request.

Freelancers could regulate their legal position in the form of a sole proprietorship (Gov.pl, 2025a). To start this form of cooperation, it is necessary to register in the Central Register and Information on Business Activity (CEIDG) by completing the CEIDG-1 application. Data such as name, surname, address, identification data (PESEL, NIP, REGON), and information about the business: Polish Qualification of Business Activity (PKD) number, legal form, etc., must be submitted. Depending on the type of

business and needs, it might be mandatory to register as a VAT payer or as an entrepreneur using the start-up relief.

Main responsibilities of the freelancer in this form of activity:

- keeping accurate records of all income and expenses,
- income tax (PIT), and depending on the situation, also VAT,
- paying social and health insurance contributions,
- all the changes in the data (e.g., address, PKD code) must be reported to CEIDG.

In Poland, freelancing is not legally defined as a separate category, but freelancers can work under several existing legal forms, both registered and without the need for registration. Fresh freelancers may use unregistered business activity or business incubators to try the concept. More experienced individuals may stick to the mandated contracts with various companies. For those who are sure of their skills, it is possible to start a sole proprietorship.

2.2.6 Environmental Implications for Freelancing in Poland

The confluence of Poland's economic and innovation environments and its human capital development offer several insights for individuals considering freelance work:

- Availability of Opportunities: The low unemployment rate indicates a healthy traditional job market, meaning that freelancing might be a choice driven by factors beyond necessity, such as a desire for flexibility and autonomy, as suggested by the study on psychosocial conditions.
- Demand for Skills: Poland's relative strength in market and business sophistication suggests a potential demand for freelance services in established commercial sectors. However, the weakness in knowledge creation might indicate fewer opportunities in highly specialized, research-intensive fields.
- Regional Variations: The significant regional disparities in GDP per capita could influence the local demand for and pricing of freelance services. Freelancers might find more lucrative opportunities in regions with higher economic output.

- Regulatory Hurdles: The weaknesses in institutions, particularly regulatory
 quality and rule of law, could pose challenges for freelancers in terms of
 navigating bureaucracy, legal uncertainties, and operational stability for their
 businesses.
- Importance of Digital Skills: Given the EU-wide gap in basic digital skills and the
 increasing digitalization of work, individuals in Poland considering freelancing,
 especially in online markets, would likely benefit from developing strong digital
 competencies.
- Psychosocial Factors: The higher reported influence at work and development possibilities for freelancers could attract individuals seeking greater control over their careers and opportunities for growth, outweighing the potential risks of income insecurity and lack of benefits.

Poland presents a mixed landscape for individuals considering freelancing. The stable economy and educated workforce provide a foundation for a thriving freelance market. However, weaknesses in the innovation ecosystem, particularly in the regulatory environment and knowledge creation, alongside potential gaps in digital skills, could present challenges. The attractiveness of freelancing is further shaped by the perceived autonomy and development opportunities compared to traditional employment, although individuals must also weigh the trade-offs related to job security and benefits. Ultimately, the decision to freelance in Poland will likely depend on individual skills, risk tolerance, preference for flexibility, and the specific sectors and regions in which they aim to operate. Further development in the innovation ecosystem and continued upskilling of the workforce, particularly in digital competencies, could further unlock the potential of freelancing in Poland.

2.3 Country profile: Romania

2.3.1 Romania's economic indicators and their relevance to the freelance labour market

Romania's recent macroeconomic performance offers an important context for understanding the rise of freelancing as an alternative or complementary form of employment. Based on (World Bank, 2024) data from 2020 to 2023, key economic indicators (Table 2) such as GDP per capita, unemployment, inflation, and exchange rate stability, reveal both structural strengths and social pressures that inform career choices (particularly in digital and flexible forms of work like freelancing).

Indicator	2020	2021	2022	2023
GDP per capita (constant 2015 US\$)	10916.31	11607.98	12114.87	12399.00
GDP per capita (current US\$)	13082.30	14986.78	15557.88	18404.27
GDP per capita, PPP (constant 2021 international \$)	35484.25	37732.55	39380.25	40303.83
Inflation, consumer prices (annual %)	2.63	5.05	13.79	10.39
Unemployment with advanced education (% of total labour force with advanced education)	2.23	2.09	1.68	1.57
Unemployment with advanced education, female (% of female labour force with advanced education)	2.40	1.90	1.31	1.46
Unemployment with advanced education, male (% of male labour force with advanced education)	2.03	2.29	2.09	1.69
Official exchange rate (LCU per US\$, period average)	4.243	4.160	4.688	4.574

Table 2. Key economic indicators for Romania.

Source: World Bank (2024).

The country's GDP per capita (constant 2015 US\$) increased from approximately \$10,916 in 2020 to \$12,399 in 2023, reflecting moderate yet steady growth in real

economic output per individual. This rise suggests improving national productivity and living standards, factors often correlated with greater access to technology, education, and self-employment tools - all of which enable freelancing (OECD, 2017); (Uche, Ngepah, Odionye, & Effiom, 2023). When analysed in current US dollars, Romania's GDP per capita reached approximately \$18,400 in 2023, highlighting the nominal market value of output and providing a baseline for understanding freelancers' relative earnings in foreign currencies, especially for those paid through platforms.

To facilitate meaningful international comparison, the GDP per capita at purchasing power parity (PPP, constant 2021 international \$) stood at approximately \$40,000 in 2023, indicating that Romanians enjoy significantly higher real consumption capacity than raw dollar figures might suggest. This PPP-adjusted figure is particularly relevant when assessing the cost-of-living benefits for freelancers: many are able to earn in strong foreign currencies while spending in a local economy where prices are comparatively lower. Thus, Romania's strong PPP positioning may enhance the attractiveness of freelancing as a competitive and profitable labour model, especially when compared to higher-cost economies.

In parallel, inflation rates have fluctuated, peaking at 13.8% in 2022 before receding to 10.4% in 2023. Elevated inflation directly erodes purchasing power and financial predictability, often encouraging individuals to seek flexible or supplementary income. Freelancing becomes particularly attractive in such periods, offering faster monetization of skills, international access to customers, and often payments in stable foreign currencies.

Regarding currency dynamics, Romania's official exchange rate has remained relatively stable, moving from 4.24 RON/USD in 2020 to 4.57 in 2023. For freelancers who earn in USD or EUR via platforms such as Fiverr, Upwork, or Freelancer, this stability supports income planning and sustains purchasing power locally. It also reinforces the appeal of cross-border digital labour.

Importantly, unemployment rates, especially among those with tertiary education, shed light on labour force segmentation. Overall unemployment stood at 5.0% in 2023, while unemployment among individuals with advanced education was significantly lower, at just 1.57%. This educated demographic is also the one most equipped with

digital skills and language proficiency, making them ideal candidates for freelancing. Notably, the unemployment rate among tertiary-educated women decreased from 2.40% in 2020 to 1.47% in 2023, while for men it declined from 2.04% to 1.70%, indicating slight gender variation.

These data suggest that for highly educated individuals, freelancing is increasingly not a necessity born of unemployment but a strategic and voluntary professional pathway. The combination of digital access, inflationary pressure, and economic stability creates a fertile environment for independent work, especially when formal labour markets may not offer the same degree of flexibility, creativity, or international exposure.

All in all, Romania's economic indicators signal a labour market in transformation, where the freelance economy is no longer a peripheral trend but a viable and, for many, preferable alternative to traditional employment models.

2.3.2 Romania's innovation landscape: A GII-based analysis

The Global Innovation Index (GII) 2024 ranks Romania 48th out of 133 analysed countries, with a score of 33.4, placing it in the high-income group but reflecting a moderate overall performance compared to other European Union members (WIPO, 2024). This positioning offers critical insight into the environment in which Romania's digital workforce and freelance economy are evolving (Table 3).

No.	GII Pillar	Score (0-100)	Rank (out of 133 countries)
1.	Institutions	42.2	81
2.	Human Capital & Research	30.8	70
3.	Infrastructure	51.4	32
4.	Market Sophistication	32.4	67
5.	Business Sophistication	31.1	47
6.	Knowledge & Technology Outputs	29.9	38
7.	Creative Outputs	28.5	56

Table 3. Global Innovation Index pillars for Romania.

Source: WIPO (2024)

Observing the values and ranks, the following insights across different GII pillars could be obtained:

- 3. Regarding the Institutions pillar, Romania exhibits moderate regulatory quality and rule of law, yet lags in business environment indicators like policy stability (rank 107) and entrepreneurship policies (rank 71). This suggests that while legal frameworks exist, they may not sufficiently support entrepreneurial risk-taking, key in fostering a freelance ecosystem.
- 4. Concerning the Human Capital and Research index, the spending on education is relatively low (3.3% of GDP), and tertiary enrolment is average (55.5%). However, Romania has a relatively high number of researchers (1,055 per million), indicating research potential, though underutilized. Graduates in science and engineering (rank 26) present a strong talent pipeline for digital freelancing.
- 5. Value and rank of the Infrastructure subindex in Romania supports moderately the growth of its freelance economy, particularly through strong ICT access (score: 96.9) and relatively good ICT use (score: 79.8). These indicators confirm that most of the population has reliable internet connectivity and the ability to access digital tools (critical prerequisites for participating in online platforms).

However, general infrastructure remains weaker (score: 33.0), with challenges in logistics and investment in capital development.

- 6. Market Sophistication subindex underscores especially regarding the access to credit (score: 26.8) and venture capital, limiting growth opportunities for innovative freelance projects. On the other hand, Romania performs well in trade diversification and has a very low average applied tariff rate (1.1%), supporting cross-border digital services.
- 7. Subindex of Business Sophistication shows mixed results. While knowledge workers are moderately represented (rank 58), Romania shows low business—university collaboration (rank 85) and innovation linkages (rank 83). These are areas where targeted policies could stimulate partnerships that also benefit freelance professionals.
- 8. Knowledge and Technology Outputs in Romania reflect strength in knowledge diffusion (rank 24) but score low in creation and impact metrics. Software spending and high-tech exports remain underdeveloped, which could limit domestic demand for specialized freelance skills, though international demand remains accessible.
- 9. Creative Outputs are weaker than the other pillar of innovation outputs, i.e., Knowledge and Technology outputs. Despite a relatively vibrant digital culture (e.g., GitHub commits per capita ranked 46th), Romania underperforms in the creation of original content and creative goods exports. This highlights untapped potential for growth in digital freelancing sectors such as design, content creation, and app development.

Overall, Romania ranks 30th among 39 European countries, lagging compared to regional peers like Poland and Bulgaria. This underscores a need to accelerate structural reforms in education, business support, and market sophistication to better position Romania in the digital labour economy. Compared to top performers such as Switzerland or Sweden, Romania must bridge significant gaps, particularly in institutional and market sophistication.

2.3.3 Human capital development in Romania: A cross-indicator perspective

Human capital represents a foundational pillar of sustainable development and innovation potential, and in Romania's case, the current state reflects both measurable progress and enduring structural weaknesses. According to (World Bank, 2024) records, Romania's Human Development Index (HDI) was 0.584 in 2020 (on a scale from 0 to 1), indicating a medium level of human development. While HDI incorporates life expectancy, education, and income, Romania's figure places it significantly below the EU average, suggesting ongoing challenges in translating economic growth into social and educational advancement.

The Global Innovation Index (GII) 2024 (WIPO, 2024), through its Human Capital and Research pillar (score: 30.8/100; rank: 70 out of 133 countries), confirms this view. While Romania has made modest gains in areas like tertiary education enrolment (55%) and graduates in science and engineering (rank 26), it significantly underperforms in research and development (R&D) investments. Government expenditure on education and research as a share of GDP remains low (3.3% of GDP on education), and gross R&D expenditure remains below global benchmarks. Additionally, mobility in tertiary education is weak, reflecting limited internationalization and knowledge flow, an essential factor in building a future-ready workforce.

At national level, studies consistently point to structural inefficiencies in Romania's education system. The European Commission's Country Report for Romania (European Commission, 2023) notes skill mismatches, weak vocational training systems, and underinvestment in adult education. These findings align with the moderate GII score and underline the gap between educational attainment and labour market readiness. For example, while Romania produces a high volume of ICT graduates, many lack practical skills aligned with platform-based or freelance digital economies. Furthermore, urban-rural disparities in educational access and digital literacy remain a barrier to inclusive human capital development.

2.3.4 Romania's state of digitalisation

Romania's potential to participate in digital businesses, particularly freelance services, is shaped by both high internet access and comparatively low digital skills. While over 90% of Romanians use the internet at least weekly (on par with the EU average) only around 28% possess at least basic digital skills, placing Romania at the bottom of the EU ranking (Eurostat, 2024). This considerable gap underscores a digital divide: while access to digital infrastructure is widespread, the capacity to use it effectively for value-creating economic activities, such as freelancing or remote service provision, remains limited for the majority of the population.

On a more positive note, Romania performs relatively well in terms of gender participation within the digital economy. In 2023, 26% of ICT specialists in Romania were women, placing the country among the top EU performers in female digital workforce inclusion, behind only Bulgaria and Estonia. Additionally, Romania employs about 3% of its workforce in ICT-related occupations, which, although lower than the EU average (nearly 5%), shows a foundation on which digital business participation could expand (Eurostat, 2024). This participation rate has been steadily rising over the last decade, suggesting a growing interest and capacity in digital careers, including freelance services.

Romania remains significantly below the EU average in key digitalisation indicators (Eurostat, 2024), highlighting both a challenge and an opportunity for its workforce's integration into the digital economy. In 2023, only 27% of Romanian SMEs reached a basic level of digital intensity, compared to the EU average of 58%. The adoption of advanced technologies like AI is also limited, with just 2% of Romanian businesses using AI, the lowest in the EU. Moreover, only 55% of Romanian internet users made online purchases, reflecting limited digital consumer engagement. These figures suggest that while Romania's current digital maturity is low, targeted investments in digital skills and infrastructure could unlock substantial freelance and digital service potential.

However, to fully unlock the potential of the Romanian workforce for platformbased digital work, a substantial national investment in upskilling is required. The contrast between high connectivity and low digital skills points to a critical policy priority: enabling more citizens to transition from digital consumers to digital contributors. Freelance opportunities often require competencies in areas such as content creation, coding, digital marketing, and remote collaboration - skills that remain underdeveloped in Romania's general population. Addressing this skills gap will be essential for the country to effectively harness the economic and social benefits of the freelance and broader digital economy.

Romania's current state of human capital development reflects a mixed picture: strong latent potential, particularly in science and engineering, but underrealized due to funding gaps, weak institutional coordination, and limited innovation linkages. Strengthening this pillar - through sustained investment in education, R&D, and reskilling - will be key to enhancing both traditional economic productivity and the flexibility needed for success in global freelance and digital labour markets.

2.3.5 Freelancer platform economy in Romania: A brief look into literature

The past decade has seen growing scholarly interest in the freelancer platform economy in Romania. However, research on Romania's gig economy remains relatively limited, making recent peer-reviewed studies especially valuable. This review summarizes key academic studies from 2020–2025 that explicitly examine Romania's online gig workforce, highlighting their methodologies, findings, and the Romanian context of each. The studies fall into three broad categories: qualitative explorations of freelancer experiences, legal/policy analyses of gig work, and broader comparative or overview studies.

There are two especially important studies. One is of Buzoianu *et al.* (2023) in which initial findings from in-depth interviews with Romanian gig workers are presented. It offers a ground-level view of freelancing via platforms. The authors conducted nine semi-structured interviews in late 2022 with workers who had found projects through platforms like Upwork or Fiverr. A key goal was to understand how these workers perceive their roles and the challenges they face. The findings indicate that Romanian platform freelancers largely see themselves not as "gig workers" but as independent contractors or entrepreneurs, often using terms like "freelancer" or "self-

employed" to describe their work. Participants reported valuing the flexibility and autonomy of online gig work, yet they also acknowledged significant downsides such as income instability and lack of social protections. Notably, the interviewees emphasized the need for continuous self-promotion and personal branding to succeed on digital platforms – "The work mediated by platforms like Fiverr and Upwork needs constant and solid self-promotion." Building a strong reputation and client portfolio was seen as indispensable for securing a steady flow of projects.

The second study refers to the work of Daba-Buzoianu et al. (2024). Expanding on the prior study, this peer-reviewed journal article offers a more detailed examination of Romanian freelancers' motivations and coping strategies. Using a qualitative methodology based on semi-structured interviews with gig workers across three common online sectors (creative/multimedia, marketing support, and software/IT tasks), the authors explored how Romanians define and experience gig work. The study's findings are organized around two themes. First, it documents how Romanian platform workers perceive themselves and their work: interviewees tended to describe their activity in terms of running a small independent business, emphasizing self-reliance. Many acknowledged feeling a lack of security. For example, they routinely face financial insecurities due to irregular earnings and the absence of benefits associated with standard employment. Second, the article examines the mechanisms of succeeding on digital labour platforms. Romanian freelancers outlined strategies for reputation-building on sites like Upwork (e.g., garnering positive reviews, improving profiles) and discussed how their platform reputation directly impacts their income opportunities. In other words, cultivating a high rating and strong client feedback loop was crucial for attaining better-paying gigs. This study explicitly situates these findings in the Romanian context, noting that Romania is an "emerging market" for online gig work where such experiences have been understudied.

2.3.6 Legal and policy studies of platform work in Romania

The study of Roşioru (2020) "The Status of Platform Workers in Romania" focuses on the legal classification of gig workers. This study examines how Romanian labour law applies to those earning income via platforms. Roşioru, a labour law scholar,

performs a doctrinal legal analysis of Romanian statutes and jurisprudence to determine whether platform-based freelancers are considered employees, selfemployed, or fall into an intermediate category under national law. The analysis finds that in practice, Romanian platform workers are treated as independent contractors, meaning they are excluded from standard labour protections (such as guaranteed minimum wage, overtime pay, or collective bargaining rights) that formal employees enjoy. Rosioru points out that Romanian law, as of 2020, lacks a special status for economically dependent workers - individuals who are formally self-employed but economically reliant on a single platform or client. In the absence of a tailored legal framework, most Romanian gig workers default to self-employed status (often registering as authorized freelancers, or PFA in Romanian), which leaves them without the safety net of the Labour Code. The study draws on comparative perspectives and debates in EU labour law, discussing the concept of "economically dependent worker" as a possible model for Romania. Roșioru ultimately argues that Romania's legal system needs to adapt, either by redefining the scope of "employee" to cover certain platform labour relationships or by creating a new intermediary status to extend basic protections to freelancers who depend on platforms for their livelihood.

In his study "The Social Protection of Platform Workers in Romania: Meeting the Growing Demand for Affordable and Adequate Coverage?" Rosioru (2021) turns to the social security system and how it covers (or fails to cover) platform-based freelancers in Romania. This article, published in the International Social Security Review, analyses Romanian social insurance laws – health care, pensions, unemployment, paid leave, etc. – through the lens of platform work. A central observation is that Romania's social security model is largely universal in principle: access to core benefits (health insurance, pension, certain family benefits) is tied to having any professional income and paying the required contributions, regardless of whether one is an employee or self-employed. Thus, platform workers are formally covered in areas like healthcare and old-age pensions, since they can contribute as self-employed. However, Rosioru identifies critical gaps in practice. Many social protections in Romania are only optional for self-employed workers – for example, freelancers must opt in (and pay extra) for unemployment insurance, work injury insurance, or medical leave benefits, whereas employees receive these by default. Platform workers who do not (or cannot)

contribute to these voluntary schemes end up without coverage for those contingencies. The findings underscore a mismatch: Romanian platform workers are de jure part of the social security system, yet de facto many have inadequate coverage, facing affordability issues and bureaucratic hurdles when trying to access benefits. This Romania-specific analysis concludes with policy suggestions, such as adapting contribution rules or creating special regimes, to ensure that the growing ranks of platform workers can obtain affordable and sufficient social protection.

In his broader comparative and macro-level study "The Digital Work Platforms in Romania: An Overview of the Current State and Possible Advancements", Rosca (2024) offers a wide-angle overview of Romania's digital platform labour landscape. Adopting a mixed perspective from sociology and information systems, he examines the major online labour platforms operating in Romania and assesses the country's progress in this domain. The study likely surveys the leading platforms used by Romanian freelancers - for example, global marketplaces like Upwork, Fiverr, PeoplePerHour, and regional or local platforms - and synthesizes data on their usage and penetration in Romania. Rosca draws on existing indices and reports (such as the Digital Platform Economy Index) to gauge Romania's level of platformization and identifies both opportunities and challenges. The methodology appears to be a combination of literature review and analysis of secondary data (e.g., platform statistics, national digital economy indicators), providing a macro-level picture. In terms of findings, while the paper itself must be consulted for details, the author likely notes that Romania has a significant and growing pool of online freelancers due to its competitive advantages (a well-educated, multilingual workforce and relatively low labour costs). Rosca's overview explicitly situates Romania in the broader context of the platform economy's development. By outlining "possible advancements," the author points to areas for improvement, such as upskilling programs for digital work, better integration of freelancers into the economy, and supportive regulations. In essence, this study functions as a comprehensive snapshot of where Romania stands in the platform economy circa 2024.

In a comparative study, "Locating Online Labour: The Salience of the National Scale in Remote Digital Work", Stegman & Hardy (2025) challenge the common assumption

that online freelance marketplaces create a borderless, location-agnostic labour market. Through a comparative analysis (involving Romania and at least one other European country), they argue that digital gig work remains deeply "constituted by nation-scale cultural and infrastructural norms and practices." (Stegeman & Hardy, 2025, p. 369). In other words, where a freelancer is from still matters, even if the work is done online. The methodology likely involves cross-country interviews or surveys with platform workers, and/or analysis of platform data with a national lens. The authors examine factors such as each country's regulatory environment, social norms, and economic conditions. Stegeman and Hardy show how national regulations (such as tax policies or business registration requirements) and local labour market conditions (like the prevalence of English proficiency or technical skills) can shape the opportunities and outcomes for Romanian platform workers. They also observe that online gigs often form "discrete supply chains and bounded markets" rather than a free global talent pool. For instance, Romanian freelancers may cluster in certain niches or primarily service clients from specific regions, leveraging their comparative advantages in those segments. The inclusion of Romania as a case study is explicit and informative – it demonstrates that despite the global reach of platforms, Romanian workers' prospects are still anchored by issues such as domestic social policies and education systems. This study's comparative approach underscores a crucial point: the freelancer platform economy does not operate in a vacuum. Romanian gig workers' lives are intertwined with their national context, reminding stakeholders that any interventions (be it platform design changes or labour regulations) must consider these local factors to be effective.

Summing up, the peer-reviewed literature of the past ten years suggests that Romania's experience with platforms like Upwork and Fiverr is characterized by enthusiastic adoption amid a regulatory vacuum. Romanian freelancers have proven eager participants in online labour markets, but academia signals that legal and policy adjustments are needed to ensure this new mode of work is sustainable and equitable. As the platform economy continues to evolve, these studies provide a critical knowledge base for understanding Romania's path and for informing stakeholders – from Romanian policymakers to the platform companies themselves – about the unique dynamics at play in this Eastern European context.

2.3.7 Cultural dimensions and freelancing in Romania: An analysis using Hofstede's model

Freelancing, defined as the act of working independently rather than for a specific employer, has grown significantly worldwide, particularly in the digital economy. In Romania, a country marked by a complex socio-economic transition from communism to capitalism, freelancing has experienced significant growth but also unique challenges.

In the following chapter, we will provide some considerations on the "footprint" culture leaves on every aspect of "the way people communicate, perpetuate and develop knowledge about and attitudes towards life" (Geetz, 1973).

More precisely, using Hofstede's model of national cultures as the analytical framework (Hofstede Insights., n.d.; Geert Hofstede B.V., n.d.), this chapter will try to investigate how specific cultural dimensions in Romania facilitate or hinder independent work.

Geert Hofstede's study of the cultural dimensions describes the effects of society's culture on the values of its members, and how these values relate to behaviour using a structure derived from factor analysis. Another characteristic of this research is that the countries' scores on the dimensions are relative, as we are all human and, simultaneously, we are all unique. In other words, culture can be used meaningfully only by comparison (Hofstede, Hofstede, & Minkov, 2012; Baltador, 2016). Each cultural dimension in Hofstede's framework (power distance, individualism vs. collectivism, masculinity vs. femininity, uncertainty avoidance, long-term vs. short-term orientation, and indulgence vs. restraint) offers insights into the values and behaviours of individuals within a culture, which in turn influence professional practices such as freelancing. Methodologically, each dimension is measured by an Index, ranging from 0 to 100. Their absolute value is not relevant, *per se*, but they indicate comparatively, one culture from another.

Power distance "expresses the degree to which the less powerful members of a society accept and expect that power is distributed unequally" (Hofstede, Hofstede, & Minkov, 2012, p. 61). This dimension is calculated by the Power Distance Index (PDI), which scores from 0-100, the closer to 100, the higher the power distance. Romania scores

relatively high on PDI, indicating that hierarchical structures are deeply rooted in society and organizations. This preference for hierarchy might initially appear to hinder freelancing, a practice that inherently lacks traditional organizational hierarchy. Romanian freelancers may find it challenging to assert themselves with clients, negotiate contracts, or operate independently without the perceived validation from a higher authority figure. Moreover, this cultural aspect could lead to freelancers feeling isolated, without the formal "recognition" structures present in traditional employment.

Nevertheless, freelancing can also provide a way for individuals to bypass rigid corporate hierarchies. For some Romanians disillusioned with top-down management styles, freelancing offers a form of professional liberation. The ability to interact more directly with clients and manage one's own career paths appeals to those who seek autonomy despite the broader cultural preference for hierarchy. According to Hofstede, longitudinal studies indicate that the new generations tend to reduce the PDI, but the relative position between countries remains the same.

This dimension refers to two poles: Individualism - in this societies, individuals are expected to take care of themselves and their immediate families only and collectivism, where individuals expect their relatives or members of a particular ingroup to look after them in exchange for unquestioning loyalty (Hofstede, Hofstede, & Minkov, 2012). Romania exhibits a relatively collectivist orientation compared to Western European nations but is more individualistic than many Asian societies. In a collectivist culture, strong (in-group) loyalty can shape professional decisions. Romanian freelancers might rely heavily on networks of family, friends, and former colleagues to secure work, reflecting collectivist tendencies.

However, this reliance on personal networks can both help and hinder independent work. On one hand, it facilitates access to opportunities through trusted relationships; on the other hand, it may limit the freelance market to familiar circles, restricting broader client acquisition strategies common in more individualistic freelance markets like those in the

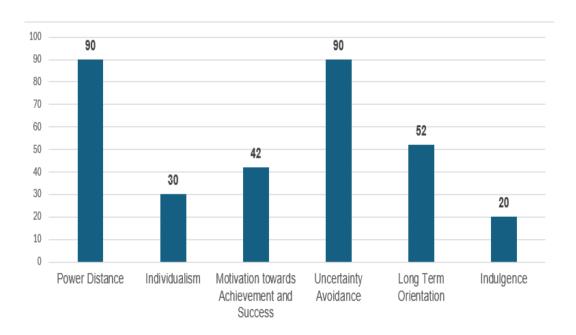
This dimension has been reframed as Motivation towards Achievement and Success Masculinity and represents a preference in society for achievement, heroism, assertiveness, and material reward for success. Masculine societies are more competitive. Femininity stands for a preference for cooperation, modesty, caring for the weak, and quality of life. Society at large is more consensus-oriented (Hofstede, Hofstede, & Minkov, 2012). Romania has a moderately masculine culture, where achievement, success, and competition are important societal values. In the context of freelancing, this cultural orientation can motivate individuals to strive for professional excellence and financial success. Freelancers may be driven by the desire to prove themselves through entrepreneurial endeavours, client satisfaction, and personal branding. However, a highly competitive environment can also lead to burnout and unhealthy comparisons among freelancers, especially when professional identity becomes tightly tied to financial performance. Moreover, the masculine focus on success may prioritize measurable achievements, potentially marginalizing creative freelancers whose outputs are less easily quantified.

This dimension expresses the degree to which the members of society feel uncomfortable with uncertainty and ambiguity (Hofstede, Hofstede, & Minkov, 2012). Romania scores high on Uncertainty Avoidance, indicating a strong preference for structured situations, clear rules, and predictable outcomes. High Uncertainty Avoidance can present a significant barrier to freelancing, which by nature involves financial instability, fluctuating workloads, and uncertain client relationships. Many Romanians may perceive freelancing as too risky compared to traditional employment with a fixed salary and benefits. This cultural trait could deter individuals from pursuing freelance careers or lead to stress and anxiety among those who do. Consequently, Romanian freelancers often seek ways to mitigate uncertainty by securing long-term contracts, diversifying their client base, or collaborating with agencies that offer more stable project flows.

Long-term oriented societies foster pragmatic virtues oriented towards future rewards, in particular saving, persistence, and adapting to changing circumstances. Short-term oriented societies foster virtues related to the past and present such as national pride, respect for tradition, preservation of "face", and fulfilling social obligations.

Romania's relatively low Long-Term Orientation suggests a focus on short-term results rather than future rewards. This can affect freelancers by encouraging a project-to-project mentality rather than building a sustainable, long-term independent career. Short-termism may result in a focus on immediate financial gain over strategic brand development, continuous skill acquisition, or long-term client relationships. On the other hand, the agility that comes with short-term thinking can be an advantage in the volatile freelance market, where adaptability is key. Romanian freelancers may be more willing to pivot rapidly, seize new opportunities, and reinvent themselves, an asset in today's fast-changing work environment.

Indulgence stands for a society that allows relatively free gratification of basic and natural human drives related to enjoying life and having fun. Restraint stands for a society that suppresses the gratification of needs and regulates them through strict social norms (Hofstede Insights, 2025). Romania tends towards Restraint, meaning that society places relatively less emphasis on leisure and gratification. This cultural trait may cause freelancers to experience a "work-first" mentality, where taking breaks, celebrating achievements, or investing in self-care is undervalued. Consequently, Romanian freelancers might face higher risks of overwork and stress without adequate cultural support for maintaining a healthy work-life balance. However, this restraint-driven work ethic can also foster discipline and perseverance that are essential for freelancers to navigate the challenges of independent work.



 $Figure \ 5.\ Hofstede's\ dimensions\ of\ Romanian\ national\ culture.$

Source: Hofstede Insights (n.d.).

Analysing freelancing in Romania through Hofstede's cultural dimensions reveals a complex interplay of facilitating and hindering factors. High Power Distance, Collectivism, and Uncertainty Avoidance pose significant challenges to independent work, making negotiation, risk-taking, and solitary work less culturally intuitive. At the same time, the moderate levels of Masculinity encourage striving for success, while Short-Term Orientation and Restraint foster adaptability and discipline, respectively.

For policymakers, educators, and support organizations seeking to foster freelancing as a viable career option in Romania, cultural sensitivities must be carefully considered. Strategies could include providing freelancers with negotiation skills training, promoting freelance networks to meet collectivist needs for community, offering risk-mitigation resources, and encouraging long-term career planning to counteract short-termism. Only by addressing these cultural factors can Romania fully unlock the potential of its independent workforce.

2.3.8 The regulatory and legal framework for freelancers in Romania

In the context of the evolving global labour market, Romania has witnessed a notable growth in freelance work, driven by technological innovation and shifting professional values. Freelancing, understood broadly as the provision of services by independent professionals outside of traditional employment frameworks, is increasingly relevant in sectors such as information technology, graphic design, translation, education, consulting, consulting, therapy, marketing, legal and financial services, wellness, landscape art, and arts generally.

Despite the rising number of individuals who engage in freelancing, Romanian law does not provide a dedicated legal definition for this category. Instead, freelance activity is operationalized through several legal structures that allow individuals to work independently. The absence of a coherent legal identity for freelancers generates significant variability in how individuals are taxed, insured, and regulated, depending on the legal structure under which they choose to operate. These include the "Persoană Fizică Autorizată" (PFA), individual or family enterprises (Întreprindere Individuală and Întreprindere Familială), limited liability companies (SRL), and, for certain professions, civil or copyright-based contractual relationships.

Romanian freelancers operate under legal structures that permit individuals to conduct economic activities independently, yet none of these forms constitute a formally recognized legal status called "freelancer." The most common structure, the PFA, allows individuals to register with the National Trade Registry Office and operate independently within their declared area of professional activity. Similarly, individual or family enterprises permit solo or familial business operations under simplified rules. Some professionals choose to establish SRLs, which, although more complex, offer limited liability and greater access to business-related advantages, including contracts with corporate clients and eligibility for certain funding programs.

Freelancers in Romania are active across a diverse range of sectors. In the digital economy, professionals in IT, software development, graphic design, and marketing often pursue freelance careers. Language services such as translation and interpretation are also commonly performed in freelance formats. Other examples include consultancy in legal, health and safety consultancy and financial domains, as well as work in health-related and creative industries—such as psychology, therapy, education, massage therapy, cosmetology, and visual arts. In regulated professions like law, architecture, or medicine, freelance activity may be permissible but is subject to

specific ethical and licensing standards outlined by professional bodies and national legislation.

While these sectors illustrate the broad relevance of freelance work in Romania, the legal and administrative mechanisms supporting such careers remain highly fragmented and often confusing. This fragmentation stems in part from the influence of the French legal tradition, which differentiates independent work on a professional basis rather than through a unifying freelancer statute.

In Romanian law, the term "freelancer" lacks a specific juridical definition. Nevertheless, the concept is operationalized through various legal structures that permit independent economic activity. Among these, the most employed forms include:

- Persoană Fizică Autorizată (PFA) or Authorized Natural Person, which enables individuals to conduct business-like activities in their own name following registration with the National Trade Registry Office (ONRC).
- Întreprindere Individuală (II) and Întreprindere Familială (IF) legal forms designed for individual or family-based entrepreneurial activity.
- Societate cu Răspundere Limitată (SRL) or Limited Liability Company, often adopted by freelancers with higher revenues or business-oriented needs.
- Copyright and civil contracts commonly used in intellectual, artistic, or educational services to formalize collaborations with clients.

Romanian law does not provide a single, unified set of regulations specifically for freelancers as a general category. Instead, freelancers are governed by a combination of general business laws and profession-specific regulations, with requirements varying depending on the type of freelance activity.

The Romanian legal system uses terms and frameworks from the civil code, labour code, commercial code, and specific deontological (ethical) codes for various professions (such as lawyers, notaries, accountants, doctors, and architects) to regulate independent work. The selection of the appropriate legal framework depends on the profession and context, rather than a dedicated freelancer law (Porumb, Bogdan, Săcara-Oniţa, & Porumb, 2022). For certain professions, such as translators and

interpreters, there are specific legal requirements for authorization and activity, but these are tailored to the profession rather than to freelancers as a whole (Istratie-Macarov & Buzarna-Tihenea, 2019).

Freelancers must comply with general requirements for sole traders or companies, including health and safety, fire safety, financial reporting, and data protection (GDPR). These requirements are not unique to freelancers but apply to all independent economic activities (Istratie-Macarov & Buzarna-Tihenea, 2019).

Taxation and financial obligations for freelancers are also governed by the general tax code, with no special tax regime exclusively for freelancers (Istratie-Macarov & Buzarna-Tihenea, 2019).

The legal framework for freelancers is fragmented and subject to change, with ongoing updates to legislation affecting different professions and business activities. Freelancers must stay informed about both general and profession-specific legal requirements (Porumb, Bogdan, Săcara-Oniţa, & Porumb, 2022); (Istratie-Macarov & Buzarna-Tihenea, 2019).

Romanian law does not have a dedicated, comprehensive set of regulations for freelancers. Instead, freelancers must navigate a mix of general business laws and profession-specific rules, with legal obligations depending on the nature of their work and professional category.

Romanian freelancers are generally required to comply with standard tax obligations, with compliance influenced by factors like tax system fairness and knowledge of tax laws, while some IT professionals benefit from specific income tax breaks.

Romanian freelancers face tax compliance challenges related to complex regulations, high compliance costs, trust in authorities, knowledge of tax laws, and the need for more transparent and digitalized public services.

The principal legal instrument regulating taxation for freelancers is Law No. 227/2015—the Romanian Fiscal Code. Under this law, individuals earning income through independent activity may be taxed under two main regimes: real income

taxation or fixed-income norms, depending on the nature of the profession and annual income thresholds.

Freelancers operating as PFAs, for instance, can choose the real income regime, wherein net income is calculated as the difference between total revenue and allowable expenses. Alternatively, under the norm-based system applicable to certain professions, tax liabilities are calculated based on standardized income levels established by tax authorities.

PFAs may choose between two taxation regimes: the real system and the fixed-income norm. Under the real system, net income is calculated by subtracting deductible business expenses from gross revenues, and a flat 10% income tax is applied to the result. This method is more accurate but requires full bookkeeping and documentation of all income and costs. Alternatively, PFAs in eligible professions may choose to be taxed based on normative income levels established by ANAF (the National Agency for Fiscal Administration). In this simplified regime, income is presumed and not linked to actual earnings, which reduces administrative complexity but may lead to either overpayment or underpayment depending on the freelancer's real income.

In addition to income tax, freelancers are subject to social contributions. The payment of pension contributions (CAS) becomes mandatory if net income exceeds the equivalent of 12 minimum gross salaries per year, while health insurance contributions (CASS) are required if net income exceeds the equivalent of six minimum gross salaries. In both cases, the base for contribution is not actual income but a fixed value set annually by the authorities. For income below these thresholds, contributions remain optional, leading many low-income freelancers to forgo long-term social protection.

Tax reporting obligations require that PFAs submit the single tax declaration (Form D212) by May 25 each year. This declaration includes projected income, actual income from the previous year, and social contributions. Payments are typically split into two instalments, due in July and November. The process is conducted online via the SPV platform. For freelancers working with foreign clients, all revenues must be reported in RON, using the exchange rate of the National Bank of Romania applicable on the date

of invoice or payment receipt. VAT registration becomes mandatory if the freelancer's turnover exceeds 300,000 RON per year, further increasing administrative obligations.

For freelancers operating under an SRL, corporate taxation applies. This includes a 1% income tax for microenterprises with revenue under €500,000, and a 16% corporate income tax for larger entities, in addition to an 8% dividend tax applicable to distributed profits.

Freelancers engaged via copyright or civil contracts may benefit from a 40% standard expense deduction, reducing taxable income, subject to specific conditions.

Freelancers are required to submit tax declarations via the SPV (Virtual Private Space) electronic platform administered by the National Agency for Fiscal Administration (ANAF). The primary reporting form is D212, which encompasses income tax, health insurance (CASS), and pension contributions (CAS).

Income must be reported annually, typically by March 15th of the following fiscal year. However, estimated tax payments must be made quarterly, with failure to do so resulting in penalties. Fines for non-compliance vary but can reach several thousand RON, depending on the gravity of the infraction.

Freelancers whose net annual income exceeds 12 gross minimum wages are obliged to contribute to Romania's national health and pension systems. Below this threshold, contributions are optional. However, this voluntary nature creates disparities in social protection coverage. Notably, health insurance for family members of freelancers is not automatically granted and requires separate registration.

Social contributions also represent a significant financial strain. For low-income freelancers, mandatory payments into pension and health systems can be disproportionately burdensome, especially when income fluctuates. Compounding these issues is the legal ambiguity that surrounds freelance work. The absence of a clear, freelancer-specific legal framework generates confusion, especially for those new to self-employment or working across multiple sectors.

Finally, the lack of targeted state incentives and strategic support further marginalizes freelancers. With no comprehensive national policy to promote or support independent work, freelancers often find themselves excluded from benefits

that are readily available to conventional employees. This includes limited access to social security protections, maternity leave, and unemployment benefits, reinforcing the precariousness of freelance careers in Romania.

2.4 Country profile: Spain

2.4.1 Economic indicators

Spain presents a developed economy that, despite its membership in the group of high-income countries, maintains relevant structural challenges that directly influence the choice of freelance work as an employment alternative. In 2023, Spanish GDP was 1.62 trillion US dollars and GDP per capita was around\$ 35,000, ranking 34th in the world (World Bank, 2024), reflecting a medium-high purchasing power, although with notable regional differences and a decline compared to previous years.



Figure 6. GDP growth (annual%).

Source: World Bank (2024).

The Spanish labour market continues to be characterized by a high level of structural unemployment, especially among young people and low-skilled workers. The overall unemployment rate stood at 10.6% in the fourth quarter of 2024, 1% lower than in 2023 (11.7%), the lowest value since 2008 (Eurostat, 2024; YCharts, 2024); while youth unemployment (under 25) exceeded 27%, one of the highest in Europe (Eurostat, 2024). This context forces many people, especially skilled young people, to opt for self-employment or digital platforms as a way of professional insertion.

	Illiterate	Incomplet e Primary Education	Primary Education	Lower Secondary Education	Upper Secondary (General)	Upper Secondary (Vocational)	Higher Education
	2023T4	2023T4	2023T4	2023T4	2023T4	2023T4	2023T4
Both sexes		1				1	1
16-19			70,22	42,26	40,76	40,76	6,04
20-24		16,49	55,01	33,44	18,16	26,89	22,28
25-29		18,87	27,53	20,79	24,71	16,35	11,41
30-44	42,87	24,33	20,28	13,69	12,16	10,36	6,81
45-54	37,76	18,78	20,12	12,99	7,79	12,06	5,21
55 and over	28,06	30,33	17,91	13,54	10,16	11,93	6,15
Men	'				1		
16-19			63,07	42,91	39,63	34,28	
20-24		28,13	55,10	31,77	19,69	26,48	22,83
25-29		27,05	26,21	17,83	20,96	17,02	10,09
30-44	32,73	16,53	16,55	9,98	9,31	7,74	5,45
45-54	22,26	9,64	19,89	10,22	6,79	8,44	3,48
55 and over	24,88	34,76	18,67	11,08	9,29	9,11	5,22
Women	'				1		
16-19			89,64	41,10	41,68	50,18	16,10
20-24			54,75	36,42	16,58	27,50	21,82
25-29			29,52	26,48	29,19	15,50	12,50
30-44	61,33	37,34	26,34	19,96	15,11	13,35	7,93
45-54	73,74	34,63	20,49	17,03	8,94	16,15	6,73
55 and over	32,69	25,75	16,90	16,68	11,13	14,46	7,16

Table 4. Unemployment rates by level of education attained, gender, and age group¹².

Source: INE (2023).

These unemployment rates decrease significantly with the increase in training, reaching minimum levels among people with higher education (INE, 2023). This data suggests that profiles with higher education have a greater capacity to adapt to

¹² (1) Lower secondary education typically includes the first stage of secondary schooling, often up to age 15; (2) General track of upper secondary education, oriented toward academic studies; (3) Vocational track of upper secondary education, oriented toward practical and job-related skills.

emerging labour markets such as digital freelancing, especially in technological, creative, or professional translation sectors.

Inflation reached 2.3% in March 2025, following a cycle of stronger increases due to the energy crisis and post-pandemic effects (INE, 2025). Although it has declined compared to previous years, reflecting a moderation in inflationary pressures. This variable has a considerable effect on purchasing power and on the search for additional income, such as that which may come from self-employment.



Figure 7. Consumer price index.

Source: INE (2025).

Regarding the exchange rate, Spain, being part of the Eurozone, maintains a stable currency, which provides security and predictability of income. However, for freelancers working with international clients (outside the EU), payment in US dollars may represent temporary advantages or disadvantages depending on the evolution of the EUR/USD exchange rate. This aspect can be an incentive to work with global platforms that allow receiving payments in foreign currencies (Bank of Spain, 2024).

In 2024, in terms of income inequality, Spain has returned to levels it has not had since 2004, before the global financial crisis. The Gini index in Spain was 31.4 points, according to data from Eurostat and the INE's Living Conditions Survey (2023). This value indicates a significant improvement in income equity, reaching levels like those

of 2004, before the global financial crisis. The indicator has also improved in Ireland, Poland or Slovakia, to cite only the European countries where inequality has been most reduced in the last decade. In comparison, the European Union (EU) average in 2023 was 29.6, which places Spain above the EU average in terms of income inequality (European Commission, 2025).

2.4.2 Innovation indicators

The innovation ecosystem in Spain represents a key component for understanding the potential for the development of freelance work, especially in sectors related to the knowledge economy, digital services, and creative industries. According to the Global Innovation Index 2024 (WIPO, 2024), Spain ranks 28th out of 132 economies, consolidating its position as a country with a moderately strong innovation system, although it still has room for improvement compared to the most advanced economies in Western Europe. Spain ranks 27th out of 51 economies in the high-income group and 17th out of 39 economies in Europe.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	30th	27th	27th
2021	30th	28th	29th
2022	29th	28th	26th
2023	29th	28th	26th
2024	28th	29th	23rd

Table 5. Spain's GII ranking (2020-2024).

Source: WIPO (2024).

Spain has 2 clusters in the top 100 S&T clusters of the Global Innovation Index: Madrid (rank: 48) and Barcelona (rank: 55), with a top patent field of Digital Communication. The analysis of the seven pillars of the GII provides a detailed overview of the country's innovative capabilities:

 Institutions (position 49): Spain has a stable institutional environment favourable to business development, although challenges persist in bureaucracy, slow public administration, and legal certainty.

- Human capital and research (position 27): this is one of the country's strongest pillars. The educational offer is broad and of high quality, with a high rate of university graduates, especially in technical and humanities areas.
- Infrastructure (position 14): Spain stands out for its network of physical and digital infrastructures. Broadband coverage and access to digital technologies are extensive, facilitating remote working.
- Market sophistication (position 33): access to finance for entrepreneurs and microenterprises remains limited, and administrative hurdles may discourage new self-employed workers.
- Business sophistication (position 31): there are important collaboration networks between universities and companies, although the business fabric is dominated by SMEs with limited innovative capacity.
- Knowledge and technology production (position 24): talent exists but often does not find application channels in the local market, which favours the search for global freelance opportunities.
- Creative production (position 23): Spain has a strong tradition in design, media,
 literature, film and digital content, which boosts its visibility as an exporter of freelance talent.

On the other hand, the Global Innovation Tracker 2024 shows what the current state of innovation is, how fast technology is being adopted, and what the resulting social impacts are. In the case of Spain, some aspects related to investment in science and innovation, technology adoption and labour productivity are highlighted.

In this sense, the relationship between income levels (GDP per capita) and innovation performance (GII score) places Spain above other economies, as shown in Figure 8.

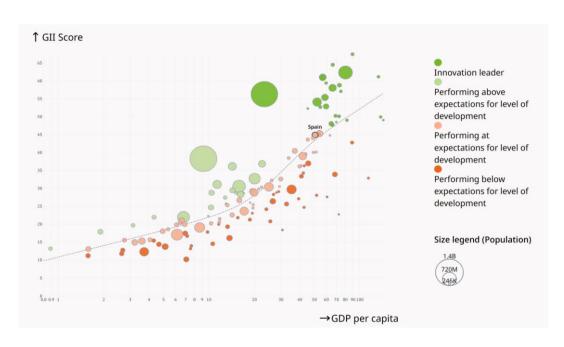


Figure 8. Innovation overperformers relative to their economic development. Source: WIPO (2024).

Science and innovation investmen	nt				
Scientific publications (SSCI or SCIE)	R&D investments	Venture capital		International patent	
		Deal numbers	Deal values		
-4%	7.60%	35%	-55.90%	-1.30%	
2022 - 2023	2021 - 2022	2022 - 2023	2022 - 2023	2022 - 2023	
2.40%	2.40%	11.50%	24%	-1.60%	
2013 - 2023	2012 - 2022	2013 - 2023	2013 - 2023	2013 - 2023	
Technology adoption					
Safe sanitation	Connectivity		Robots	Electric	
	Fixed broadband	5G			
0%	2.50%	4.90%	4.70%	59.30%	
2021 - 2022	2021 - 2022	2021 - 2022	2021 - 2022	2022 - 2023	
0%	3.90%		3.80%	69%	
2012 - 2022	2012 - 2022		2012 - 2022	2013 - 2023	
90 per 100 inhabitants in 2022	36 per 100 inhabitants in 2022	86.3 per 100 inhabitants in 2022		1.5 per 100 inhabitants in 2023	
Socioeconomic impact					
Labour productivity	Life expectancy	Temperature			
0.60%	-0.20%	2.6ºC			
2022 - 2023	2021 - 2022	2023			
0.40%	0.10%	n/a			
2013 - 2023	2012 - 2022				
114,212 USD in 2023	83.1 years in 2022				

Source: WIPO (2024).

2.4.3 Human capital development

Human capital is one of the fundamental factors that determines the capacity of an economy to generate innovation, productivity, and new forms of employment, such as

freelance work. In the case of Spain, this development is supported by a solid

educational structure and a broad public offer, although there are certain mismatches

between training and the needs of the labour market.

According to the World Bank's Human Capital Index, Spain recorded a score of 0.74

in 2020, implying that a child born in the country can expect to reach 74% of his or her

potential productivity under optimal conditions of education and health (World Bank,

2020). This figure places Spain above the world average but below the countries with

the highest investments in lifelong learning and technological adaptation.

On the educational side, tertiary enrolment rates are over 80%, one of the highest

in Europe, reflecting broad access to university (OECD, 2023). Specifically, they were

94.5% in 2022, according to UNESCO data (The Global Economy, 2022). However,

employability reports (CRUE, 2023) warn of mismatches between degrees and real

demand for skills, with significantly higher job placement rates in areas such as

engineering, IT, or digital marketing, and lower rates in some branches of humanities

or social sciences.

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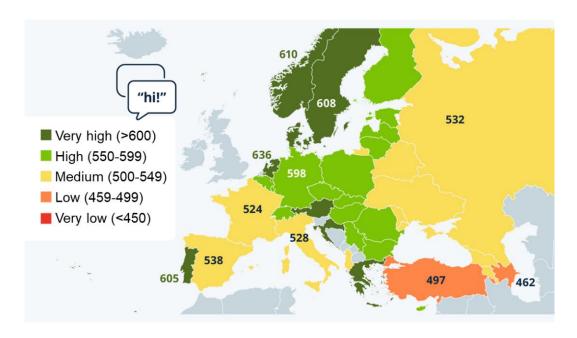


Figure 9. European countries by level of English proficiency¹³ in 2023.

Source: Florencia Melo (2024) & EF EPI (2023).

The vocational education and training (VET) system has undergone modernization in recent years. In 2024, more than 25% of students in post-compulsory secondary education were enrolled in VET, reflecting a growing social appreciation of this training pathway (MEFP, 2024). In addition, Dual VET programs have been expanded, combining theoretical training and direct work experience in companies, a modality that favours the transition to self-employment and project-based work.

The development of human capital has also been boosted by digital training and reskilling initiatives within the framework of the National Digital Skills Plan. This programme, promoted by the Spanish government and co-financed by Next Generation EU funds, has offered free courses in programming, web design, cybersecurity, and digital marketing, which are aligned with the skills required in the freelance market (SEPE, 2023).

Finally, proficiency in English as a working language has improved significantly in recent years. According to the EF English Proficiency Index 2023 (EF EPI, 2023), Spain

¹³ As a foreign language. Score based on data from EF SET English tests of more than 2.1 million participants from 116 countries. No country in Europe scored 'very low'.

ranks 33rd out of 113 countries, classified as a "high" proficiency country. This factor is essential for freelancers working with international clients and on global platforms.

Given the above, Spain has a solid base of human capital, thanks to a high level of schooling, a consolidated public education system, and recent efforts to modernize technical and digital training. However, challenges remain in matching training supply and labour demand, as well as in encouraging autonomous career paths. Continued improvement in these dimensions will be key to strengthening employability and the growth of freelance work.

2.4.4 Digitalisation and digital competences

Digitalisation is an essential component in understanding the potential for the development of freelance work in Spain, as a large part of emerging freelance activities are linked to the provision of digital, creative, or technological services. The ability of individuals to use digital tools and participate in virtual work environments largely determines their employability and competitiveness in the global market.

According to the Digital Economy and Society Index (DESI) produced by the (European Commission, 2025), Spain is above the European Union average in general digital skills. According to the latest ONTSI report on Digital Skills (2024), in the last year the digital skills of Spaniards have improved. In the last year, the digital skills of Spaniards have improved. In 2023, 66.2% had at least a basic level (basic or advanced). Specifically, 27.3% had the basics and 38.9% had advanced. Compared to 2021, the population with at least basic skills has grown by 2 points to 66.2%. On the other hand, those with basic skills have grown by 1.3 percentage points from 26% and those with advanced skills by 7 tenths from 38.2%. 29.2% of the population had a level below basic. This level includes people with low (15.2%), reduced (7.1%), limited (4.4%) and no skills (2.5%). The remaining 4.6% are made up of people whose skills are not assessable because they have not used the Internet or have not done so in the last three months. Compared to 2021, people with less than basic skills have fallen by 5 tenths of a percentage point. That year they were 29.7%. The population with skills at these levels was then slightly higher in all: low (15.4%), reduced (7.4%), limited (4.5%) and no skills (2.4%).

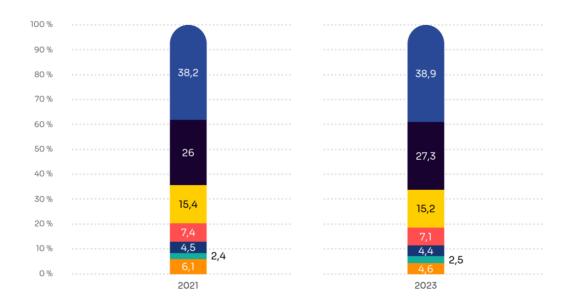


Figure 10. Percentage of the population by level of digital skills¹⁴ (2021-2023). Source: INE; Report on Digital Skills (ONTSI, 2024).

Eurostat's Digital Skills Indicator 2.0 report highlights that Spanish workers show higher levels of digital literacy in tasks related to communication, problem solving and information processing. However, relevant gaps persist by age, educational level and employment status. For example, people who are unemployed or have a low level of education have lower digital literacy, which can make it difficult for them to enter the freelance market.

Along these lines, the Spain Digital Agenda 2026 was conceived as one of the pillars of the Recovery, Transformation and Resilience Plan for Spain, as well as a vector for modernization and prosperity in the medium term. The initiative operates in three fundamental dimensions:

 Infrastructure and technology, driving connectivity, 5G, cybersecurity, AI and other disruptive technologies.

¹⁴ Orange: Non-assessable; green: No skills (Level 0); dark blue: Limited skills (Level 1); red: Reduced skills (Level 2); yellow: Low skills (Level 3); navy blue: Basic skills (Level 4): blue: Advanced skills (Level 5).

- Economy, boosting the digitisation of SMEs and public administrations, digital entrepreneurship, integration of technology in industrial value chains and in the audiovisual sector.
- People promote the acquisition of digital skills to ensure access to the jobs of the future and the digital inclusion of all citizens and ensuring the protection of individual rights in the digital environment.

In recent years, public policies have been implemented to reduce these gaps and promote digital skills. The National Digital Skills Plan (Digital Spain 2026) envisages an investment of more than 3 billion euros to promote digital training for citizens, SMEs and the self-employed (Krasavina, 2023). Through the "Digitalízate Plus" program and agreements with platforms such as Coursera or Google, thousands of people have accessed free training in areas such as programming, cybersecurity, UX/UI design or project management (Red.es & FUNDAE, 2023; FUNDAE, 2022).

Likewise, Digital Kit, managed by Red.es, has enabled more than 200,000 selfemployed and micro-enterprises to access subsidies to digitize their activity, including tools for customer management, web presence, social networks, e-commerce and cybersecurity (Red.es, 2023).

In short, Spain has an advanced digital infrastructure and an increasingly digitally literate population. Public policies are aligned with training objectives, although it is necessary to continue reducing access gaps to ensure that freelance work is consolidated as an inclusive and viable option for all segments of the population.

2.4.5 Brief review of the literature on freelancing in Spain

The platform economy in Spain has been the subject of increasing attention in academic, institutional and technical literature, especially since the COVID-19 pandemic, which accelerated the processes of digitalization of work and consolidated the rise of unconventional forms of employment, such as freelance work.

Several studies have analysed the expansion of digital work platforms ('gig economy') and their effects on the Spanish labour market. According to the Economic and Social Council (Consejo Económico y Social -CES-, 2021), work through digital

platforms already affects hundreds of thousands of people in the country, in sectors as varied as programming, graphic design, translation, content writing, digital marketing, online teaching, and multimedia publishing.

A report identifies Spain as one of the European countries with the highest penetration of digital work platforms (Eurofound, 2022). This phenomenon is not limited to delivery or transport platforms (Uber, Glovo) but includes a strong growth in platforms specialized in skilled work such as Upwork, Freelancer, Workana, Malt or Fiverr, where Spain has established itself as a provider of freelance services in the international context.

Spain has become one of the main hubs for online freelance work worldwide, according to a study by the employment platform JobLeads, which analyses data from the Online Work Observatory and the World Bank Group. With a market share of 6.98%, Spain occupies second place in the global ranking, behind only the United States, which accounts for 28.03% of the total. The report reveals a 39% growth in the presence of Spanish freelancers in the digital sphere between 2019 and 2024, a figure that reflects the growing attractiveness of freelance and remote work among the country's professionals (El Diario de Madrid, 2025).

According to The Freelancer Index 2023, France was the top-rated destination for freelancers, followed by Spain, Switzerland, Chile and Portugal. This ranking is compiled annually, considering factors such as cost of living, availability of coworking spaces, speed of internet connection, number of job opportunities per year, and the amount of freelance fees. However, the index does not incorporate the average salary, a key element for many freelancers when choosing a country to work in (Human Resources Observatory, 2024).

Rank	Country	Average price per freelancing job
1	Australia	\$594.56
2	India	\$501.00
3	Morocco	\$402.03
4	Saudi Arabia	\$401.64
5	Turkey	\$393.88
6	Nepal	\$382.50
7	Portugal	\$380.03
8	Serbia	\$347.07
9	United Kingdom	\$343.52
10	France	\$329.71
11	Ukraine	\$314.51
12	Canada	\$298.40
13	United Arab Emirates	\$285.52
14	Pakistan	\$284.17
15	China	\$273.97
16	Macedonia	\$262.75
17	United States	\$243.72
18	Vietnam	\$223.67
18	Italy	\$201.33
20	Spain	\$187.00

Table 7. Freelancing Job Prices by country.

Source: The Freelance Index (2023).

When this key variable is included, the picture changes considerably. A study conducted by Bookipi (Freelance Informer, 2024), an invoicing software company for freelancers, analysed the average revenue per project in 40 countries, using a global freelance platform as a basis. The research considered frequent services such as logo design, video editing or data entry, collecting minimum and maximum values per

assignment to calculate an overall average. Under this revenue-focused approach, Spain drops to 20th place, with an average of \$187 per completed project.

The literature on the platform economy in Spain reflects a panorama of growth, transformation and regulatory tension. While digital freelance work is consolidating as a professional alternative for qualified profiles, important challenges persist in terms of labour protection, collective representation, adequate taxation and institutional recognition. Empirical evidence also indicates that this phenomenon is even stronger among young people, female entrepreneurs and professionals seeking autonomous work in highly digitised sectors.

2.4.6 The cultural dimension of freelance work in Spain

The cultural dimension is key to understanding social attitudes towards selfemployment and towards freelance work. Collective norms, values and perceptions about risk, autonomy, innovation or work-life balance condition individuals' propensity to adopt unconventional forms of employment such as digital selfemployment. According to Hofstede Insights data, Spain shows a cultural profile characterised by:

- Power distance (57): this value indicates a moderate acceptance of hierarchy and power inequalities in society. While Spaniards respect hierarchical structures, they also expect a certain horizontality in labour relations. In the freelance field, this may translate into a critical attitude towards the rigidity of traditional organisations and a positive valuation of autonomy and self-organisation.
- Individualism (67): a high individualism score reflects a society oriented towards personal independence, where people are expected to make their own decisions and take responsibility for their success or failure. This cultural trait is highly compatible with entrepreneurship and freelancing, as it encourages individual initiative, self-management and the pursuit of personalised projects.
- Motivation towards achievement or success (42): Spain scores low on this dimension, which classifies it as a society oriented towards well-being and quality of life, rather than competitive success or extreme ambition. This may

favour the choice of freelance work as a way of achieving work-life balance, although it may also translate into less entrepreneurial aggression or risk aversion.

- Uncertainty avoiding (86): this is one of the highest values in the Spanish cultural profile, indicating a strong need for stability, security and clear rules. In employment contexts, it translates into a preference for formal contracts, established routines and protected jobs. This dimension may act as a brake on the adoption of freelance work, especially among people who perceive self-employment as unstable or precarious.
- Long-term orientation (47): Spain is at an intermediate level, suggesting a mix of
 orientation towards the past (traditional values) and openness to change. In the
 professional sphere, this allows for progressive acceptance of new forms of work,
 such as freelancing, especially if they are presented as sustainable over time and
 not merely cyclical.
- Indulgence (44): this score indicates a restrained tendency towards self-expression and immediate gratification. Societies with lower scores tend to regulate emotions more and prioritise duty over pleasure. At the work level, it may mean that work is seen more as an obligation than a source of self-fulfilment, which may temper enthusiasm for more flexible and vocational models such as freelancing.

Complementarily, Inglehart and Welzel's (2005) World Culture Map, based on the WVS (World Values Survey, 2023), places Spain in the secular-rational and self-expression zone. This indicates a society that values individual autonomy, tolerance, and civic participation while showing less reliance on religion and traditional authority structures.

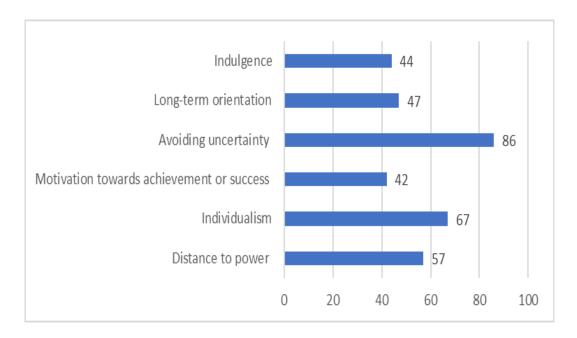


Figure 11. Hofstede's cultural dimensions.

Source: Hofstede Insights (2023).

This cultural profile suggests that Spain has undergone a transition from traditional values towards a more secular and rational orientation, while at the same time prioritizing quality of life and self-expression. These changes reflect processes of modernisation and human development, where existential security and individual freedom become central aspects of contemporary Spanish culture.

This cultural context favours the expansion of freelance work, as there is a greater acceptance of change, professional experimentation and unconventional working models. The growing orientation towards self-expression, especially among young people, coincides with a greater willingness to be self-employed, to seek flexibility and to prioritise work-life balance.

In addition, there is a generational shift in the perception of work. Recent studies on youth and employment (INJUVE, 2022) reflect an increase in the preference for flexible work models, teleworking, freedom of working hours and autonomous projects. This change coincides with increased digital literacy and a more widespread culture of entrepreneurship among the under-35 population.

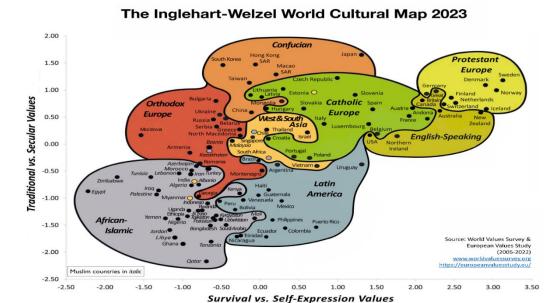


Figure 12. World cultural map.

Source: Inglehart & Welzel (2005).

While traditional traits that value stability and job security persist, values of autonomy, creativity and flexibility that favour the development of freelance work are also strongly emerging. These cultural changes are driven by access to technology, the globalisation of employment and the digital empowerment of new generations.

2.4.7 Regulatory and legal framework for freelancers in Spain

In Spain, freelance workers legally fall under the self-employed workers' regime. There is no specific category of "freelancer" in the labour legislation, so the most common figure to operate in the market is that of self-employed individuals, regulated by the Statute of Self-Employment Law (Law 20/2007, 2007).

To be self-employed in Spain, it is compulsory to (Agencia Tributaria, 2024):

- register with the Special Regime for Self-Employed Workers (RETA) of the Social Security,
- register with the Tax Agency using form 036,
- choose an appropriate IAE (Economic Activities Tax) epigraph for professional activity.

Since 2023, the contribution system for the self-employed is based on actual income. This means that the monthly contribution varies between approximately $\[\le \] 230$ and $\[\le \] 500$, depending on the declared income bracket (Ministerio de Inclusión, Seguridad Social y Migraciones, 2023). During the first year, the newly self-employed can benefit from a reduced flat rate of $\[\le \] 80$ /month, as a measure to encourage entrepreneurship.

In the field of taxation, the self-employed are subject to:

- IRPF (Personal Income Tax): it is applied under the direct estimation or module system,
- VAT (Value Added Tax): they must issue VAT invoices and submit quarterly returns.

In addition, there are compulsory tax forms such as form 130 (Personal Income Tax) and form 303 (VAT), which must be filed quarterly. Filing can be done electronically through the Tax Agency's Electronic Headquarters.

The self-employed are entitled to:

- public health care,
- temporary incapacity, maternity/paternity and retirement benefits,
- cessation of activity, equivalent to unemployment, if certain contribution requirements are met (previous 12 months).

However, many associations point out that coverage is still lower than for salaried workers and with a lower level of protection against economic or family contingencies.

In the context of work through digital platforms, Spain has been a pioneer in the specific regulation of dependent digital work with the well-known Rider Law (Ministerio de Trabajo y Economía Social, 2021). This law establishes a presumption of employment for those who work through platforms such as Glovo or Deliveroo, when it is determined that there is economic and organisational dependence.

However, this legislation mainly affects low value-added sectors (delivery, transport), and does not apply to qualified freelancers operating independently

through platforms such as Upwork or Fiverr. In this case, the freelancer is considered an ordinary self-employed worker.

There are several measures aimed at promoting self-employment:

- flat rate for new self-employed,
- programmes such as the Digital Kit (subsidies for digitalisation of the selfemployed and SMEs),
- mentoring and funding networks through ENISA, Chambers of Commerce and European programmes (Next Generation EU).

Progress is also being made in the digitalisation of the administration, allowing freelancers to carry out most procedures electronically using the permanent Cl@ve access system or digital certificate.

In the Spanish ecosystem, some associations represent and defend the interests of the freelance collective, such as:

- UATAE (Unión de Asociaciones de Trabajadores Autónomos y Emprendedores -Union of Associations of Self-Employed Workers and Entrepreneurs) (UATAE, 2023; UATAE, 2023),
- ATA (National Federation of Self-Employed Workers' Associations) (ATA, 2023),
- UPTA (Union of Professionals and Self-Employed Workers) (UPTA, 2023).

These entities promote legislative improvements, legal advice, training and support for entrepreneurship.

2.5 Country profile: Serbia

2.5.1 An economic environment in Serbia: Between solid dynamics and its uncertain sustainability

After a painful and prolonged period of transition reinforced by the challenging heritage of the 1990s and unfavourable external conditions (global financial crisis, European sovereign debt crisis, COVID-19 pandemic), the last decade is characterised by more market-oriented reforms and relatively good economic performance. However, many structural challenges are still present, testing the long-term sustainability of the Serbian development path. Main issues are related to institutional deficiencies hampering the development of a vibrant market environment and greater integration into regional (European) and international division of labour.

According to the World Bank classification (World Bank, 2025), Serbia is an upper-middle-income country, with a GDP per capita of over 13,500 US\$ (current). Its population size of 6.6 million makes it the biggest country in the Western Balkans. Together with the level of economic activity, it represents the largest market in this region.

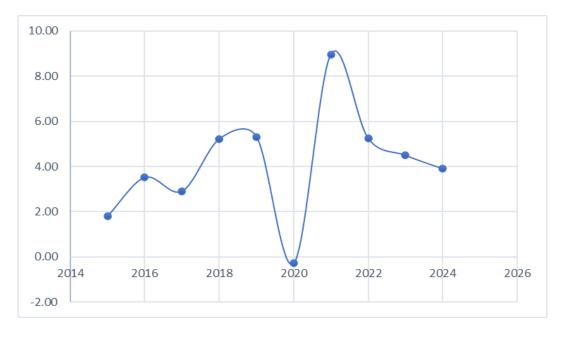


Figure 13. Decade of economic growth in Serbia (2015-2024).

Source: World Bank (n.d.).

Solid economic performance over the last decade, with the average economic growth of 4,1%, reflects relatively robust economic dynamics. It has been driven by private and public investments and consumption, making economic performance more sustainable and the Serbian economy more resilient. The foreign direct investments (FDI) are playing a significant role in the process of growth (Vukmirović, et al., 2021), attracted by exporting possibilities to other markets (Serbia has a free-trade agreement with China and a preferential status with Russia), good political relations with the country of FDI origin and a generous system of state subsidies (Beslać, Cogoljević, & Janjušić, 2023). While exposing Serbia to increasing dependency on unpredictable inflows of foreign capital (especially in times of uncertainty) and expansion of labour-intensive industries, they undoubtedly contributed to increased international competitiveness of the Serbian economy, enhancing technology transfer and increased employment (Ratkaj, Sibinović, & Manić, 2021). However, considerable challenges have arisen lately alongside the growth trajectory. Three of them are of pivotal importance and refer to uncertainty caused by international trade relations, large dependence on key European markets, foremost Germany and Italy, and social unrest and political instability caused by student protests. It led WB to revise downwards the projection of economic growth (compared to the figures in October 2024) for Serbia in 2025 by 0,7 percentage points to 3,5% (World Bank, 2025).

General macroeconomic conditions are additionally characterised by sticky inflation rates, which remained the most persistent in the Western Balkans region in 2024 (Rossi, Record, & Sidarenk, 2025) and which are over the National Bank of Serbia (NBS) target of 3%, still slowing down to 4,6%. The main drivers are growing wages, electricity/energy, and food prices (Народна Банка Србије, 2025). Wages increased in 2024 at a 14,2% nominal rate (9,2% in real terms), raising the costs of the labour force (World Bank, 2025). This is higher than it was the growth of nominal wages on the digital labour platforms in Serbia over the past year (Anđelković B. , Jakobi, Ivanović, Kalnić, & Radonjić, 2024). Still, after a very long period of stagnation of wages between 2008 and 2016 (Kosanović, Paunović, & Sergi, 2017), the pressure from the demand and supply side of the labour market increased, leading to relatively high increases in wages in the last years. However, although wage inequality is higher than it's the case for the average for the European region (World Health Organization,

2025), the Gini coefficient has been declining since 2016. This, indirectly, coupled with the strong growth of wages lately, suggests more availability of quality and well-paid alternatives on the conventional labour market.

Still, the most remarkable trends are related to the employment trends, where the unemployment rate was continuously falling in the previous decade, making the labour market tight. After a very costly and prolonged period of transition, where almost half of the previously state-owned enterprises disappeared in only half of the decade (Ivanovic *et al.*, 2019), the main driver of new jobs became the private sector. However, an additional factor causing the fall in the unemployment rate is a strong emigration flow toward advanced European countries, where between 30,000 and 50,000 people, mainly young and educated, leave Serbia every year (Rakić, 2024).

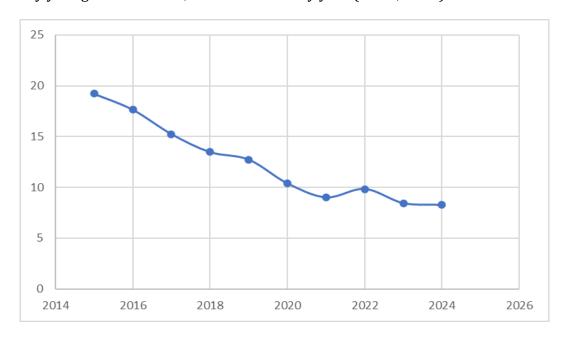


Figure 14. Unemployment rate in Serbia (2015-2024).

Source: World Bank (n.d.).

Not only that the unemployment rate experienced a continuous fall over the last decade, but more importantly robustness of the labour market is reaffirmed in constantly rising employment rates. Employment rates reached new highs at 51,4% in 2024, which was supported by stronger-than-expected growth performance (World Bank, 2025), and it was 1,1 percentage points higher than the previous year (Statistical Office of the Republic of Serbia, 2025). However, youth unemployment remains a prominent problem, where every fourth young individual (25,8%) between 15 and 24

is unemployed and it is considerably higher than the average rate in the EU. The young workers face not only higher unemployment, but also worse job opportunities on the labour market (Jandrić & Żakowska, Unemployment in Serbia: Characteristics and Challenges, 2022). Many of them are often accepting jobs with lower qualifications than they have (Pavlović, Bjelica, & Domazet, 2019). The main drivers of unemployment are related to skills mismatch in the market (World Bank, 2025). Additionally, unemployment is, independently of age group, higher for women than for men. The main single factor contributing to the closure of the gap between men and women in the labour market is education, i.e., differences between sexes decrease as the level of education increases (Jandrić & Molnar, 2017). An important qualitative dimension of the labour market in Serbia is a relatively high share of part-time workers in the overall worker population. They comprise 23,6% of the entire working population, which is considerably higher than the average in the EU (Bucevska & Kozheski, 2022). However, the main positive aspect is the direction and sometimes the intensity of improvements of the main labour market trends in Serbia.

The overall economic situation is pulling down the supply of the labour force available for freelancing. While robust economic growth created new job opportunities in the traditional labour market in Serbia, the rise in wages, coupled with a regime of de facto fixed exchange rates, made the Serbian freelance workforce less competitive over time (in terms of labour costs) on the global labour market. Still, a relatively high share of Serbian workers is engaged in different forms of part-time jobs – a characteristic that makes them more fit for freelance job opportunities. Contrarily, a continuous rise in wages, which is higher at the traditional labour market than at the digital labour market, additionally reallocates the workforce from freelancing toward traditional firms.

2.5.2 How innovative is Serbia? Country between (modest) progress and (even bigger) needs

Compared to the year before, Serbia has improved its position on the Global Innovation Index (GII), advancing by one spot to 52nd place globally (Dutta, Lanvin, & Rivera León, 2024). This advancement is characterised by Serbia's improved efficiency in converting innovation inputs into innovation outputs.

Serbia's position is completely aligned with its level of economic, technological, and social development. Its position is even better contextually observed. Namely, Serbia improved its standing by one place as well in the upper-middle-income country group. It ranks now 7th out of 34 economies. Moreover, only India (39th) and Vietnam (44th) among lower-middle-income countries outperform Serbia. Less impressive is its position in Europe, where Serbia ranks 31st out of 39 European countries, a modest improvement of one position. However, Serbia was one of only 9 countries in Europe to improve its position in the previous year. It is important to note that Europe remains home to 7 of the world's top 10 most innovative economies, and 15 of the top 25, making regional comparisons particularly competitive.

Key strengths of the Serbian innovation system identified in the latest WIPO report (2024) include:

- industrial diversification (11th place),
- export of ICT services (12th place),
- number of scientific and technical publications (13th place),
- export of cultural and creative services (14th place).

Over 7 pillars, the biggest challenges are improvements in the regulatory framework, i.e., advancement of the rule of law and greater stability in public policies that encourage entrepreneurship and business activity. However, apart from Hungary, no other country in the region has a more stimulating institutional framework. In the area of human capital and research, although Serbia improved its position (50th place globally), there is still considerable space for progress. A particular focus should be on internationalization of higher education and research institutions, significantly raising the quality of higher education/universities, and creating a framework that would encourage learning and R&D activities. The solid skills of Serbian students in writing, science, and mathematics are the main strengths in this domain (Ivanović V., 2024).

In terms of infrastructure, Serbia has, for the first time, entered the top 30 countries, making this segment the most developed. However, despite the high ranking, there are large differences within this domain. While the indicators for the use of ICT services and environmental sustainability are generally good, logistics remains an area that

needs improvement. Similarly, although we have many ISO certificates, energy consumption and the share of renewable energy use are still very low.

In the area of market sophistication, Serbia is best positioned – the industrial structure is highly diversified and resistant to external shocks. Still, there is a lack of data regarding the activities of VC funds and startup financing. The level of employment in knowledge-intensive services has increased over the past year, as well as the number of companies offering training for employees, and female participation. A notable improvement has been made in cluster development, with the index value rising by as much as 28%.

The obstacles remain the low level of R&D spending financed by companies and the need for greater collaboration between companies and research institutions. Technological and knowledge-based outputs are far below the average for the Serbian economy, especially in terms of knowledge creation and its absorption in the economy. However, its broader impact on the economy is missing, evident in the absence of unicorns and the very low spending by Serbian businesses on software solutions and broader usage in business processes.

Creative outputs are the domain where the greatest leap is seen – Serbia improved its position by 7 places. Furthermore, according to several indicators of individuals' and businesses' online activity, the position has significantly improved, as well as in the export of cultural and creative services. The biggest challenge is the low value of intangible assets, which, due to the long time required for their development, will likely remain a challenge even in the medium term.

2.5.3 Going beyond the innovation "ingredient": Human capital in more detail

Human capital in Serbia has undergone considerable changes over the past decade (Figure 15). While the human capital index (HCI) was continuously improving, reaching the average level of Western Europe in 2017, it has declined during the COVID-19 pandemic to the value of 0.68 (World Bank, 2024). Still, Serbia performs regionally better than all other countries in the neighbourhood, except Croatia, which has a bit higher value of HCI (0,71).

Within the country, one of the main characteristics is the presence of gender differences, where women perform better than men. While the HCI for men is following the same developmental trajectory as for women, the value of HCI for women is 0,7 and for men 0,66. However, as for other countries, since the HCI is a composite indicator and hence complex in structure, only after looking into more detail and all components, a more accurate and precise remark about gender equality may be given. Since girls have better biological and behavioural advantages over boys in health and survival, but there are important facets of human capital not covered by HCI, according to which women underperform compared to men, and that accumulated capital does not necessary get utilized (Daniel & Gatti, 2021), a true picture of gender equality has to be observed contextually, frequently disaggregated and in a range of features outside of those contained in HCI.

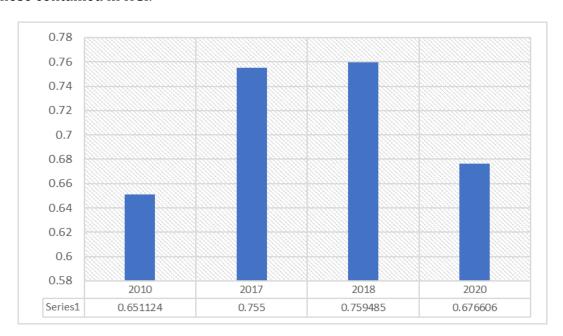


Figure 15. Human capital index (2010-2020).

Source: WIPO (2024).

For the medium to long-term development of the labour force, the group of indicators related to early childhood and school age are of primary importance. In this regard, Serbia over-performs compared to its region (Europe and Central Asia) when it comes to health, learning and psychosocial well-being, and minimum meal frequency, while the neonatal mortality rate is a bit higher than the regional average. Regarding the children of school age, Serbia performs better than the regional average in learning

poverty (9%), a similar regional position regarding the child mortality rate, and worse results for children engaged in child labour (9%). However, challenges remain in the domain of investments and the policy framework since Serbia invests only 3,3% of GDP in education, taking 94th place globally, as well as the school life expectancy, where it is positioned in 69th place globally (Ivanović V., 2024).

The indicators for youth and adults are enabling better insights into the state of the workforce and its capabilities to engage in freelancing. All the individual indicators for youth are like or close to the regional average values. While there is full literacy among youth (age 15-24), the improvements have been made in the adolescent fertility rate (decreasing over time) and the share of youth not in employment, education or training (share decreasing from 17% in 2018 to 12% in 2023). Indicators for adults (25+ years) are the most challenging, since women's participation on the labour market, life expectancy at birth, and adult unemployment rate are under the average values for the region. However, the changes over time are encouraging (except for the life expectancy at birth), since the female participation rate rose from 50% in 2018 to 54% in 2023, and the unemployment rate of adults fell from 11% in 2018 to 8% in 2023 (World Bank, 2024).

2.5.4 The state of digitalisation in Serbia: Lagging (the EU), but not too much and not always

Rapid technological change alters by equal peace the world of work and business practices. Businesses are impacted through better, more accurate and abundant information flows, creating opportunities to develop new products and services and stronger and strategically better-shaped relationships with customers. The world of work is exposed to even more disruptive changes, where 23% of jobs are going to be changed between 2023 and 2027 (World Economic Forum, 2023).

Comprehensive insights into the digitalisation processes require knowledge about the digital transformation, i.e., digital skills, technology uptake in businesses and egovernance infrastructures.¹⁵ When it comes to Serbia, it lags the EU average across

¹⁵ The data presented in the analysis in this section are based on the Eurostat database (Eurostat, 2024).

most of the indicators. However, differences are mainly modest, except when it is compared with advanced EU countries.

Only 33,61% of Serbian citizens have basic or overall basic digital skills. This is far away from the EU average of 56%. Moreover, only one EU member state has a lower value (Romania) and a few other non-EU countries (Türkiye, Bosnia and Herzegovina and Albania). Still, all the values are comparable to those of Serbia and quite remote from more advanced European countries. Contrary to this, when it comes to people employed in IT services, they comprise 4,3% of the employed labour force in Serbia, which is a value higher than in some advanced countries, like Slovenia and Iceland, and lower, but comparable with the EU average (5%). A bit more than a quarter (26,84%) of enterprises in Serbia are providing training and workshops for their employees to improve ICT skills, which is higher than the EU average (22%). This is in line with the flourishing IT sector in Serbia, which recorded two-digit growth over the last decade (Matijević & Šolaja, 2022).

Technology uptake in businesses, measured by different indicators encompassing how many different technologies (of 12 observed) are in use in enterprises, points to a relatively low level of digitalization. Only 16 of every 100 enterprises use 7 or more digital technologies (high and very high levels of digitalization), while more than half (50,3%) of the enterprises have a basic level of digital intensity (more than 4 digital technologies in use). Although there is a gap compared with the average for the EU (58,3%), Serbia is not falling behind largely. The situation is much better in large enterprises (that have 250+ employees) where more than ¾ of them have at least basic digital skills. Regarding the use of cloud services, Serbia (37% of enterprises using those services) lags the EU average (45,32%). Still, the extent of digitalisation is impressive, since in only a year share of those enterprises increased by 8,11 percentage points. Use of AI technology experienced high growth from 1,82% to 6,95%, indicating a quite fast pace of diffusion in business practices.

29,62% of citizens in Serbia use E-governance services. This is more than the values in most other non-EU countries and even than some EU countries, but the values are remote from the EU average (47,01%). The main reason for the relatively low level of utilisation (despite a very developed system of E-governance) consists in fact that

many citizens are not sufficiently informed about the ways and purposes for which the portal can be used (Bošković & Marjanović, 2024).

People in Serbia go online for various purposes, but the most intensive use of the internet is for communication and finding information, except for health services. For example, 79,02% of people are using the internet to find information about goods and services, more than 80% are participating in social media, and more than 90% are using instant messaging. Those figures correspond to average values for the EU, in some domains are even higher, while the most underused digital services refer to digital banking. Only 41,18% of citizens are using these services. Use of the Internet for commercial purposes, i.e., for purchasing goods and services, is especially prevalent within the younger population (87,62% bought something online), while for the whole population the percentage is 65,04.

Although Serbian enterprises are lagging in the use of social media and online communication tools compared with the average for the EU, the differences are not pronounced. Social media is used by 53,89% of enterprises, while large enterprises are using it considerably more frequently (70,54%). Use of the Internet for holding remote meetings is less spread, since only 43,24% have experience with it. Commercial services are the strength for Serbian enterprises, since 30,25% of them used the Internet to sell services and goods, which is almost 7 percentage points higher than the average of the EU.

2.5.5 Are the Serbian values aligned with a freelancer's career path? Looking into Hofstede's model

To measure different national cultural characteristics, Hofstede (2015) developed a model of national culture, based on six dimensions (initially developed model had four dimensions): Power Distance, Individualism, Motivation towards Achievement and Success, Uncertainty Avoidance, Long Term Orientation, and Indulgence. The values for these dimensions for each country are regularly measured and updated, and the latest values for Serbia are presented in Figure 16 (Country Comparison tool, 2025).

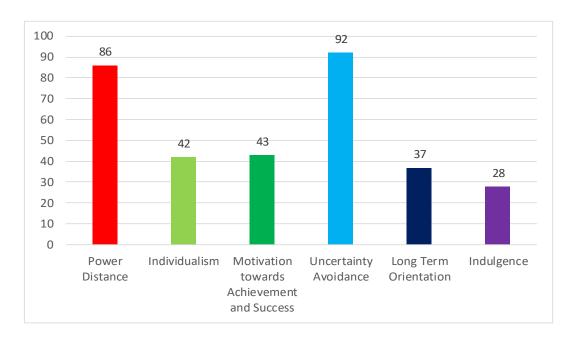


Figure 16. Hofstede's cultural dimensions for Serbia.

Source: Hofstede Insights (2025).

Serbia, with a score of 86, is quite high on the Power Distance dimension. It reflects preferences toward a hierarchical order in which everybody has a place without asking for any special justification. Such an order tends to be more authoritarian and has a high concentration of power (Janicijevic & Marinkovic, 2015). At the same time, in those orders individuals are less inclined to be autonomous and ready to negotiate with a less hierarchical and procedural approach to bureaucracy (Khan M., Panditharathna, Hossain, & Bamber, 2022). This characteristic works as an impediment to risk-taking and the resulting entrepreneurship activities. As such could be observed as an obstacle for freelancing.

Several studies confirmed a positive correlation between entrepreneurship and Hofstede's measure of Individualism (Jourdan & Smith, 2021). With a score of 42, Serbia is generally considered a relatively collectivistic society. However, it has gradually been transforming over time into an individualistic one, since the previous score of this dimension was 25. In this regard, the cultural environment in Serbia is more stimulating for entrepreneurial activities, i.e., the development of freelancing. As a relatively consensus-oriented society, with the score for different types of Motivation towards Achievement and Success of 43 (instead of "wanting to be best"), entrepreneurial activities and freelancing development in Serbia are under an

additional impediment, since individuals in those societies are less driven by competition, achievement, and success. Maybe even more important obstacle is Uncertainty Avoidance, since individuals in Serbia dominantly feel threatened by new or unknown situations (value of index is 92), which leads to avoidance of any high-risk activities, including freelancing.

Regarding Long-Term Orientation, Serbia, with a score of 37 on this dimension, belongs to a class of normative cultures. These cultures show great respect for traditions and a relatively small propensity to save for the future. All the necessary ingredients for success, such as a pragmatic approach, adaptation readiness, and practical problem solving, are on a low scale in Serbia, which additionally puts pressure on entrepreneurial activities. Maybe the most restrictive impact comes from the Indulgence dimension, since the score is very low (28). It means that the people tend to control their desires and impulses which mostly classifies Serbia as a country within the group of restrained nations, which hurts entrepreneurship development.

2.5.6 Regulatory framework for freelancing in Serbia

The regulatory framework for freelancers in Serbia has been adopted from other legal systems and implemented with certain specificities. The way freelancers work, and their legal status, support the thesis that labour is becoming increasingly flexible. It means that work is more often performed in forms that do not involve a formal employment relationship.

Before the adoption of regulations that primarily govern the tax treatment of freelancers, the relationship between freelancers and clients in the Republic of Serbia was a classic obligation-based relationship with almost complete freedom of contract. However, since the untaxed income of freelancers posed a problem for the state, new legal norms have been introduced to regulate their tax status. These aim not only to ensure their taxation but also to integrate them into the pension, disability, and health insurance systems.

Considering the current legal framework in the Republic of Serbia, freelancers may perform work based on non-employment contracts or as entrepreneurs. When not under an employment relationship, freelancers may work based on a contract for temporary and occasional jobs, a contract for supplemental work, or a service contract. These contracts apply when the client is based in Serbia. If the client is based abroad, the freelancer would also operate under a non-employment contract, but the name and structure of that contract would depend on the laws of the country in which the client is located.

For freelancers who have the status of entrepreneurs, the situation is somewhat simpler. Depending on the type of work they perform, they may be subject to lump-sum taxation (flat-rate taxation), and if their annual income does not exceed 6,000,000 RSD (approximately 50,848 EUR), they are not required to keep business records. If their turnover exceeds this amount, freelancers—as well as other entrepreneurs—must keep business records, and if it goes over 8,000,000 RSD (around 67,797 EUR), they are also obliged to pay value-added tax (VAT) of 20% on the amount paid by the client for services rendered or work performed.

A freelancer may be taxed on a lump-sum basis provided they meet the independence test. If the freelancer does not meet the criteria set by the independence test, as prescribed in Article 85, paragraph 1, point 17) of the Personal Income Tax Law, their income will be taxed as "other income", which is less favourable for them. If the freelancer who is registered as an entrepreneur meets at least five of the nine listed criteria—or if it was reasonably foreseeable that they would meet at least five when entering into a business relationship, and they subsequently did so—then the compensation received from the client will be taxed as "other income", and the freelancer will not be eligible for lump-sum taxation.

As for health insurance coverage for family members of a freelancer who is an entrepreneur, they are entitled to such insurance under Article 18 of the Health Insurance Act.

The Law on Pension and Disability Insurance (34/2003....94/24) in Article 12, paragraph 1, point 3a, stipulates that persons engaged in independent activities and those working in the territory of the Republic of Serbia for a foreign employer who does not have registered entrepreneurship in Serbia, and who receive compensation for their work but are not insured under any other basis, are considered insured

persons. This regulation does not explicitly define freelancers, but it is implied that it pertains to them.

For freelancers, the insurance period is determined proportionally based on the contracted compensation, on which tax is paid in accordance with the Law on Income Tax of Citizens. The amount of the agreed compensation is divided by the minimum contribution base applicable at the time of the contribution payment, which in 2025 is 45,950 dinars (approximately 423 euros). Therefore, the agreed compensation earned by the freelancer is divided by the valid minimum contribution base, and based on this proportion, the number of days or months of the insured period is determined.

Regarding the tax status of freelancers, the Law on Amendments to the Law on Income Tax of Citizens (138/22) regulates freelancers' self-taxation. This regulation does not define the term freelancer but prescribes the obligation of self-taxation, the modalities of self-taxation, and the method of fulfilling the tax obligation.

The Law on Income Tax of Citizens contains provisions regulating:

- the obligation of self-taxation for freelancers Article 100a, paragraph 1, point 2,
 subpoint (1) and paragraph 2 of the Law on Income Tax of Citizens,
- the standardised costs in dinar amounts that freelancers are entitled to Article
 12b, paragraphs 1 and 2 of the Law on Income Tax of Citizens,
- the method (modalities) of self-taxation for freelancers Article 55, paragraph 2;
 Article 56, paragraph 2; Article 58, paragraph 2; Article 85, paragraph 5, point 2);
 Article 86, paragraph 2, point 2);
 Article 95, paragraph 7;
 Article 100a, paragraphs 7. and 8. of the Law on Income Tax of Citizens.

Additionally, with the amendments to the Law on Contributions for Mandatory Social Insurance (84/2004–8/2025), Article 28. stipulates the basis on which contributions are paid for mandatory pension and disability, and health insurance.

Regarding the taxation of freelancers, there are two ways they can be taxed. According to the first, freelancers have a non-taxable amount of 107,738 dinars (approximately 913 euros) quarterly (or 35,912 dinars monthly, which is about 304 euros), meaning freelancers earning less than this amount do not pay tax, and therefore do not pay contributions for pension and disability insurance. With the first payment

for health insurance, freelancers will be insured for the next six months, with the possibility of registering their family members (spouse, children). Those who earn more than 35,912 dinars monthly will be obligated to pay pension and disability insurance contributions of 24% and health insurance contributions of 10.3%. Since the income earned by a Serbian citizen and resident from a foreign legal entity not registered in Serbia, based on their work within Serbia, is treated as other income under Article 85 of the Law on Income Tax of Citizens (24/2001–19/2025), the tax on income is 20%.

According to the second model, income tax is paid at 10%, the non-taxable amount is 21,659.66 dinars (183.5 euros) per month (or 64,979 dinars, approximately 550 euros quarterly), while standardized costs are 34%. The pension and disability insurance contribution rates and health insurance contributions are the same as in the first model.

For those for whom online work is an additional job and income source, no health insurance contributions are paid, and when the income from this activity is reported, the right to unemployment insurance is lost. Given that freelancers have the option to choose one of the two models based on their quarterly income, a mandatory minimum amount for health insurance contributions has been introduced. This means that freelancers, as well as their insured family members, will have health insurance even in a quarter where no income is generated. As for pension and disability insurance contributions, they are always paid because this increases the pension base, and these funds finance the current pension beneficiaries.

2.5.7 Implications of economic and other societal conditions for freelancing in Serbia

The current and future development of freelancing in Serbia is under the influence of the whole social, economic and technological environment. Moreover, the freelancing landscape is shaped by numerous factors coming from the international milieu. Both domestic and international conditions exert a stimulative or inhibiting impact, which makes predictions about future dynamics on the freelancer market highly unpredictable. However, there are several implications of the broad societal,

economic and technological environment that frame the current state of the freelancer market development in Serbia. They are following:

- Overall economic conditions reflected through solid economic performance and shortages of workforce, especially in the last few years, have slowed down the unprecedented rise of freelancing in Serbia during the COVID-19 pandemic and two years afterwards. Tight situation on the traditional labour market and relatively strong emigration flows of highly educated people will continue to restrict the growth of the supply of the freelancer workforce. If inflation continues and the rise of wages on the domestic market stays stronger than the rise of wages on the global online labour market(s), the freelancer career will be increasingly less attractive for the young, educated people in Serbia, since they comprise the dominant share of freelancers' workforce. Further, stronger demand for qualified workers, followed by greater equality in wage distribution, works restrictively on the labour supply on digital labour markets and the attractiveness of a freelancer career.
- Continuous improvements in the innovation ecosystem have an ambiguous impact on the freelancer workforce. On one side, creating additional demand for a qualified workforce, innovative firms are reducing the supply of independent workers. On the other side, since technological firms, startups and especially those in the ICT sector that often have project-based business models, are more prone to use flexible work arrangements in everyday business activities, creating additional demand for freelancer services.
- There is a relatively low gap in human capital development in Serbia compared with the advanced European countries. In this regard, this domain could be observed as favourable for freelancing development in Serbia. The biggest challenge emerges in youth employment, since the number of young people outside of employment, training and education has risen lately. It restricts the availability of the workforce with adequate (and accurate) skills that can successfully compete for jobs on a global level. Contrary, the rise of women's participation rates in the labour market creates an additional reservoir of labour force in the future capable of integrating into the global labour market.

- Modest overall falling behind the EU average values in the domain of digitalisation confirms that the current stock of digitalisation skills and business practices is not widely restrictive for the development of freelancing. However, the consequences of different aspects of digitalisation are present. For example, the low level of citizens with basic and over-basic digital skills impedes the development of freelancing, while a relatively high share of firms in the ICT sector offer training for their employees, generating medium to long-term prerequisites for an increased number of freelancers, especially in the software development occupation. Additionally, growing usage of AI in Serbian enterprises creates a workforce more capable of working as freelancers.
- All cultural dimensions exert pressure on entrepreneurship development and consequently on the development of freelancing in Serbia. The only dimension which has been transforming in a way to make the domestic environment more entrepreneurial is the measure of individualism. The difference between freelancing and cultural dimensions could be explained by the broader economic and business environment, in a way that freelancing offers generous monetary and non-monetary incentives to individuals that are much higher than cultural obstacles to choosing a career as a freelancer.
- A relatively comprehensive regulatory framework is a rather stimulating feature for freelance development. It offers them, depending on their work choice in freelancing (full-time or part-time/supplementary work), to choose between different options, keeping one that maximises monetary rewards for them. Still, there are some ambiguities to be resolved. The possibility of finding an appropriate upgrade in the regulatory framework relies, to a great extent, on synchronising with the new European directive on platform work.

2.5.8 Key insights about the Serbian freelance workforce: Brief literature review reflection

Serbia belongs to the group of countries with a very vibrant workforce. While the share of the Serbian population in the world population is only 0,081% (Worldometer, 2025), the share of freelancers from Serbia in the global workforce for the past seven

years was 1,16% (Stephany, Kässi, Rani, & Lehdonvirta, 2021). Since it's a phenomenon rapidly evolving, it has attracted a lot of attention from researchers and policymakers. Besides a growing number of publications on this subject, the Serbian government developed various mechanisms and a comprehensive regulatory framework to support the growing importance of the freelancer workforce in Serbia. According to estimations made by Anđelković, Čolović & Jakobi (2021), the number of freelancers is around 74,000, which makes 2,46% of active labour force in Serbia.

The professional structure of the freelancer market in Serbia is characterized by the dominance of workers in the creative and multimedia occupations, followed by workers in software development. They comprise almost 2/3 of the entire population of workers (Anđelković B., Jakobi, Ivanović, Kalnić, & Radonjić, 2024), and in a regional perspective, there is especially strong specialisation in services related to applied industrial design (Ivanović, et al., 2023).

Regarding demography, a "typical" digital worker is between 25 and 29 years old, living in an urban area, who started working on the platform while searching for an additional source of income (Anđelković, Šapić, & Skočajčić, 2019). Compared with other countries in the Western Balkan region, they are more satisfied with their work and have psychologically adopted the best for working from home (Radulović, Todorović, Radović-Marković, Petrušić, & Dragojević, 2023). The main drivers for people to engage in freelancing in Serbia consist of monetary incentives, flexibility and freedom, adaptability and the possibility to work part-time (Markovic, Vujicic, Nikitovic, & Milojevic, 2021).

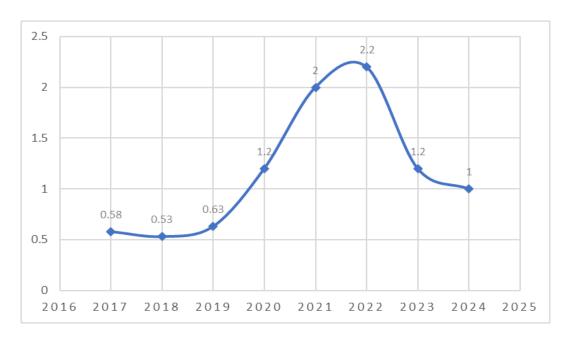


Figure 17. Serbian platform workers (% of world population). Source: Stephany et al. (2021).

One of the obvious motives for engaging in freelancing in Serbia is monetary incentive. The average hourly rate for freelancers in Serbia is 23,7 US\$. Maybe the more important is the change over time. Namely, wages of Serbian workers have been continuously rising in the last 2 years. The most paid professions are software development and professional services (more than 25 US\$ on average), while the least paid are the workers in the clerical and data entry domain, on average 12,8 US\$ per hour (Anđelković B. , Jakobi, Ivanović, Kalnić, & Radonjić, 2024). If we assume that someone worked full-time as a freelancer (176 hours per month) and has an average wage for digital workers per hour (23,73 US\$), they would earn a gross monthly salary of 4,176 US\$. This is considerably higher than the average gross salary in the traditional labour market, which was 1,385 US\$ (Statistical Office of the Republic of Serbia, 2025).

Gender equality is another important topic related to freelancing in Serbia. Participation rates are lower than in the traditional labour market, since women comprise approximately 33,1% of the gig workforce (Anđelković B. , Jakobi, Ivanović, Kalnić, & Radonjić, 2024). Despite present inequality, the participation in the digital labour market is much higher than in many other developing countries as well as advanced market economies, except the USA (Payoneer, 2023). Besides inequalities in participation, there are inequalities related to earnings. Although women earn on

average 81,34% of the hourly wage of men, the differences vary widely across different occupations. Moreover, there is "regularity" in this regard. Women have even a slightly higher hourly wage than men, but in the least paid professions: clerical and data entry services and writing and translation. Contrary, the largest difference emerges in the most paid profession – software development, where the hourly wage is 9,37 US\$ higher for men than for women (Anđelković B. , Jakobi, Ivanović, Kalnić, & Radonjić, 2024).

While Serbia has a highly dynamic workforce of freelancers, the main structural dimensions reveal a rather mixed picture of the freelancer market in Serbia. Observed in relation to most of the countries in the world, they are mainly positive. However, compared with the "ideal values", especially regarding the different inequality measures, there is a lot to be improved. And since it is about a relatively new and multidisciplinary topic, many important aspects remain undiscovered yet, particularly those related to the determinants of success on the digital labour platforms.

2.6 Country profile: Ukraine

2.6.1 Economic indicators

Freelancing in Ukraine should be analysed by considering two crucial aspects: the ongoing active phase of military conflict resulting from the full-scale Russian invasion and the broader, overarching trajectory of freelancing development in the country. This trajectory had already established itself significantly before the onset of the war and is expected to persist and evolve further following the eventual cessation of hostilities. Adopting this dual perspective will enable a more comprehensive, nuanced, and future-oriented overview of Ukraine's freelance sector, effectively integrating immediate wartime realities with long-term economic and societal trends (DLF Attorneys-at-law, 2022).

Several notable indicators can characterise the economic context in Ukraine. According to data provided by the International Monetary Fund (IMF), the Gross Domestic Product (GDP) per capita in Ukraine, measured at current prices, stands at approximately \$5,500 (International Monetary Fund, 2025).

Additionally, education indicators, particularly tertiary school enrolment rates, highlight a relatively high level of educational attainment, with a gross enrolment rate of 76% recorded in 2021, according to statistics published by the World Bank (The World Bank Group, 2025).

Since the commencement of the full-scale conflict, official unemployment data from the State Statistics Service of Ukraine has ceased to be published, creating challenges in assessing the precise employment landscape. However, independent estimates from the Info Sapiens research agency provide valuable insights, indicating a decrease in the unemployment rate to 12.1% as of March 2025, representing the lowest recorded level since the onset of active military operations (Samoiliuk, 2025).

Historically, inflation in Ukraine typically remained within a 10% annual threshold during the pre-war period. However, inflation rates have slightly escalated amidst the war, ranging from approximately 10% to 13%. Additionally, the exchange rates of the Ukrainian Hryvnia have displayed significant volatility over the past two decades, consistently depreciating relative to major stable international currencies. The

predominant currencies serving as benchmarks for Ukrainians are the US Dollar and the Euro, exhibiting a notable upward trend in preference and influence.

Such unstable exchange rates and persistent and significant inflation pressures serve as powerful motivators for Ukrainians seeking income opportunities denominated in more stable foreign currencies. Consequently, freelancing, particularly with international clients paying in stable currencies such as the US Dollar or Euro, emerges as an increasingly attractive and viable economic option for the population.

2.6.2 Innovation indicators

Global Innovation Index 2024 provides valuable insight into the factors of innovation and developments that ground Ukrainian potential to form an influential and qualitative freelancing proposition for the world. Based on the Global Innovation Index (GII) 2024, Ukraine ranks 60th among 133 economies, reflecting a diverse innovation landscape with both strengths and areas for improvement. A detailed analysis of the seven GII pillars provides insights into Ukraine's potential as a hub for successful freelancers.

In the Institutions pillar, Ukraine holds the 107th position. This suggests challenges in political stability, regulatory quality, and the rule of law. This might be partially due to the current war challenges in Ukraine. This is why Ukraine can potentially improve this factor after the war ends. A stable institutional environment is crucial for freelancers for contract enforcement and business reliability. Enhancing institutional capabilities can build trust and attract more freelance opportunities.

The Human Capital and Research pillar ranks Ukraine 54th, indicating a well-educated workforce with a significant number of graduates in science and engineering fields. This educational foundation equips Ukrainian freelancers with the skills necessary for complex projects, particularly in IT and technical domains. Continued investment in education and research will further enhance this advantage.

Regarding Infrastructure, Ukraine ranks 82nd, reflecting communication, transport, and energy system limitations. Freelancers may face challenges such as inconsistent internet connectivity and logistical issues. Improving infrastructure is

essential to support remote work and ensure reliable service delivery. At the same time, digital infrastructure in Ukraine is relatively strong and is being significantly enhanced, answering the war-related challenges. After the war, Ukraine can have one of the most resilient digital infrastructures in the world.

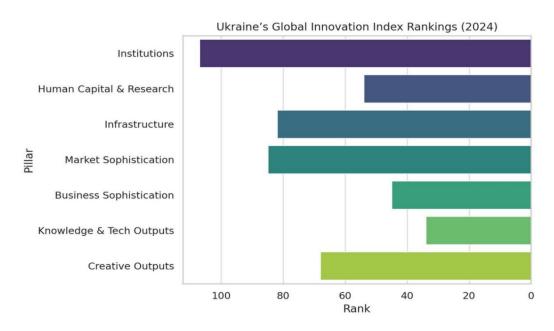


Figure 18. Ukraine's global innovation index rankings in 2024. Source: WIPO (2024).

The Market Sophication pillar places Ukraine at 85th, suggesting difficulties accessing credit, investment, and trade. Freelancers may find it challenging to secure financing and integrate into global markets. Enhancing financial systems and reducing market entry barriers can empower freelancers to expand their services internationally. Looking at the structure of Ukrainian freelancing by profession, we may suggest that these factors have a minor influence on the country's freelancing potential.

Ukraine performs better in Business Sophistication, ranking 45th. This indicates a conducive environment for knowledge workers and innovation linkages. Freelancers can benefit from a culture that supports business development and collaboration, leading to increased networking opportunities.

In Knowledge and Technology Outputs, Ukraine excels with a 34th place ranking, demonstrating strong capabilities in producing and exporting knowledge-intensive

goods and services. This translates to a reputation for delivering high-quality, techdriven solutions, attracting clients seeking specialized expertise. Despite the negative reasons, the war will advance the knowledge and abilities of Ukrainians in the set of drone-, "war-AI-" and electronic warfare-related areas. This knowledge and these skills will be in demand worldwide in the following decades.

Lastly, Ukraine is ranked 68th in the Creative Outputs pillar, reflecting potential in areas like design, media, and content creation. Investing in creative industries and supporting artistic education can diversify freelance opportunities beyond technical fields.

In summary, Ukraine's GII 2024 profile reveals a nation with a strong foundation in human capital and technological outputs, essential for a thriving freelance sector. Addressing challenges in institutional quality, infrastructure, and market sophistication will further enhance Ukraine's attractiveness as a global freelancing hub (World Intellectual Property Organization, 2024).

2.6.3 Human capital development

The World Bank's Human Capital Index for Ukraine was 0.63 in 2020, meaning a child born in Ukraine can expect to achieve only 63% of their potential productivity under universal education and health conditions (World Bank, 2025).

This reflects gaps in education quality and outcomes despite high enrolment rates. Ukraine historically boasts one of the highest tertiary education enrolment rates in the world with, for example, gross enrolment rate around 83% in 2014 (Friedman & Trines, 2019), indicating a strong tradition of higher education. However, the past five years have seen human capital development tested by skills mismatches, outmigration, and, most recently, the disruptions of COVID-19 and war. International assessments and Ukrainian studies point to a need to improve the relevance of education and skills for the modern labour market. Over the recent years, Ukraine's government and partners have focused on reforms in education and skills training, while the population has increasingly turned to digital learning and freelancing as avenues for development.

Ukraine's tertiary education enrolment remains high in gross terms, but the number of students has declined. Demographic decline, fewer youth, and student outmigration have led to a drop in higher education enrolments. Early data suggest the full-scale invasion in 2022 further accelerated this outflow, as thousands of students and academics were displaced. Despite these challenges, tertiary enrolment in Ukraine is still relatively high by international standards - a testament to the cultural value placed on higher education. The other factor is the quality and focus of the Ukrainian higher education. Challenges are in the spectrum of professions offered by higher education institutions and the relevance of the outcome to the present international socio-economic environment. Over the past five years, Ukraine has been working to improve higher education quality and governance, often with international support. In 2021, the World Bank approved a \$200 million Improving Higher Education for Results project to support Ukraine's universities in boosting labour-market relevance and fiscal efficiency (International Bank for Reconstruction and Development, 2021). This has included initiatives like modernizing curricula, introducing performance-based funding, and strengthening university-industry linkages. The war since 2022 has created new setbacks by damaging infrastructure (over 500 educational institutions have been damaged or destroyed, according to government data) and interrupting studies. However, reconstruction plans emphasize education as a pillar of recovery.

Digital literacy has become a cornerstone of human capital development in Ukraine, especially relevant for freelancing and remote work. National initiatives have yielded measurable progress. According to the Ministry of Digital Transformation, the share of Ukrainians with at least basic digital skills jumped from roughly 47% in 2019 to about 60% in 2023 despite the disruptions of war (Міністерство цифрової трансформації України, 2023). 93% of adults (18–70) now have at least some digital skills – only 7% lack any digital literacy – indicating that most of the population can use digital devices at a basic level—the government's Diia. The Digital Education platform, launched in 2020, has attracted over 2.3 million users for online courses, contributing to this improvement in digital competence.

Notably, the war acted as a catalyst for digital skill uptake: the full-scale invasion in 2022 forced schools, universities, and businesses to operate online, and 56% of

Ukrainians surveyed in 2023 reported positive improvements in their digital literacy during the war period. This rapid digitalization during 2019–2024 has strengthened the foundation for Ukraine's gig economy, as a digitally literate workforce is better positioned to participate in freelance platforms and remote jobs. Language proficiency, especially English, is a key skill for freelancing, given that many Ukrainian freelancers serve international clients. Ukraine's English proficiency is moderate and gradually improving. In the EF English Proficiency Index, Ukraine ranked 40th out of 116 countries in 2024 with a score of 535 (classified as "moderate proficiency") (Signum International AG, 2024). Ukraine had improved its position from 45th in 2023. This upward trend suggests that younger Ukrainians are particularly attaining better English skills than prior generations - a positive sign for integration into global freelance markets. English has essentially become the dominant second language among Ukrainians under 40. The government has acknowledged the importance of English for Ukraine's economic future; plans are underway to strengthen English instruction in schools and even grant English a special status as a language of business. Overall, digital and language skills have seen notable improvements in the last five years - Ukraine's population is more connected and English-capable than before, bolstering the country's human capital for remote work opportunities.

Technical and vocational education and training (TVET) is another vital component of human capital, especially for developing practical skills and freelance trades. In Ukraine, vocational education is significant in the secondary education system. About one-third of upper-secondary students in Ukraine were enrolled in vocational programs as of 2020, highlighting the scale of VET in the country (OECD, 2022). The challenges here are: vocational education in Ukraine still suffers from uneven quality and social perception issues – university education is often seen as more prestigious, leading much capable youth to bypass VET.

At the same time, OECD analyses note that Ukrainians are comparatively straightforward by age 15 about their career ambitions and that many popular occupations (such as skilled trades, IT technicians, and designers) can be entered through vocational training. In freelancing, many technical and craft skills obtained via VET (e.g. graphic design, IT networking, artisan skills) can enable graduates to become

self-employed or offer services online. Beyond formal education, Ukraine's human capital development has been significantly influenced by the rise of entrepreneurship and freelancing. Over the past five years, Ukraine has emerged as one of the global hotspots for freelance talent, particularly in IT, creative industries, and digital services. International gig economy data shows Ukraine's freelance sector growth has been remarkable: for example, freelance earnings from Ukraine grew 36% year-on-year in one global ranking, placing Ukraine among the top 5 countries for fastest-growing freelance income (Gilchrist, 2021). Even before the COVID-19 pandemic, online freelancing was on the rise - cross-border payment transactions to Ukrainian freelancers jumped 50% between 2017 and 2019 according to Payoneer data. A combination of factors drove this trend: a highly educated yet underemployed workforce (many skilled people seeking additional income or unable to find suitable local jobs), comparatively lower labour costs attracting foreign clients, and improving digital infrastructure and payment systems in Ukraine. Freelancing platforms also became accessible as English skills improved. By 2020, estimated 70%+ of Ukrainian online freelancers were working via global platforms like Upwork and Fiverr, primarily serving international clients in English (European Training Foundation, 2021). This indicates that a large share of Ukrainians engaged in freelance work had the necessary language and digital competencies to compete globally.

The freelance talent pool in Ukraine skews toward technical and creative fields (Semencha, Kuriacha i Hordieieva-Herasymova, 2024). According to the Online Labour Index and other surveys, software development and technology services are the most provided freelance services by Ukrainians, followed by creative/design work as the second-most common category (European Training Foundation, 2021). This aligns with Ukraine's strong base of IT education and the prominence of its tech sector. Additionally, many Ukrainians freelance in translation, digital marketing, multimedia production, and administrative support.

The past five years saw a proliferation of IT courses, coding boot camps, and online certificates (often delivered by private IT academies or via platforms like Coursera) to meet the demand for digital skills – effectively a parallel education track oriented toward freelancing and exportable skills. Language proficiency and self-management

skills have also become part of the essential competency set for freelancers. Many young professionals in Ukraine have proactively improved their English and client communication abilities, recognizing that freelancing success requires more than technical know-how. Surveys of Ukrainian platform workers found motivations, including difficulty finding regular employment, desire for remote work flexibility, and higher earnings than domestic jobs could offer. Thus, a culture of entrepreneurial self-reliance has been growing.

On a broader level, Ukraine has moved to cultivate entrepreneurship as a driver of human capital utilization. In 2019, the government launched the Ukrainian Startup Fund, a state-backed seed fund providing grants to tech innovators, which by 2021 had funded hundreds of startup teams with mentoring and financing. The size of the grants is between \$25,000 and \$50,000 for early-stage startups (Ukrainian Startup Fund, 2023). Such initiatives help foster an ecosystem where young people can develop business ideas and innovative projects - skills that overlap with freelance competencies like creativity, problem-solving, and project management. Likewise, entrepreneurship training programs and competitions have become more common in universities and even secondary schools (for instance, business plan contests or innovation clubs, sometimes supported by Western donors). The result is a new generation increasingly exposed to entrepreneurial thinking. While small and medium enterprises (SMEs) in Ukraine still face obstacles (e.g. complex regulations, limited access to finance), the mindset shift is evident - a 2023 OECD survey on youth found a rising share of Ukrainian youth expressing interest in starting their own business or working independently as a career path. The war has somehow reinforced this trend: with economic disruption, many Ukrainians have had to adapt by freelancing or launching micro-businesses, whether as IT contractors abroad or as local entrepreneurs addressing wartime needs (such as manufacturers pivoting to produce goods for defence or reconstruction).

Freelancers have also demonstrated resilience – after an initial shock in early 2022, about 96–98% of Ukrainian freelancers were back online and working by April 2022, and demand for their services grew by \sim 30% in mid-2022 compared to the prior year

as businesses (domestic and foreign) turned to flexible talent during the crisis (Ukraine Media Group LLC, 2022).

Over the past five years, Ukraine's human capital development has been a story of high educational attainment tempered by structural challenges and dynamic skill adaptation in the face of adversity. On one hand, the country maintains a highly educated populace (with tertiary enrolment rates among the highest globally) and has undertaken reforms to improve education quality. However, issues such as mismatched skills, declining enrolments, and brain drain have persisted, limiting the payoff of formal education. On the other hand, Ukraine has seen a remarkable rise in digital competencies and freelance-oriented skills - a trend accelerated by the dual shocks of the pandemic and war. Investments in digital literacy and the population's resilience have enabled millions of Ukrainians to acquire the skills needed to work remotely or start their ventures. International assessments (World Bank, OECD) acknowledge Ukraine's relatively strong human capital base but call for continued modernization of higher education and training systems to meet labour market demands. National studies echo that sentiment while highlighting the innovative responses of Ukrainians, from online learning to entrepreneurial initiatives, which are bridging some of the gaps in the formal system. As of 2024, Ukraine's human capital profile is mixed: tertiary education is widespread but needs to better align with market needs, technical and vocational training is being revitalized, and the workforce is increasingly tech-savvy, multilingual, and entrepreneurial. Going forward, sustaining these positive trends will be crucial. Improving university curricula, expanding vocational training for in-demand skills, and supporting English and IT education will help Ukraine maximize its human capital. Equally important is leveraging the freelance and startup sector to complement traditional employment – an area where Ukraine has already proven competitive globally.

2.6.4 Digitalisation and digital competences

Over the past decade, the country has built one of Europe's largest online gig workforces worldwide. Estimates by the ILO indicated that roughly 500,000 Ukrainians were registered on freelancing platforms as of the late 2010s – about 3% of

Ukraine's total workforce. According to the Oxford Internet Institute, this made Ukraine the world's seventh-largest source of online labour on major platforms (e.g., Fiverr, Freelancer.com) around 2017. The country was also ranked among the top ten fastest-growing freelancing markets globally, entering the 2020s. Such prominence is reflected in Ukraine's contribution to platforms like Upwork. In 2022, roughly 6% of Upwork's global revenue was derived from Ukrainian freelancers and clients, underscoring the nation's outsized role in the digital talent pool (Gigmeter Tim, 2022).

Several studies highlight the composition and skills of Ukraine's freelance workforce.

The article "Gig contract as a Ukrainian legal phenomenon and features of its occurrence in the framework of gig economy" (Filinovych, Derevianko, Pohorielova, & Denysiuk, 2025) examines an innovative legal approach Ukraine has developed to address the challenges of regulating work in the digital economy. The research contextualizes these developments within the broader global gig economy, which is characterized by short-term, flexible jobs where workers typically function as independent contractors or freelancers. Digital platforms like Uber, Upwork, and TaskRabbit have enabled this form of work globally. While offering flexibility and diverse opportunities, the gig economy often leaves workers without adequate social protections or labour rights.

Ukraine's approach stands out through its introduction of the Law on Diia.City (Law No. 1667-IX) in 2021, which created a special legal and economic framework for IT businesses. As of January 2025, there were 847 resident companies in Diia.City, up from just 74 in February 2022. The IT industry has become increasingly important to Ukraine's economy, bringing in \$6 billion in export revenue in 2022 (Law on Diia.City, 2021).

At the core of this framework is the gig contract, defined as a legal instrument that combines elements of both civil contracts and employment contracts. It provides workers with flexibility while ensuring basic social guarantees. Ukrainian law defines it as "a civil contract, according to which a gig specialist undertakes to perform work and/or provide services following the tasks of the Diia.City resident as a customer" (Article 1 of Law on Diia City (2021)).

These contracts offer work flexibility by allowing for irregular working hours and remote work. They simultaneously provide social guarantees, including annual paid leave of at least 17 working days, temporary disability assistance similar to sick leave, maternity leave (70 days before and 56 days after childbirth), and compulsory state social insurance. The framework also includes a simplified mechanism for transferring intellectual property rights to the company and provisions for non-disclosure and noncompete agreements.

The article compares Ukraine's approach with regulations in other regions. The European Union focuses on balancing worker rights with business interests. India has implemented a Code on Social Security (2020) that includes provisions for gig workers. The United States shows varied approaches, with ongoing debates about worker classification (Filinovych, Derevianko, Pohorielova, & Denysiuk, 2025).

The article suggests improvements for Ukraine's system, including better dispute resolution mechanisms, clearer termination provisions, and potentially a dedicated social security fund for gig workers. This Ukrainian legal innovation may offer valuable insights for other countries seeking to adapt their legal systems to the rapidly evolving global digital economy, particularly in balancing worker flexibility with adequate social protections (Filinovych, Derevianko, Pohorielova, & Denysiuk, 2025).

2.6.5 Freelancer landscape in Ukraine: A brief overview of literature

Ukrainian online freelancers are heavily concentrated in IT and creative fields, providing services like software development, tech support, design, and multimedia content creation. This talent pool has become a significant resource for Western companies seeking high-tech skills. Survey-based research by the International Labour Organization found that platform workers in Ukraine tend to be young and highly educated, with many treating online freelancing as a supplementary income source. Workers access opportunities through a diverse range of over 40 platforms – from local Ukrainian or Russian-language marketplaces to global English-language platforms. This multi-platform ecosystem enables freelancers to tap both domestic clients and international markets. Key motivations for Ukrainians to engage in online freelancing

include earning additional income, the flexibility to work from home, and better pay than local jobs (Aleksynska, Bastrakova, & Kharchenko, 2019).

In short, Ukraine entered the 2020s as a powerhouse of online freelance talent, especially in tech-oriented fields, with a youthful, well-educated, and internationally engaged workforce.

When Russia invaded Ukraine in February 2022, it sent shockwaves through every economic sector, yet research shows that the online freelancing industry demonstrated exceptional resilience and flexibility. Ukraine's platform economy, while disrupted, remained largely intact in the early months of the conflict. Industry reports from Freelancehunt (a Ukrainian freelance platform) similarly document a swift rebound in freelance activity after an initial wartime dip (Bondarenko, 2023). By mid-March 2022 (just a few weeks into the invasion), about 74% of Ukrainian freelancers had resumed work online, and by April, that figure reached 96–98%. Despite blackouts, displacement, and security challenges, most freelancers returned to serving clients within weeks of the invasion. Demand for Ukrainian freelancers even surged later in 2022: the volume of freelance projects and hiring in summer 2022 was around 30% higher than in 2021, and total turnover (platform earnings) grew by nearly 30% year-on-year.

Experts attributed this wartime growth to businesses (both in Ukraine and abroad) seeking flexible and cost-effective services for quick recovery and adaptation, to which Ukraine's freelancers were well positioned to respond (Ukraine Media Group LLC, 2022).

Cross-sectional data analyses reinforce that Ukraine's freelance sector remained robust through the war's outbreak. One comparative panel study observed only modest declines in the number of active Ukrainian gig workers in early 2022, followed by a stabilization as freelancers adjusted their working patterns (Ukraine Media Group LLC, 2022).

By 2023, Ukraine's presence on global freelancing platforms was rebounding strongly. In the first quarter of 2023, demand for Ukrainian freelancers' services was 84% higher than in 2022. This reflects the low base during the initial war disruption

and a genuine expansion in online outsourcing to Ukraine as the country demonstrated its digital resilience. Surveys of freelancers during the war reveal mixed impacts on individual earnings: about 40% of Ukrainian freelancers reported declining income under wartime conditions. However, roughly one-third increased their earnings, while the remainder saw little change. Outcomes varied by sector – for instance, IT and marketing specialists with international client bases often continued to earn or even grow their income. In contrast, those dependent on local clients or affected areas faced setbacks (Visit Ukraine Today , 2023).

Several structural features of the Ukrainian gig market observed in earlier studies have persisted through 2022–2024. For example, there is a significant gender dimension to platform work. Men and women participate in freelancing in nearly equal numbers, but earnings are skewed toward male freelancers overall (Ukraine Media Group LLC, 2022; Gigmeter Tim, 2022). Recent platform data show that male freelancers earned about 72% of total freelance revenues in Ukraine, compared to 28% earned by women. This echoes pre-war findings of a gender pay gap in online work (men earning over twice as much on average as women), driven in part by occupational segregation – men tend to dominate higher-paying IT and engineering gigs, while women are more represented in lower-paid writing or clerical tasks (Gigmeter Tim, 2022).

Another continuity is the geographic distribution of freelancers. Studies before the war noted that over half of all online workers were based in just four major cities (notably Kyiv, Kharkiv, Lviv, and Dnipro). The war-induced internal displacement has likely shifted some of this concentration. However, recent regional analyses (using Upwork profile data) still found a broad spread of freelancers across Ukraine's oblasts, with higher densities in urban centres and western regions that were less affected by active (Gigmeter Tim, 2022). In summary, the convergence of evidence from national surveys, platform data, and international comparisons all points to a resilient and growing freelance platform economy in Ukraine during 2022–2024, despite the extraordinary challenges posed by the war.

As of 2025, Ukraine's freelance economy demonstrates notable resilience and growth despite ongoing challenges. The nation ranks among the top countries for

freelance activity, with approximately 36% year-over-year earnings growth, positioning it just behind the United States, the United Kingdom, Brazil, and Pakistan in global freelance earnings expansion (IG Rosales, 2025).

Following the February 2022 invasion, over 40% of current Ukrainian freelancers started their careers in freelancing (i.e. they joined after the war began) (Pidgaina, 2023). This robust platform activity is also reflected in export statistics. Ukraine's IT and freelance service exports reached an all-time high of \$7.3 billion in 2022, slightly dipping by 8.2% to around \$6.7 billion in 2023. Even with that modest decline, freelance-driven IT services accounted for an impressive 41% of Ukraine's service exports in 2023, underlining how critical remote freelance work has become to the national economy. Freelancers and IT outsourcing firms have sustained operations by adapting to wartime conditions – for instance; companies set up backup power generators and widely adopted satellite internet (Starlink) to counter periodic blackouts (Moore, 2024).

A significant portion of Ukraine's freelance workforce comprises individuals aged 18 to 35, accounting for over 70% of freelancers. This demographic is predominantly engaged in sectors such as design (32.5%), programming (19.99%), and writing (19.38%).

Smaller but notable segments work in architecture/engineering, audio-video production, consulting, and administrative support. There are some gender differences in specialization – for example, male freelancers are more often found in programming, engineering, or IT-related jobs. In contrast, female freelancers more frequently choose fields like design, translation, and business support (Bondarenko, 2023).

The talent spectrum is broad, enabling Ukraine's freelance workforce to meet diverse international client needs. The strong international demand and continued project flow have kept freelance revenue flowing into Ukraine, helping support households and injecting foreign currency into the economy. The government has also supported the sector indirectly; for example, Ukraine's Ministry of Digital Transformation has introduced an e-residency program to attract IT and creative professionals to register their businesses in Ukraine remotely, aiming to bring in at least 1,000 new e-resident entrepreneurs in its pilot stage (Ionan, 2023). Such policies

and Ukraine's relatively favourable tax regime for independent contractors create a supportive framework for freelance work (Barros).

The near future outlook for Ukraine's freelancing sector (2025–2027) is cautiously optimistic. Current trends suggest that Ukraine will continue integrating deeply with the global remote work economy. The remote work culture that has grown out of necessity is likely to persist as freelancers and clients have grown comfortable with online collaboration across borders. International demand for Ukrainian talent is expected to remain strong – Ukraine's freelancers have proven their reliability and quality despite adversity, strengthening foreign clients' confidence. Many Ukrainian specialists offer a compelling blend of high skill and competitive pricing, which will keep them in demand. Potential challenges to the outlook include the uncertainty of the war's trajectory and the need to maintain stable electricity and connectivity. However, the past two years have demonstrated that the freelance sector can adapt rapidly through backup solutions and community support. Many companies and freelancers now have contingency plans for power or connectivity disruptions, ensuring work continuity.

2.6.6 Cultural dimension of freelance work in Ukraine

Understanding the cultural underpinnings of freelance work in Ukraine requires a nuanced look at the country's value orientations. These cultural foundations shape individual attitudes toward work, risk, independence, and self-management—key drivers for freelancing and entrepreneurial self-employment careers. Hofstede's national cultural dimensions and data from the World Values Survey (WVS) offer valuable frameworks to interpret the socio-cultural characteristics of the Ukrainian population and their impact on the evolving freelancer economy.

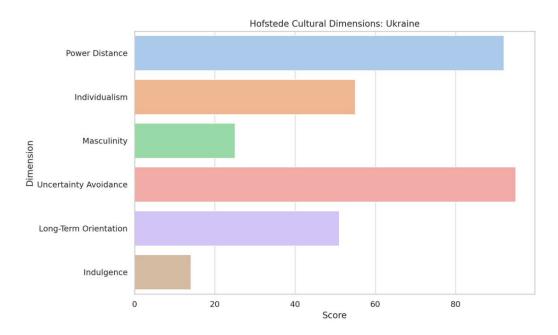


Figure 19. Hofstede Cultural Dimensions in Ukraine.

Source: Hofstede Insights (2025).

These scores provide several insights into how cultural values may both facilitate and constrain the growth of Ukraine's freelance economy. For instance, the exceptionally high Uncertainty Avoidance suggests that Ukrainians prefer predictability and stability over ambiguity and risk-taking. This cultural trait could potentially hinder individuals from entering freelancing, which is inherently uncertain and requires comfort with income variability, client acquisition, and contract instability. High uncertainty avoidance is typically associated with a stronger preference for formal employment contracts, organisational structure, and clear hierarchies. As a result, this dimension may slow the broader transition to freelance careers among individuals who lack prior experience or risk-mitigation strategies (e.g., savings and client networks).

Similarly, low Individualism indicates a collectivist orientation, where people are more likely to prioritise group belonging and family over personal achievement. In such cultures, self-initiated careers like freelancing may be less familiar or less socially encouraged than traditional employment. Individuals may also seek reassurance from peer groups or family before choosing a non-traditional career path. However, collectivism can also provide strong social support networks, which in the Ukrainian context may manifest in informal freelance communities that share clients, collaborate

on projects, or pool resources (e.g., coworking spaces, messenger groups, etc.). This can partially offset the fear of operating independently.

High Power Distance suggests that hierarchy and centralisation are widely accepted. In employment terms, this may mean that Ukrainians are accustomed to top-down structures, which may inhibit some individuals from feeling empowered to pursue autonomous careers. Freelancing requires a mindset shift—from waiting for direction to seeking and managing one's work. This could be a significant cultural adjustment. However, as more professionals encounter remote work models and flat organisational structures in international freelancing environments, these hierarchies may weaken over time.

On the other hand, Ukraine's moderate Long-Term Orientation (LTO) and lower Masculinity score may contribute positively to freelance career development. LTO reflects a willingness to delay gratification, invest in education, and plan for the future—traits conducive to developing a freelance career that often requires months or years to stabilise. Meanwhile, the modest Masculinity score suggests a balanced society that values cooperation, quality of life, and work-life balance—all compatible with the flexibility offered by freelancing.

However, the very low Indulgence score implies a culture of restraint, where gratification is delayed, and leisure is limited. This may inhibit entrepreneurial exploration if individuals do not perceive a strong internal locus of control or intrinsic motivation. In cultures with low indulgence, people may feel that their actions are constrained by external norms or systemic barriers, which could demotivate some from pursuing less secure but potentially rewarding freelance opportunities.

Insights from the World Values Survey (Wave 7) (World Values Survey Association, 2022) corroborate many of these trends. Ukraine scores high on Survival values over Self-expression values and leans toward Traditional rather than Secular-Rational values. This places Ukraine in the quadrant of countries where economic and physical security are prioritized over autonomy, self-expression, and entrepreneurial risk-taking. According to Inglehart's cultural map (Inglehart, Modernization, Cultural Change, and Democracy:The Human Development Sequence, 2012) societies with survival-oriented values tend to resist innovation and emphasize job security, which

explains the strong historical preference for stable employment over freelance or startup initiatives.

However, the WVS also reveals important generational and regional shifts. Younger Ukrainians—particularly those with IT education or international exposure—are more aligned with self-expression values and individualistic behaviours. These populations are the vanguard of Ukraine's growing freelance sector. They tend to be digitally literate, globally connected, and more open to alternative work models. Importantly, the war has acted as a catalyst, accelerating these shifts: job displacement and remote work normalization have pushed many into freelancing by necessity, gradually eroding the stigma associated with non-traditional employment.

In conclusion, Ukraine's cultural characteristics present a mixed landscape for developing its freelance economy. High uncertainty avoidance and collectivist tendencies may dampen freelance participation among older or more risk-averse demographics, while younger, urban, and digitally enabled populations are increasingly overcoming these barriers. Cultural traits that favour discipline, long-term orientation, and modest ambition may, paradoxically, support freelancing success once individuals leap. For policymakers and educators, the implication is clear: promoting entrepreneurial education, financial resilience, and digital competence—while shifting cultural narratives around independence and success—will be key to unlocking Ukraine's freelance potential in the years ahead.

2.6.7 Regulatory/legal framework for freelancers

Freelancers in Ukraine – including independent digital professionals, creatives, and IT contractors – typically operate as sole proprietors under national law. The Ukrainian term FOP (Фізична особа–підприємець) refers to an individual entrepreneur or sole proprietor, which is the most common legal form for freelancers. By registering as an FOP, an individual gains the legal ability to conduct business activities and invoice clients. Freelancers not formally registered as entrepreneurs are still expected to report their income as personal income, but the FOP route provides a more transparent framework with simplified taxation. Importantly, a freelancer operating as an FOP is

not an "employee" under labour law – instead, they are a business entity in their own right, subject to business taxation and self-registration requirements.

Ukrainian legislation (e.g., the Law "On State Registration of Legal Entities and Individual Entrepreneurs") makes the registration process relatively straightforward. Many government services are digitized, allowing new freelancers to register online via the Diia portal in a few days. Upon registration, a freelancer must choose a taxation system (general or simplified) and list business activity codes (KVED). This determines how they will pay taxes and report income.

Under the general tax system, freelance individuals pay taxes much like other private persons, but on their business profits. This includes the standard personal income tax (PIT) at 18% on net income and an additional military levy (war tax) – typically 1.5% before, though temporarily higher (5%), starting in 2024 and until the end of the war. They can deduct business expenses but must maintain proper accounting. In addition, they pay a Unified Social Contribution (USC) of 22% of the minimum wage for social security (pension and health insurance fund). The general system is less popular for freelancers due to the higher tax rate and bookkeeping burdens unless their income or activities fall outside the simplified system's limits.

Most Ukrainian freelancers and micro-entrepreneurs opt for the simplified tax regime, known as the single tax system, which is designed for small businesses. This system replaces the multi-tier taxes (PIT, USC on full income, military levy) with a single tax at a low rate and simplified accounting. The Tax Code of Ukraine establishes several groups under the simplified system for individuals (FOP Groups I–III). Freelancers usually use Group III.

There is also group III, which refers to the broadest category and the one most freelance professionals (especially IT and digital workers) use. It has a higher revenue cap (up to ~\frac{2}{8}.285 million per year in 2024, about USD 225,000). Group III taxpayers pay a flat percentage of their gross revenue: 5% if not registered for VAT or 3% if they voluntarily register as a VAT payer. They can work with domestic and international clients, including as contractors for foreign companies. The 5% single tax is the only income tax on their earnings (no 18% PIT on top), making this regime very entrepreneur-friendly. Group III freelancers also pay the USC (22% of minimum wage)

monthly for social security. Until recently, they did not have to pay the separate 1.5% military levy on this income – the single tax was considered inclusive. This has changed with new wartime measures, and they must pay 1% of their gross income as a military levy until the war's end.

In summary, as of early 2025, a typical Ukrainian freelance professional on the simplified system (Group III) pays a 5% tax on revenue, a 1% war levy on revenue, and a fixed 22% minimum wage as a social contribution.

There are, however, recent (and ongoing) reforms in Ukraine that affect freelancers. Ukrainian authorities are in tax reform discussions that could alter the landscape for freelancers and micro-businesses in the coming years. In late 2023, the government approved the National Revenue Strategy until 2030, a tax and customs reform policy roadmap. Several proposed changes target the simplified tax system and small entrepreneurs to reduce abuse and align with EU norms. In the broader tax reform, Ukraine is considering reintroducing a progressive scale for personal income tax, replacing the flat rate of 18% (Shevchuk, 2023).

Higher earners could face one or two elevated PIT brackets. While single-tax FOP income is currently separate from PIT, a future progressive PIT might influence high-earning freelancers who choose the general system or those receiving foreign income directly. It also aligns with the European practice of higher taxes on top earners. As of 2025, this is only a proposal under discussion. Another significant development is Ukraine's effort to align with EU tax transparency standards for digital platforms.

In April 2025, the Cabinet announced draft legislation to implement the OECD's Model Reporting Rules for digital platforms, similar to the EU's DAC7 directive. This law would require digital platform operators (online marketplaces, freelance gig platforms, rental platforms, etc.) to report income earned by Ukrainian sellers/service providers through their platforms to the Ukrainian tax authorities. The scope covers goods and services platforms, including potentially global freelancing platforms. The first reporting is expected for the year 2026 if the bill is passed (KPMG, 2025). Importantly, the proposal also introduces a withholding tax mechanism for platform-mediated income. If a Ukrainian individual earns income via a digital platform and is not a registered entrepreneur, the platform will withhold a flat 5% personal income

tax on that income (plus the applicable military levy). On the labour regulation side, while Ukraine does not yet have special laws for "platform workers" akin to the EU's forthcoming Directive on Platform Work, alignment with European standards might eventually require distinguishing true self-employed freelancers from misclassified employees. The EU's directive (adopted in late 2024) creates a presumption of employment for certain gig workers to ensure labour protections (Council of the EU, 2025).

Ukraine's current framework is very liberal in allowing companies to engage individuals as contractors (FOP or gig contract), even in roles similar to employment. As integration with the EU progresses, we may see closer scrutiny of freelance arrangements to prevent abuse – for example, large tech companies extensively using FOP contractors instead of employees could face pressure to provide proper labour guarantees. The introduction of Diia City in 2022 foreshadowed this by providing IT businesses with an alternative model of engagement (via "gig contracts") with a stable tax rate and some labour-like benefits rather than employing people informally. Diia City was established by the Law "On Stimulating the Development of the Digital Economy in Ukraine" (2021) as a special legal regime for IT companies. Diia City thus formalizes freelance-like relationships within a company structure. The success and future of Diia City are still developing – the National Revenue Strategy even hinted at scepticism toward special regimes like Diia City, suggesting tax privileges might be revisited. However, for now, it remains an innovative part of Ukraine's framework for digital professionals (Shevchuk, 2023).

Overall, Ukraine's legal framework has been quite supportive of freelance work and entrepreneurship. Key supportive elements include:

- Low Tax Burden,
- Ease of Doing Business,
- Flexibility to Work Internationally,
- Special Regimes for Tech.

Despite the supportive elements, freelancers in Ukraine face some challenges and changes in the current framework:

- Regulatory Changes and Uncertainty,
- Social Protection and Benefits,
- Misclassification and EU Alignment Pressure,
- Inflation and Income Limits.

Concluding description of the regulatory aspects of freelancing in Ukraine's legal and tax framework for freelancers in 2024–2025 is characterized by a generally favourable tax regime and straightforward business formalities, coupled with a period of transition and reform. Freelancers are expected to register as individual entrepreneurs, pay a low single tax (with recent additions of war-related levies), and report income through simplified filings. The current system has dramatically supported the rise of freelance work, especially in IT, by minimizing tax and regulatory burdens. At the same time, recent reforms – driven by war exigencies and EU-alignment goals – are incrementally increasing tax obligations and tightening oversight (e.g., mandatory social tax, platform income reporting). How these changes unfold will determine whether Ukraine can maintain its competitive environment for freelancers while meeting revenue needs and European standards.

Ukraine's freelancing sector in 2025 stands as a dynamic and resilient segment of the economy, characterized by robust growth in the face of hardship. Key indicators – from surging demand and global rankings to the large influx of new talent – all point to a sustained expansion. Without major disruptions, Ukrainian freelancers are expected to play an even more significant role in the domestic labour market and the global gig economy through 2027, driven by a strong remote work culture, international client demand, and a solid digital infrastructure backbone. The sector supports thousands of livelihoods today and is poised to be a growth engine for Ukraine's digital economy in the coming years.

2.7 Country profile: Indonesia

2.7.1 Economic indicators

Indonesia's economy is characterised by significant growth, as measured by Gross Domestic Product (GDP). In 2024, Indonesia's GDP at current prices reached IDR 22,139.0 trillion, and its GDP per capita reached IDR 78.6 million, equivalent to USD 4,960.3 (BPS, 2025). Meanwhile, according to the World Bank, the annual GDP reached USD 4,876.3 by the end of 2023, as shown in Figure 20.

The country's economic resilience is evident in its post-pandemic recovery, though the labour force participation remains slightly below pre-pandemic levels. Despite global financial volatility, Indonesia's economic prospects remain stable, particularly in key sectors such as manufacturing, services, and digital transformation (WIPO, 2024).

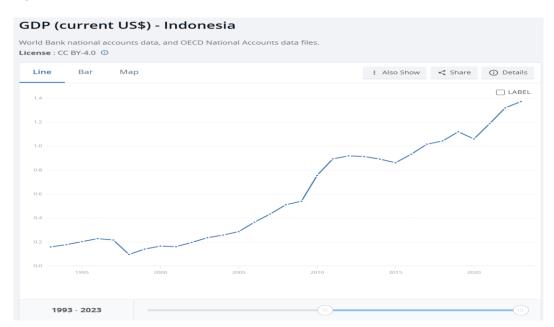


Figure 20. GDP Indonesia 1993-2023.

Source: World Bank (n.d.).

Indonesia is the fourth most populous country in the world and the largest in the ASEAN region, with a population of approximately 284.44 million as of 2025 (BPS, 2025). The population is growing at an estimated rate of 1.09% per year. The male-to-female ratio in the country is slightly skewed, with 101.9 males for every 100 females.

As of August 2024, Indonesia's labour force consists of 152.11 million people, which includes individuals aged 15 and older, regardless of their employment status. Among them, 144.64 million are employed, while 7.47 million are unemployed, representing an unemployment rate of 4.91%. Additionally, gig or casual workers stand at 41.6 million, with the majority—about 72%—working in non-agricultural sectors such as manufacturing, trade, construction, and various service industries.

These statistics underscore Indonesia's labour force's significant size and dynamics, highlighting both opportunities and challenges in addressing employment issues, supporting freelancers, and tackling unemployment amidst a rapidly growing population (BPS, 2025). When making employment decisions, especially regarding freelancing in Indonesia, various factors must be considered, including economic conditions, innovation metrics, and human capital indicators.

However, Indonesia faces challenges such as a youth unemployment rate and a significant number of NEETs (Not in Education, Employment, or Training), which stands at 25.9%, far above that of high-income countries. Furthermore, a gender job gap exceeding 7.5 percentage points highlights the structural barriers women face in accessing quality employment. These indicators underscore the necessity for targeted economic policies to enhance employment opportunities and bridge existing gender and youth employment gaps (WEF, 2025).

2.7.2 Innovation Indicators

Indonesia ranks 54th globally in the Global Innovation Index, indicating its growing potential in innovation and technological advancements. The country excels in university-industry R&D collaboration, ranking 6th globally, and in its state of cluster development, ranking 7th. This is complemented by a strong performance in intangible asset intensity, ranking 13th globally. Despite this progress, Indonesia still faces challenges in areas such as trademarks (ranked 72nd) and industrial designs (ranked 64th), which suggests that further innovation infrastructure is needed to enhance intellectual property protection and commercialization (WIPO, 2024).

Regarding emerging technologies, Indonesia shows optimism towards digital transformation, although it is still in the early stages of adopting AI and automation.

With increasing demand for AI-related skills, driven by organizational needs and market transitions, Indonesia is positioned to benefit from the growing green and emerging tech job sectors.

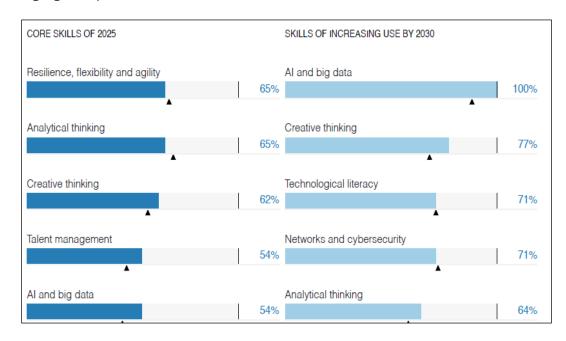


Figure 21. Core skills of 2025 and increasing use by 2030.

Source: Li and Shine (2025).

Figure 21 illustrates the key core skills of 2025 and the skills expected to increase by 2030 in Indonesia, highlighting the growing importance of digital and adaptive skills. Core skills for 2025, such as resilience, flexibility, agility, analytical thinking, and creative thinking, are considered crucial, with each skill being valued by a significant percentage of the workforce (65%, 65%, and 62%, respectively). Talent management, AI, and big data are also important, though slightly less emphasized, with 54% of the workforce recognizing their relevance. These core skills reflect Indonesia's shift toward a more adaptive and data-driven economy.

Looking ahead to 2030, the skills projected to see the most significant growth include AI and big data, which are expected to reach full adoption at 100%, signalling a transformative shift towards data-centric and AI-powered industries. Creative thinking and technological literacy are also expected to grow substantially, with 77% and 71% projections, respectively. This highlights the increasing demand for innovation and digital fluency in the workforce. Additionally, networks and

cybersecurity skills are expected to grow by 71%, reflecting the rising importance of securing digital infrastructure in an increasingly interconnected world. The data highlights the need for a workforce that is not only technologically adept but also creative and adaptable, capable of meeting future labour market demands. (WEF, 2025).

2.7.3 Human capital indicators

Indonesia's human capital indicators highlight a rapidly growing working-age population, positioning the country to play a key role in global workforce growth by 2030. However, significant skill gaps persist, prompting over 60% of employers to prioritize reskilling and upskilling initiatives to equip the workforce for the digital economy. High demand exists for analytical thinking, tech literacy, resilience, and creative thinking to prepare workers for future labour market demands (WEF, 2025). The government introduced the Digital Talent Scholarship (DTS) program to address these gaps, focusing on data analytics, AI, and cloud computing. Launched in 2018, the program aims to train over 600,000 skilled workers annually. Despite efforts, challenges remain in gender equity and women's access to higher education and career advancement (WIPO, 2024; WEF, 2025).

Indonesia's digital transformation agenda, supported by the Making Indonesia 4.0 program, accelerates human capital development in the digital sector. This program aims to improve digital literacy and equip the workforce with essential Industry 4.0 skills, including AI, cloud computing, and cybersecurity. With the increasing digitalization of industries, the workforce is expected to benefit from enhanced access to training, ultimately reducing digital skill shortages and contributing to economic growth (Chen, Ramli, Hastiadi, & Suryanegara, 2023). The country's investment in digital education and workforce development is key to ensuring a competitive edge in the global digital economy.

Indonesia's Human Development Index (HDI) reached 75.02 in 2024, reflecting a 0.63-point increase from the previous year. This marks steady annual growth of 0.75% from 2020 to 2024. Key components of HDI—health, education, and living standards—show positive progress. Life expectancy at birth improved to 74.15 years in 2024, while

expected years of schooling rose to 13.21 years, and mean years of education increased to 8.85 years. The standard of living, measured by adjusted real per capita expenditure, also rose by 3.71%. Despite these advances, regional disparities persist, with some provinces exhibiting lower HDI levels than others (BPS, 2024).

2.7.4 Human capital & development: Opportunities and career progression

One of the most pressing issues for freelancers in Indonesia is the lack of structured pathways for professional growth and career advancement. According to Arifianto and Vallentino (2022) freelancers gain diverse skills and experiences from project-based work, but they also often face difficulties translating these into long-term development or promotions. This is particularly evident in sectors like event management, marketing, and brand activation, where work is intermittent and tied to short-term gigs. Unlike formal employees, freelancers are rarely offered training or mentorship, and there are limited mechanisms to recognize their cumulative growth. Consequently, many Indonesian freelancers remain in a cycle of "project hopping" without clear prospects for upward mobility. While the developmental value (one of the six FVP components) is evident in learning new tools, client management, and communication skills, the absence of career scaffolding hinders retention and morale. To address this, stakeholders (i.e., platforms, government bodies, and private companies) must collaborate to create structured programs for skills upgrading. For example, freelancing platforms could incorporate micro-certifications, gamified experience levels, or portfolio showcases that validate and promote skill progression. Additionally, government programs like pre-employment cards (Kartu Prakerja) could be reoriented to offer advanced courses or mentorships targeted specifically for experienced freelancers. This approach recognises that freelancing is not merely a transitional phase but a long-term career choice for many Indonesians. By investing in the developmental trajectory of freelancers, institutions can unlock higher productivity, professional resilience, and economic inclusion in the gig economy.

2.7.5 Cultural dimension

Indonesia's cultural context significantly shapes the freelance ecosystem, influencing work patterns, professional relationships, and entrepreneurial approaches. This analysis combines insights from Hofstede's cultural dimensions framework and the World Value Survey (WVS) to understand Indonesia's cultural landscape related to freelancing comprehensively.

Hofstede's six-dimensional model offers valuable insights into Indonesian work culture, with clear implications for the freelance sector. Regarding *Power Distance* (score: 78), Indonesia scores high on this dimension, indicating acceptance of hierarchical order and inherent inequalities. In freelancing, this manifests as respect for client authority and clear role definitions in project relationships. Indonesian freelancers often demonstrate deference to clients, particularly international ones, which can facilitate smooth working relationships but may sometimes hinder assertiveness in negotiations or scope discussions (Hofstede Insights, 2025).

Values for the *Individualism vs. Collectivism* dimension (score: 14) point to a low score on individualism. Indonesia is a strongly collectivist society where loyalty to the group supersedes individual needs. This may influence freelancing practices through the following:

- strong emphasis on relationship-building before business transactions,
- preference for long-term client relationships over one-off projects,
- development of freelancer communities and support networks,
- tendency to avoid confrontation that might damage professional relationships.

In the *Masculinity vs. Femininity* aspect (score: 46), Indonesia's intermediate score on this dimension indicates a balance between competitive and consensus-oriented values. This creates a freelancing environment where quality of life and work flexibility are valued alongside achievement and success, contributing to the appeal of freelance work arrangements that offer work-life balance.

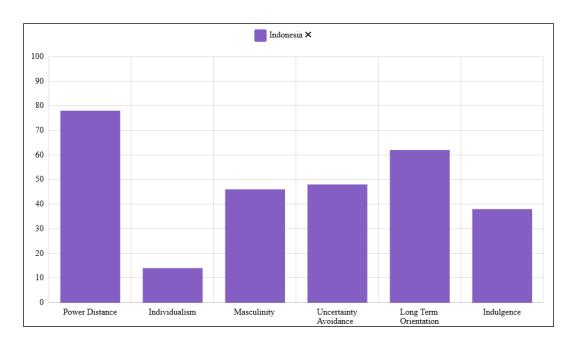


Figure 22. Hofstede's six-dimensional score in Indonesia.

Source: Hofstede Insights (2025).

Indonesians score moderately on the *Uncertainty Avoidance* dimension (score: 48), showing a relatively relaxed attitude toward ambiguity. This cultural trait supports adaptability in the changing freelance marketplace, though there remains an appreciation for structure and clarity in project specifications and payment terms.

Indonesia's moderately high score indicates a pragmatic culture encouraging thrift and modern education efforts to prepare for the future. This comes from the value of the *Long-Term vs. Short-Term Orientation* cultural dimension (score: 62). This orientation supports investment in skill development among freelancers and persistence through market fluctuations (Hofstede Insights, 2025).

Indulgence vs. Restraint has in Indonesia a relatively low score (score: 38), which indicates a culture of restraint, where social norms control the desire for gratification. This manifests in freelancers' work ethic, emphasizing diligence and responsibility over immediate gratification or leisure.

Indonesia's collectivist culture significantly shapes freelancers' experiences and behaviours, particularly through the Freelancer Value Proposition (FVP) lens. Unlike in many Western countries where individualism dominates, Indonesian freelancers are embedded in a socio-cultural context that values harmony, community, and reputation.

Arifianto and Vallentino (2023) highlight that for Indonesian freelancers, social value, the respect and recognition gained from experience and work reputation, is a vital motivating factor (Arifianto & Vallentino, 2022). Freelancers with broader networks and more event history are socially esteemed, while newcomers often face scepticism and a lack of credibility, regardless of their competence. This insight reflects Hofstede's cultural dimension of collectivism, where community perception and interpersonal relationships significantly influence professional advancement. The value of social standing further intersects with hedonic and developmental values; freelancers not only seek economic reward but also satisfaction, pride, and acknowledgment from their peers and communities. This interdependence of social and personal development creates a unique freelancer identity in Indonesia, one that is highly relational. Therefore, when discussing cultural aspects in the ENTEEF report, it is essential to recognize that Indonesian freelancers are driven not just by economic needs but also by a deep-rooted aspiration to contribute meaningfully to their social networks. This requires platforms and institutions to design systems that support peer-based reviews, mentorship, and community building, which are culturally congruent. Furthermore, recognition from platforms or clients can significantly elevate a freelancer's perceived value within their circle, emphasizing the importance of nonmonetary incentives in fostering freelance engagement.

An additional insight into the values and beliefs shaping the outcomes on the freelancer market could be obtained from the World Values Survey (Inglehart, et al., 2014). Concerning trust and social capital, only 9.8% of Indonesians believe that "most people can be trusted," compared to global averages of around 30% (WVS, 2022), indicating an important hurdle for any business activity. This low general trust environment makes reputation and referrals particularly important in the freelance marketplace, with platforms and digital portfolios where trust is pivotal in governing business transactions. Further, the influence of work values When asked about essential aspects of a job, Indonesians ranked "good pay" (84.7%) and "job security" (81.2%) highest, followed by "opportunities to achieve" (70.9%) and "doing something important" (63.8%) (WVS, 2022). These values create interesting tensions in the freelance sector, where income potential may be higher but security lower than traditional employment. Authority and decision-making values show that 67.3% of

Indonesians prise increasing citizen input in government decisions, indicating a desire for a voice despite the high-power distance culture. This translates to the freelance context as a growing assertiveness among younger freelancers who seek more collaborative relationships with clients than traditional hierarchical structures might suggest. Eventually, attitudes toward technology adoption indicate that 78.5% of Indonesians view science and technology as making lives healthier, easier, and more comfortable. This positive orientation toward technology creates fertile ground for digital freelancing platforms and tools, supporting the rapid growth of Indonesia's digital freelance economy.

Summarising the cultural prerequisites for the development of freelancing in Indonesia, several conclusions can be drawn. One refers to the importance of community-oriented freelancing. Rather than operating in isolation, Indonesian freelancers often form communities for mutual support, skill sharing, and collaboration. This reflects collectivist values and helps mitigate the challenges of independent work in a society structured around group membership. Online communities have flourished, with platforms like Indonesian Freelancer (with 31,000 Instagram followers) serving as important hubs (Indonesian Freelancer, 2025). However, this could present an important obstacle in developing an independent freelancer career on the global labour market, where the reputation and individual performance determine every individual's prospects. Similarly, in relationship-based business development, which is in accordance with collectivist values, Indonesian freelancers typically invest significant time in relationship-building with potential clients. Projects often emerge from established connections rather than purely transactional bidding processes, even on digital platforms. Further, hierarchical client relations, reflecting the high power distance, translate into client relationships where freelancers may be reluctant to challenge client decisions or negotiate aggressively. This can create challenges in scope management and fair compensation, particularly for less experienced freelancers (Hofstede Insights, 2025). Moreover, it may influence the pricing strategies of freelancers in a decisive way. Indonesia's intermediate position on the masculinity/femininity spectrum creates a freelance culture that values financial success and quality of life benefits, making freelancing attractive to those seeking flexibility and income potential (WEF, 2025). Finally, pragmatic skill

development refers to the feature of Indonesian culture where long-term orientation supports systematic investment in developing marketable skills, with 65% of the workforce recognizing the importance of analytical thinking and creative thinking as core skills for 2025 (WEF, 2025).

These cultural dimensions have essential implications for freelancing platforms, clients engaging Indonesian freelancers, and policy development in the growing gig economy sector. As Indonesia continues its digital transformation, understanding these cultural foundations provides a crucial context for successful engagement in this dynamic market.

2.7.6 Regulatory and legal framework for freelancers in Indonesia

Based on applicable regulations, freelancers in Indonesia have been regulated in a law specially designed for freelancers (Freelance Workers Law, 2020). This regulation analyses the changes in legal protections for freelance workers in Indonesia. It discusses how freelancers, once not covered explicitly by Indonesian labour laws, now have a clearer legal status under the new regulations. This aspect has been regulated additionally through the regulatory guidelines aimed at spurring job creation (President of Indonesia, 2022). This regulation has been upgraded to the level of legislation to law concerning job creation, which contains improvements to the previous regulation (President of Indonesia, 2023).

In the regulation, freelancers are referred to as workers with a Fixed Term Employment Agreement (PKWT). What distinguishes them from others is the type of contract and employment relationship. It also regulates social protection for freelancers and ensures ease of doing business. Social protection must be included in the government's social security program, called BPJS, employment, and health insurance. However, the Job Creation Law has not been designed to include freelancers with short-term or flexible contract statuses. The main issue is the lack of legal clarity regarding the status of freelancers. Freelancers often do not have the rights granted to permanent employees, such as health insurance, pensions, and other social security benefits. Existing regulations do not provide adequate protection, leaving them

vulnerable to income uncertainty and making it difficult to access social benefits available to workers covered by standard forms of employment (Rhogust, 2023).

Aspect	Freelancer (Contract-Based Worker)	Permanent Worker
Status and Contract Type	Freelancers work based on Fixed- Term Work Contracts (PKWT) for a specific period or project.	Permanent workers have Indefinite Work Contracts (PKWTT), implying continuous, long-term employment.
Rights and Benefits	Freelancers have limited rights compared to permanent workers and are often without full social security or benefits. If eligible, they may access BPJS Employment and Health.	Permanent workers are entitled to various benefits such as health insurance, pension plans, annual leave, and protection against termination (e.g., severance pay).
Job Security	Freelancers have less job security. They are typically exposed to income instability and lack long-term job guarantees.	Permanent workers enjoy higher job security and are less likely to face abrupt job loss without compensation.
Work Hours	Freelancers enjoy flexible working hours and the freedom to choose their work location.	Permanent workers generally have fixed working hours and are expected to work at a specific location.
Legal Protection	Freelancers are subject to less comprehensive legal protection. Their rights are often less clear, especially regarding termination and benefits.	Labour laws protect permanent workers, ensuring stability, paid leave, severance, and other rights.
Employment Stability	Freelancers work on short-term contracts and often move from one project to another without a guarantee of continuous work.	Permanent workers typically enjoy continuous employment, making them eligible for longterm benefits and career advancement.

Table 8. Comparison between freelancers and permanent workers.

Source: Own elaboration.

Despite legal protection, this law still limits legal protection for freelancers, considering that its primary focus is more on permanent workers. Freelancers can access BPJS Employment and BPJS Health, but implementation and participation are still limited. The comparison of legal provisions between freelancers and permanent workers in Indonesia is presented in Table 9.

Maybe the point of central importance refers to the taxation treatment of freelancers. Freelancers in Indonesia must also report their annual income tax, just like other workers. The primary legal basis is the Norma Penghitungan Penghasilan Neto (NPPN), or the Net Income Calculation Norm. This norm is the foundation for calculating the income tax applicable to freelancers. However, certain conditions must be met before a freelancer can apply for NPPN. According to Article 14 of Law No. 36 of 2008 on Income Tax and Government Regulation No. 46 of 2013, individual taxpayers with an annual gross turnover of less than IDR 4.8 billion may use the NPPN method, provided they notify the Directorate General of Taxes or the nearest tax office within the first three months of the relevant tax year. For individual taxpayers required to maintain financial records and whose income is not subject to final tax, the net income must be calculated using NPPN.

For this reason, the government continues to impose income tax obligations on freelancers (Mariska, 2023), requiring them to file tax reports annually like any other worker. Several freelance professions are subject to income tax, including researchers, authors, translators, supervisors, insurance agents, athletes, advertising agents, intermediaries, and professionals such as notaries, actuaries, lawyers, consultants, accountants, doctors, architects, and appraisers. Other taxable freelancers include educators, instructors, speakers, advisers, and artists such as dancers, actors, commercial models, film stars, musicians, comedians, TV personalities, directors, film crews, singers, and hosts. Individuals involved in multi-level marketing, direct selling, and door-to-door sales are also required to report and pay income tax.

Legal business status is essential for freelancers in Indonesia, as it demonstrates to clients, partners, and stakeholders that they operate legitimately and per applicable regulations. One of the primary legal forms available to freelancers is the Individual Limited Liability Company (PT Perorangan), which allows a single Indonesian citizen

to establish a legal business entity. To qualify, the freelancer must fall under the Micro or Small Enterprise category, with business capital not exceeding IDR 1 billion for micro and up to IDR 5 billion for small enterprises (excluding land and buildings). The process involves choosing a company name, declaring initial capital, preparing a statement of establishment, and registering electronically with the Ministry of Law and Human Rights (Mariska, 2023).

Also, freelancers must obtain a Business Identification Number (NIB) for operational licensing. The NIB can be acquired easily through the Online Single Submission (OSS) system by filling out the required data and business plan. Freelancers must also have a Taxpayer Identification Number (NPWP) to fulfil their tax obligations, as they are considered income earners despite not being tied to a formal employer. Finally, it is highly recommended that freelancers formalise their engagements through cooperation agreements, which protect both parties. These agreements outline the scope of work, payment terms, intellectual property rights, responsibilities, and confidentiality clauses, ensuring clarity and legal protection in freelance arrangements (Mariska, 2023).

Having a legal business status offers significant benefits for freelancers in Indonesia (Mariska, 2023). Firstly, it provides financial and legal protection—by establishing a legal entity such as a limited liability company (PT), a freelancer's assets are protected in the event of financial disputes, as liability is limited to the capital invested in the business. It also ensures that legal disputes are handled through the legal entity rather than the individual personally. Secondly, business legality facilitates scalability, allowing freelancers to expand their operations, obtain necessary business permits, and recruit employees under clear contractual terms. Lastly, legal status significantly enhances credibility; it demonstrates to clients, partners, and stakeholders that the freelancer operates professionally, adheres to regulations, and can be trusted as a legitimate business partner, ultimately strengthening their reputation and competitiveness in the market.

Besides the legal framework, an important aspect supporting freelancing in Indonesia refers to various governmental programs. For example, the Digital Talent Scholarship (DTS) program, launched by the Ministry of Communication and

Information Technology (Kominfo), aims to enhance the digital skills of the Indonesian population, including freelancers. DTS offers training in various technology fields such as data analysis, cloud computing, and artificial intelligence (AI), which can help freelancers expand their opportunities in the digital job market (Kominfo, 2025). The Kartu Prakerja program is a government initiative that provides training and incentives to improve workforce skills, including those of freelancers. This program offers online training that freelancers can use to enhance their skills in various fields, from technical to managerial skills (Kementerian Ketenagakerjaan, 2025). Training and various training provided align with the mapping of the digital competitiveness of 38 provinces and 8 digital sectors in Indonesia (Eas Ventures, 2023). The Ministry of Communication and Information Technology (Kominfo) designed and implemented various programs for digital economy development, such as 100 Smart Cities and Smart Village, which can provide opportunities for freelancers to participate in digital projects across Indonesia. These programs aim to improve digital literacy and support the implementation of technology-based solutions (Kominfo, 2022).

Informal institutional structures are an additional pillar in supporting freelance activities in Indonesia. They usually use social media for different purposes, from advertising job opportunities to outreach activities.

The community on Instagram is called Indonesian freelancer, with almost 31.1 thousand followers (Indonesian Freelancers, 2025). There are at least 90 posts about job opportunities, job offers, and educational content for freelancers. The Instagram account "Freelancer Indonesia (@indonesian.freelancer)" focuses on supporting freelancers in Indonesia by providing helpful information, tutorials, job opportunities, and discussions around the freelance world. It has a following of over 31,000 people and regularly posts freelance job opportunities, life hacks, and fun facts related to freelancing. The account also encourages partnerships and offers links to join relevant groups, such as Telegram, for more information and resources. This platform serves as a community for freelancers to stay updated, learn, and connect with others in the same field. It aims to create a space for knowledge-sharing and networking among freelancers, helping them grow their careers and overcome common challenges in freelancing.

Facebook also plays an important role in organising the freelancer community in Indonesia (Komunitas Freelancer Indonesia, 2025). The Komunitas Freelancer Indonesia Facebook group is a public group with over 5,200 members. It serves as a platform for freelancers in Indonesia to share job opportunities, discuss freelancing-related topics, and connect with others in the community. The group has various posts, including job offers, event promotions, discussions, and freelancer tips. Members frequently interact by sharing their experiences, asking for advice, or offering services such as creating accounts or performing tasks. Additionally, posts often include requests for collaboration, advice on how to start freelancing, and other freelance-related inquiries. The group offers a space for experienced freelancers and those new to the field, creating a network for mutual support and growth.

2.7.7 Brief look at the current state of freelancing in Indonesia

The freelance platform market in Indonesia has been growing rapidly, with a valuation of USD 6.50 billion in 2023. This growth is driven by increased internet penetration (77% in 2023), the expansion of the gig economy, and the need for flexible work arrangements. Jakarta dominates the market due to its high internet penetration and vibrant startup ecosystem. Platforms like Sribu.com, Projects.co.id, Freelancer.co.id, Fastwork.id, and Upwork are key players, with SMEs relying heavily on freelance services to reduce costs and scale operations. Software development services currently lead the market, followed by graphic design, writing, and digital marketing services. A significant challenge freelancers face is payment delays, affecting 30% of freelancers, and job insecurity. However, the government has launched initiatives such as the Freelancer Support Program, which provides training and financial assistance for freelancers, with a budget of USD 10 million. Additionally, tax incentives have been introduced to encourage freelancing. The Digital Economy Development Plan aims to allocate USD 500 million to enhance infrastructure and support the freelance sector. The adoption of remote work and technological advancements like AI and blockchain is expected to further fuel the growth of Indonesia's freelance platform market (Ken Research, 2024).

Platforms serving the freelance market, particularly in Indonesia, may experience market saturation as the number of freelancers registering exceeds the number of companies needing services. One of the studies analysed is Sribu.com. Sribu.com is Indonesia's leading digital freelancing platform that has experienced market saturation and intense competition. This study explores the challenges and strategic opportunities in a saturated market. The study reveals key issues such as the oversupply of freelancers, fierce price competition, and the need to improve service quality and innovation. The main challenges identified include the oversupply of freelancers, leading to intense competition for the same jobs, which drives price reductions. Freelancers often lower their rates to win projects, reducing service value and profit margins. Another challenge is maintaining consistent service quality, as platforms must manage freelancers with varying skill levels. Furthermore, constant innovation is necessary for platforms to differentiate themselves from competitors and meet the evolving needs of clients and freelancers. However, there are strategic opportunities as well. Offering niche or specialized services can attract clients looking for specific expertise. Enhancing the user interface and overall experience can improve client and freelancer satisfaction. Additionally, targeted marketing strategies for specific client or freelancer segments can help the platform attract and retain users (Akbar & Ghazali, 2024).

This report, co-authored by the Asian Development Bank (ADB) and LinkedIn, highlights the rapid growth of digital jobs in Asia and the Pacific, including Indonesia. It reveals the increasing demand for digital skills, particularly in emerging sectors such as renewable energy, e-learning, and smart cities. The pandemic accelerated digital transformation, resulting in a surge in demand for digital talent. Key findings indicate that demand for advanced digital skills, such as AI, cybersecurity, and cloud computing, is rising, particularly in industries most significantly impacted by the pandemic. Indonesia and other countries have experienced significant growth in digital hiring, with employers increasingly seeking employees with basic and advanced digital skills. The report also addresses the growing importance of digital credentials and the need for reskilling programs to bridge the digital skills gap, particularly in industries such as smart cities and e-learning (ADB & LinkedIn, 2022).

The report focuses on the skills gap in the Asia-Pacific region, particularly emphasizing the increasing demand for digital and soft skills. It identifies that 86 million regional workers must be upskilled or reskilled to keep pace with technological advancements. Advanced digital skills are viewed as a significant differentiator in the labour market, with a high demand for AI, cloud computing, and cybersecurity expertise. The report notes that Indonesia, along with other Southeast Asian countries, is facing a significant digital skills gap, particularly in roles related to technology-intensive industries. The rise of green skills, driven by sustainability trends, is also discussed, with companies scrambling to attract talent to support their green transformations. Moreover, the report emphasizes the need for targeted upskilling programs, such as online courses and micro-credentials, to bridge the skills gap and prepare workers for future job demands (The Economist Group, 2023).

In summary, the freelance platform market in Indonesia is experiencing significant growth, fuelled by increasing digital penetration and the rise of the gig economy. However, challenges such as market saturation, intense competition, and payment delays remain obstacles for freelancers. Despite these issues, opportunities for innovation, niche services, and improved user experiences are abundant. The government's initiatives, including the Freelancer Support Program and tax incentives, aim to address these challenges and further develop the freelance ecosystem. Additionally, the growing demand for digital skills and the increasing importance of reskilling programs, particularly in technology and sustainability sectors, will be key to bridging the skills gap and ensuring a robust freelance workforce in the future. By embracing these opportunities and overcoming challenges, Indonesia's freelance market can continue to thrive and contribute to the country's economic development.

3 Freelancing in Europe and Asia: Between Similarities and Differences in the Supply of the Global Labour Force

3.1 Geography of freelancing: How similar are Europe and Asia?

While the labour force was traditionally fixed to a certain location and shaped by national (labour institutions), with the rise of platform work and job tasks that could be executed online, geography became a less stringent factor. This fact reflects the huge flexibility and inclusiveness of digital labour markets, which are open to individuals from every corner of the world. A significant part of the labour supply comes from European and Asian countries, since 12 out of top 15 countries ranked according to the global share in freelancer workforce are coming from these two continents. Moreover, in the period between 2017 and 2024, Asian countries are dominating the global supply of the labour force, with three countries (India, Bangladesh and Pakistan) accounting for 53.5% of the global supply, while only three European countries are in this club – Russia, Ukraine and Serbia (Stephany, Kässi, Rani, & Lehdonvirta, 2021). The dominance of Asia is evident in our sample with a share of 43.3%.

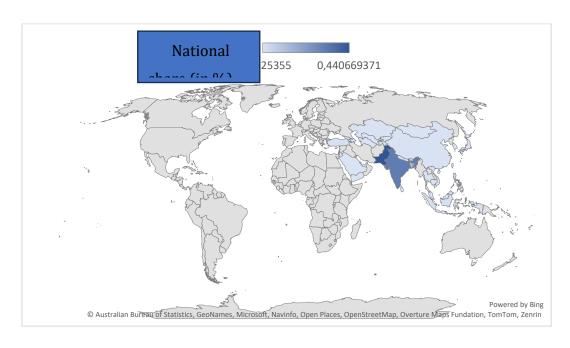


Figure 23. National shares of top-performing freelancers in Asia.

Source: Own elaboration.

Comparing Figure 23 and Figure 24, describing the structure of the labour supply in Asia and Europe, some clear differences emerge, sometimes more, sometimes less pronounced. First, the dominance of Asia is obvious. There is a 5.3 times greater number of top workers coming from Asia than from Europe. This finding is in line with the fact that several Asian countries dominate in the supply of workers in web-based online labour platforms (Stephany, Kässi, Rani, & Lehdonvirta, 2021; Kässi & Lehdonvirta, 2018). There are multiple reasons for that. Second is the size of the population spurred by the overall prolonged period of economic and technological development, with rising access to digital infrastructure and education, enabling millions of new workers to offer their knowledge globally. From the perspective of firms searching for freelancer services, cost advantages are of crucial importance, since the wages, per hour as well as for fixed jobs, are considerably lower in Asian countries than in European countries. For example, in our sample mean hourly rate for Asian freelancers is half of that for European workers, i.e. 22.1 US\$ compared to 44.1 US\$. However, from the perspective of freelancers, these (relatively low) wages are still higher than those which can be achieved on the conventional labour market.

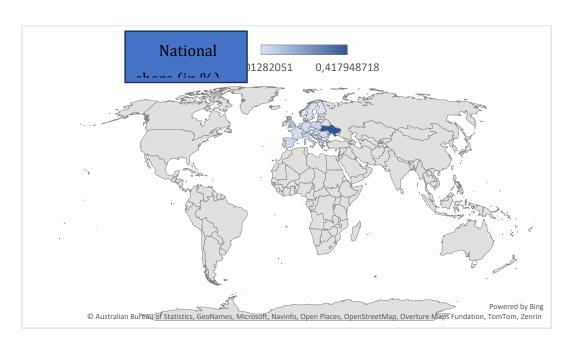


Figure 24. National shares of top-performing freelancers in Europe.

Source: Own elaboration.

Comparing the shares of European countries within Europe versus Asian countries within Asia, the distribution of workers is more equal within Europe than within Asia. Namely, outside India, Bangladesh and Pakistan, no other nation has a highly developed freelancer market, since the market shares of other countries are not going over 1% of the global workforce. Contrary to that, there are 15 European countries which are having a share in the population of top workers of over 1% (see

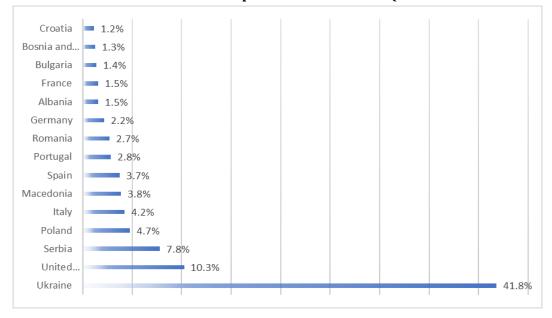


Figure 25). The range goes from 1.2% for Croatia to a strong dominant position of Ukraine (41.8%)¹⁶. Moreover, top-performing freelancers in our sample are present in 33 out of 38 European countries (Russia excluded), while in Asia, it is the case with 38 out of 48 countries. This fact additionally suggests that freelancing is more developed and more equally distributed across Europe than Asia, reflecting better infrastructural and broader economic and educational conditions in which the labour supply is formed and developed.

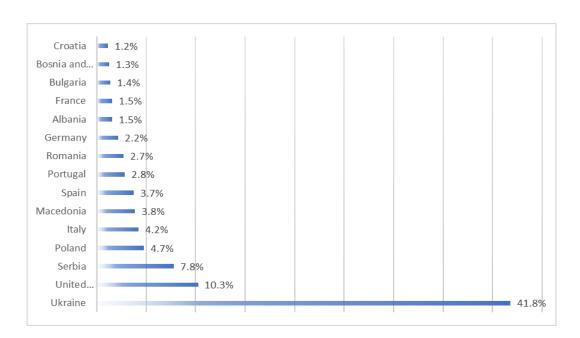


Figure 25. Top 15 freelancer countries in Europe according to the share of topperforming workers on Upwork.

Source: Own elaboration.

While Asia is dominating the global landscape, Figure 26 illustrates another important issue. Namely, we observe the population of top-performing workers in Europe and Asia by the year they started their careers. There is no significant difference between Europe and Asia, since most of the freelancers began their careers

 $^{^{16}}$ An important fact for this distribution of freelancers in Europe is the exclusion of Russia from the online labour market, since Upwork suspended operations in Russia and Belarus (Upwork, 2022).

between 2019 and 2022, 51.3% in Asia and 42.9% in Europe. This dynamic suggests that platform work has become more and more popular over time, showing unprecedented expansion at the end of the second decade of the XXI century. However, being the top-performing worker globally requires proven experience and excellence for a prolonged period, and it is only exceptionally achievable in the short run, since only 0.03% of workers in Asia and 0.27% of workers in Europe achieved it in a period within a year.

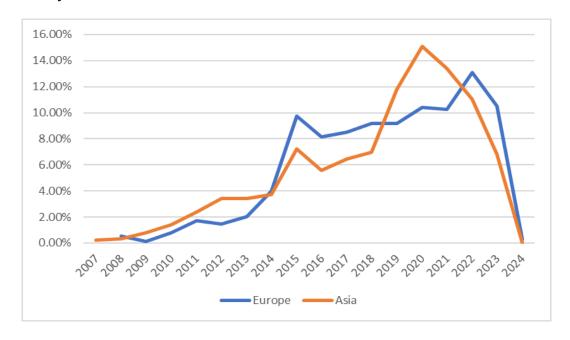


Figure 26. Experience across continents over the years.

Source: Own elaboration.

Additionally, a relatively greater share of workers in Europe (within the European population) who started their careers before 2018, compared to Asian workers (within the Asian population), may imply that it is easier for European workers to keep up with the global competition. This could partially be dependent on the more appropriate set of skills and knowledge they possess, enabling them to be more competitive. Additional insight, common to both continents, refers to the obvious challenges freelancers face over time to stay within the cohort of top-performing workers. Namely, as time passes by, fewer workers stay in this group. Multiple explanations may hold for this regularity. However, several seem especially plausible and important. One is the greater competition that they face over time as a result of the increased inflow of new workers. It may further imply that the skills and knowledge of older workers become less

marketable, while only those workers with continuous activities toward upskilling and reskilling may stand the competitive pressures. Additionally, multiple problems freelancers are facing, from job insecurity to balancing work and personal life (Akhmetshin, Kovalenko, Mueller, Yumashev, & Khairullina, 2018), could make freelancers' careers less attractive in the long run, as most of them are using labour platforms as a transitional mechanism in searching for more adequate work options, on the conventional labour market or other alternative work arrangements. Additionally, since there are only a few freelancers who succeed in reaching top-rated status in the short run and since the younger population dominates, parental support may be decisive in helping newcomers to better cope with costs and risks and achieve a successful career as freelancers (Martindale & Lehdonvirta, 2023).

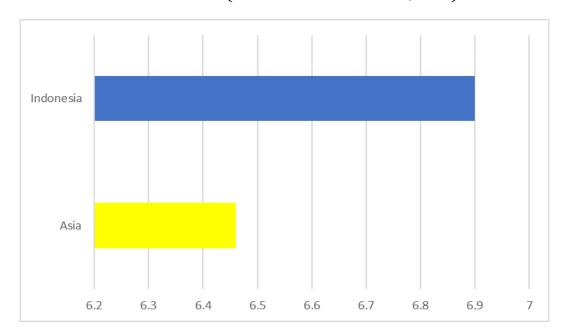


Figure 27. Average experience of freelancers in Asia.

Source: Own elaboration.

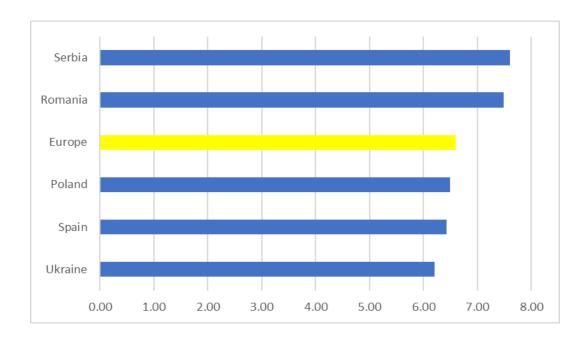


Figure 28. Average experience of freelancers in Europe.

Source: Own elaboration.

Contrary to previous insights, if the average years of experience on the platform across the countries on both continents is observed, Asian workers (Figure 27) tend to be more experienced than European ones (Figure 28). The data presented suggests that platform work developed from the beginning at the same pace in Europe and Asia. But the difference is not on a large scale. The average experience in Asia is 6,5 years, while the European workers have 6.6 years of experience – a difference of almost 4 months. There is, however, important differences within project countries in Europe. Serbia and Romania have the most experienced labour force, with considerably higher values from the overall European average, while freelancers in Indonesia have 5,5 months more experienced workforce compared to the continental average.

3.2 Which professions are dominating the digital labour market landscape?

Global business practices accompanied by strong and omnipresent technological advancements revolutionised the world of work in profound and disruptive ways. While earlier epochs were permeated by offshoring, where businesses were motivated by the lower cost of low-skilled labour, the emergence of freelancing marked a turning

point where every kind of job/service, whether low- or high-skilled, can be performed from remote places and almost any corner in the world. Moreover, the rise of digital labour platforms, accompanied by an expansion of digital technologies and the breakthrough of ICT in every domain of business operations, made available those services not only to big multinational corporations but also to small businesses and individuals (Beerepoot & Lambregts, 2016).

Following the methodology developed by the Oxford Internet Institute (Stephany, Kässi, Rani, & Lehdonvirta, 2021), the occupational structure of labour supply within both continents is presented in Figure 31. However, since Asia has 5,1 times greater number of freelancers in the algorithmically determined list of 10,000 top-rated freelancers in the world, it also has a larger population in each profession. These differences are especially huge in data entry and administrative services, where Asian workers outnumber European peers by more than 53 times, i.e., while only 5 workers from Europe succeed in reaching top-rated status in this profession globally, there are 268 Asian freelancers with this status. This finding is rather expected, since this profession is the least paid one, and the advantages of the Asian market are not only the size and corresponding pool of talents, then also the cost effectiveness for businesses. Contrary to this, the smallest difference occurs in the writing and translation and multimedia and creative services, where Asian workers are 2,6 times more numerous than European. This finding, as well, is not surprising, at least for writing and translation, since the bulk of transactions is happening in English and since the dominant part of job offers is coming from Western countries, especially the USA.

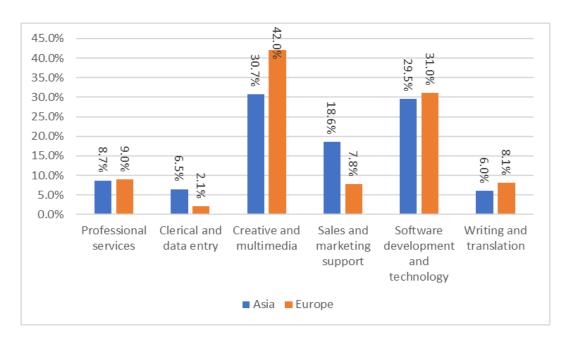


Figure 29. Occupational structure in Asia and Europe.

Source: Own elaboration.

Observing the data presented in Figure 31, it is obvious that there is a similarity in the occupational structure of the market. Namely, in both continents, creative and multimedia and software development and technology professions dominate the occupational landscape. However, it appears that the domination is more pronounced in Europe, since 74 out of every 100 freelancers come from one of these two professions, while in Asia, it is the case for 57 out of 100. These figures witness a greater concentration of more technically advanced professions in the European market, with an implication for its greater exposure to exogenous shocks. For example, in a case of external disturbances which would produce an unexpected fall in demand for those services, the European market would be much strongly affected than the Asian. Contrary, since these services are, on average, better paid, the European market is much better accommodated to the current demand conditions and needs of the global business community for digital services.

While in the professional services, software development and technology, and writing and translation, comparable shares of freelancers emerge in both continents, in the clerical and data entry freelance population takes a higher share in Asia compared to Europe, i.e., 6,5% compared to 2,1%. In this regard, the European market is more aligned with general technological trends, since jobs in this occupation are

more exposed to the risk of technological substitution, i.e., AI-based solutions are rapidly making a lot of jobs in this occupation obsolete, reducing considerably the demand for these services. Although the impact of AI on different occupations is ambiguous, where different studies reach even divergent conclusions (Ghosh, Ghosh, Roy Chowdhury, & Ganguly, 2025), most findings, however, underline disproportionally higher exposure to workers who do routine jobs (Zarifhonarvar, 2024), to which clerical and data entry jobs fit the best. Similar findings hold for the writing and translation profession. For example, the introduction of ChatGPT in November 2022 produced a profound effect in this domain, reducing the demand for text-related services disproportionately (Liu, Xu, Nan, Li, & Tan, 2023). The introduction of different AI applications not only reduced employment and earnings, then also those providing top-quality services disproportionally affected (Hui, Reshef, & Zhou, 2024). However, since the demand for digital services freelancers are providing is growing over time, following the accelerated rates of digitalisation (Lenaerts, 2023) and more and more AI-skewed demand for services freelancers are providing across economic sectors (Liu, Chen, & Lyu, 2024), the decisive aspect for the future of freelancing is upskilling and reskilling toward more advanced set of (technical) skills incorporating different AI competencies, which is a prerequisite for freelancer career development across all occupations, not only those currently exposed to substitutions by AI application.

Relatively big differences (greater than 10 p.p.) in professional structure between the European and Asian markets emerge in two professions. Namely, creative and multimedia services are proportionally more represented in Europe than in Asia – 42% versus 30.7%. Relatively high shares in creative and multimedia services could be, at least, partially explained by the tendency of workers in this sector to be more frequently self-employed. This is especially relevant for Europe, since more than 30% of workers in the creative sector are self-employed, compared to a little more than 10% for the wider economy (World Economic Forum, 2020). Contrary to that, almost 1/5 of the freelancers in Asia are employed in sales and marketing, reflecting the high demand for these services that is present in the Asian region (Abad, 2022), as well as unprecedented growth, attracting more and more businesses to this region, which induces high demand for specialists in this occupation.

Look at the data of the project countries reveals a bit different picture (Figure 30). Namely, in Asia, Indonesia has relatively comparable shares with the average for the continent across four professions: professional services, clerical and data entry, and to a lesser extent, software development and technology and writing and translation. Two professions in which Indonesia deviate considerably from the continental average are sales and marketing services and creative services and multimedia. In the sales and marketing sector supply of labour force in Indonesia is by far smaller (5,1%) than the share of this profession in the Asian continent (18,6%). Contrary to that, there is an extraordinarily high degree of specialisation in creative and multimedia services, in which almost every second top-rated worker in Indonesia is active, which is in line with some previous studies (Faisal, Sucahyo, Ruldeviyani, & Gandhi, 2019). Moreover, these services are in large urban areas, where better access to advanced technology, education, economic resources, and soft infrastructure exists and where the crossfertilisation of ideas is much more fruitful (Fahmi, Koster, & Van Dijk, 2016). Opposite to that, a low share of freelancers in sales and marketing (only 5,1%) points out the specificity of the Indonesian freelancer's professional landscape, pointing out as well to a specific pattern of specialisation in digital professions (compared to average tendencies in Asia) present in Indonesia.

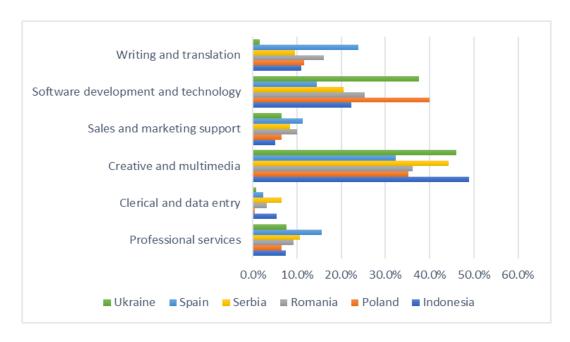


Figure 30. Structure of professions in project countries.

Source: Own elaboration.

The professional structure in European countries covered by the project is characterised by pronounced variation between the countries when the share of individual professions in the overall professional structure in an individual country is observed. In this regard, Spain has an unusually high share of workers (compared to average values for Europe) in professional services, sales and marketing and writing and translation. While a relatively high share of workers in professional services and sales and marketing could be an indicator of sophisticated skills present within a considerable part of the workforce. Moreover, these could be an indicator that an overproportional part of freelancers in Spain tend to come from privileged backgrounds, since there is a higher probability that individuals with more social and human capital tend to choose exactly occupations in professional services and sales and marketing (Martindale & Lehdonvirta, 2023). Contrary to that, since Spanish is the second most widespread language in the world, it leads to relatively stronger demand for different services within this profession. While Poland has a high share of freelancers in software development and technology, and Ukraine in creative services and multimedia, Serbia has a disproportionate number of workers in clerical and data entry. It means a relatively disadvantaged position for Serbia, although it is relativized by the small number of workers in this profession and, although higher than average, still a small share. Romania is a country whose professional structure of the freelancer market reflects the structure of the market in Europe.

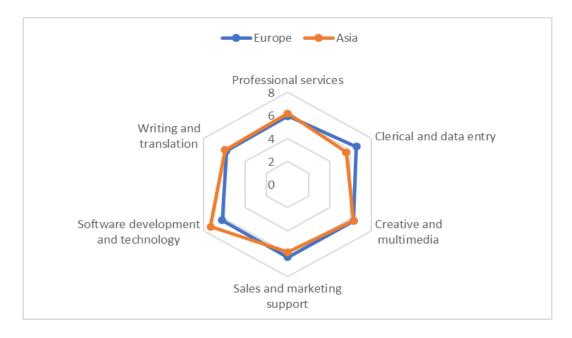


Figure 31. Freelancer's experience across professions in Europe and Asia.

Source: Own elaboration.

Although the professional structure is relatively resistant to greater changes over time (Anđelković B., Jakobi, Ivanović, Kalnić, & Radonjić, 2024), given the volatility and digital nature of this environment, dominance of short-term employment relationships and heterogeneity of workers and their skills, employers and evolving demand in these markets, it is unclear how careers of freelancers might unfold (Seifried, Jurowetzki, & Kretschmer, 2020) and to what extent digital professions are boundless, making professional structure more "fluid" and additionally prone to changes. Moreover, the continuous development and rapid growth of digital labour markets, along with the increasing number of freelancers and businesses, coupled with further technological advancements, are exposing established structures to potentially change more over time. However, the mobility of workers between categories is generally limited, so the market is stratified in a relatively stringent way (Martindale & Lehdonvirta, 2023), so any future more significant changes in professional structure would be caused by dramatic shifts in demand (technologically or economically induced) or/and by inflow of new workers or outflow of old workers with significantly different professional

profiles disproportionally diverging from established structures. Maybe the best evidence for the relatively resistant structure of professions is the fact that creative and multimedia services and software development and technology were the most popular profession ten years ago (Popiel, 2017), and no important departure from this fact has happened up to date.

Observing average experience within individual occupations in both continents, there is no unambiguous regularity. However, this finding only confirms a previous statement that reaching the top-performing status requires considerable time. In other words, one who wants to be a top-performing worker must make, above sophisticated skills and knowledge globally demanded, a clear choice toward developing a freelance career and be ready to invest considerable resources along this path. Despite the absence of generalised regularities regarding the relationship between experience levels in different professions, Asia has the most experienced workforce among the top-rated workers in software development and technology (7,4 years on average) and the most "inexperienced" workforce among workers in clerical and data entry services (5,6 years on average). In these two professions is the highest difference between continents: in the case of software development and technology Asian workers are, on average, almost 14 months more experienced than European workers. Contrary to this, European workers are, on average, almost a year more experienced than their Asian competitors in clerical and data entry profession. Since the differences are not huge and systematic between the continents, they do not imply the existence of structural barriers that are geographically determined. In other words, the same prerequisites, at least observing the time needed to develop a successful career in the online labour market, hold, whether individuals are coming from Europe or Asia. This is additionally true, since the differences are negligible in the other four professions, ranging from 11 days in creative and multimedia services to 5,5 months in sales and marketing services, both in which the European workers have more experience. It additionally means that the existence of global online labour markets attenuates geography-induced access to work, in a similar way that those markets attenuate socially-based differences in the selection of workers by employers (Martindale & Lehdonvirta, 2023).

Differences in experience levels are not significant if only project countries are observed and do not diverge a lot from the average values in both continents. The most experienced workforce is in Serbia and Romania – 7,6 and 7,5 years, while the most inexperienced workforce is in Indonesia and Ukraine – 6,1 and 6,2 years. However, on the level of professions across project countries, there are a few exceptions. The most experienced workers in project countries are in data entry and clerical services in Romania, with an average experience of 8 years and 7 months, while the least experienced workforce is in sales and marketing in Indonesia, with an average experience of 4 and a half years. These differences are considerable. In a case of professionals in clerical and data entry occupation in Romania, average values potentially indicate, among other things, that once freelancers became competitive globally in this (the least sophisticated) profession, they tend to stay, pursue and, more importantly, they can do it, a freelancer career more frequently than in other professions. Still, the pattern of lower-skilled jobs being replaced by those requiring a more advanced set of skills and technical knowledge is clear (Charles, Xia, & Coutts, 2022), is exerting pressure on them to find ways to survive (more cost-efficient) competition from other countries and automation pressures new (AI-based) technology solutions are causing. Contrary to that, a relatively low level of experience for freelancers in the sales and marketing sector in Indonesia could potentially be a signal for challenges, whether internal (e.g., upskilling) or external (e.g., volatile demand), that they face and have trouble coping with them in an efficient way.

3.3 Freelancing through the lens of gender disparities: From the theory of equal opportunities to inequality in reality

Digital advancements not only revolutionised the way people work but also created new opportunities for the greater inclusion of different societal groups traditionally less represented in the conventional labour market, especially women. However, research on digital labour markets points out that gender distribution is skewed in favour of male workers, i.e., that male platform workers outnumber their female counterparts. Different surveys and studies point to considerable gender differences in

the online labour markets. For example, Stephany *et al.* (2021) suggest that women's participation in the online labour market is 39% in the workforce globally, while other studies, such as those of Payoneer (2023) point to a bit lower share – 36%.

The second aspect is that there are big differences between the regions, reflecting exactly different cultural, educational and social conditions in different societies. For example, in the already mentioned study of Payoneer (2023) the most equal region is North America, where the 50% of the workforce are women, followed by Latin America with a share of 43%, while African and Asian countries are having the lowest share of women participation – 24% and 25%, respectively. The main characteristic in Europe refers to the fact that there are huge variations within the continent. While in south and eastern European countries the share of women is, on average, even higher than in Latin America (43%), the average for the rest of the European countries is comparable to levels in Asia and Africa – 27% of the freelancer workforce are women. The newest data from the Oxford Online Labour Index largely confirms these findings.

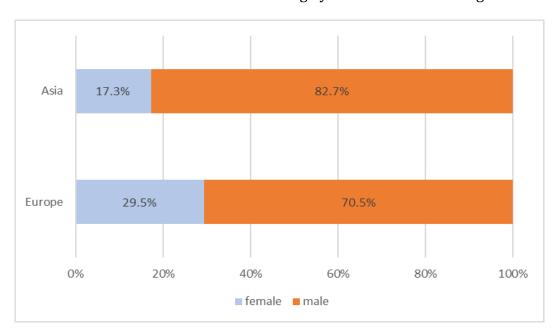


Figure 32. Gender structure of digital labour market(s).

Source: Own elaboration.

Another line of the divide is between developed and developing countries, where higher equality is present in the former. For example, the USA has a completely balanced gender structure of the labour supply (50,7% are female workers), Germany (43,8%) and the UK (42,2%) are very balanced, while in large developing markets, like

India (27,4%) or Pakistan (15,2%), participation of women is much lower (Stephany, Kässi, Rani, & Lehdonvirta, 2021). However, evidence shows that the gender gap has narrowed in recent years (ILO, 2021), although without remarkable leaps, at least in some European countries (Anđelković B., Jakobi, Ivanović, Kalnić, & Radonjić, 2024).

Apart from the inequalities within the general population of freelancers, gender distribution within the top-performing workers in our sample is even less favourable than it is the case with the figures for the overall population in previously mentioned studies. Nonetheless, equality between the sexes is much higher in Europe than in Asia (Figure 34), which corresponds to the findings that Europe is a more equitable continent. This result is in line with the claim that the rates of female participation on platforms are considered higher in industrialised countries than the rates in developing countries (ILO, 2021), because the majority of countries in Europe are industrialised, while in Asia, the level of economic development is considerably lower.

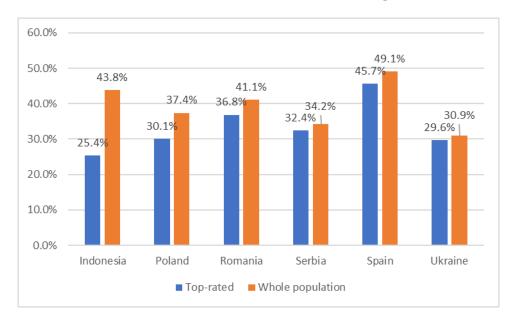


Figure 33. Share of female freelancers within the overall and the top-rated population.

Source: Own elaboration.

If the gender distribution in project countries¹⁷ is observed, figures reveal the fact that becoming a freelancer is not easy for women for many reasons, but it is even harder to reach top-rating status. However, the situation is quite different for different countries. In Ukraine and Serbia, it seems that there are the fewest barriers for switching from an "ordinary" freelancer female worker to a top-rated worker status. In other European countries, the odds for reaching top-rated status are lower, and the lowest values are in Poland. Indonesia is an interesting example. Although Indonesia has the lowest share of women in the project countries' sample, it is still a country in Asia that has an unusually high number of female workers in the overall population. As such, it has one of the most equal gender distributions in the developing world.

Women are participating less in the online labour market, while the differences regarding the experience level are not pronounced. Namely, globally, women have slightly above 6 years of experience, while men have on average six and a half years. The situation is not much different at the continental level. In Europe and Asia, women have a bit less experience than men, eight and a half months in Europe and 5 months in Asia. Small differences in this aspect suggest that developing a highly successful freelancer career requires equal resources, at least when the time is in question, from both sexes. On the level of project countries, the results confirm this finding, although there is some variation. The smallest difference in experience between genders is in Serbia, less than 3 months, while in Poland, men have more than a year of experience compared with women.

Looking for experience into gender structure on the level of professions in project countries, results are more diverse, but generally not diverging substantially from the main trends. The most experienced workforce within the female and male population is in Romania in the creative and multimedia services, with more than 9 years for men

¹⁷ We observe gender structure within the whole population and top-rated workers from our sample in the project countries. The data for the whole population is taken from the Online Labour Index (OLI) (Stephany, Kässi, Rani, & Lehdonvirta, 2021), while the data for top-performing freelancers is from our sample. This approach could be challenging, since our sample is based on one platform, and the OLI is based on the ten most popular platforms. Nonetheless, we partly resolved this by comparing data for the whole population and top-rated workers for Romania, Serbia, and Ukraine from Andjelkovic *et al.* (2024) and found that our data depicts correctly the top-rated population, while Upwork data from Andjelkovic *et al.* (2024) depicts correctly the gender structure of the overall freelancer population by Stephany *et al.* (2021).

and almost 8 and a half years for women. However, more interesting results are obtained by observing the minimum values across professions and on a gender level. Specifically, Indonesia has the least experienced women freelancers in the area of software development and technology (with almost 4 years and 2 months of average experience), suggesting that a small group of Indonesian women in software and development are just lately integrating into the global labour market. An even more interesting situation is with Polish male workers in creative and multimedia services, who have only two and a half years of experience, suggesting that they have recently discovered possibilities offered on the global labour platforms, which may be caused by diverse and rich opportunities these workers have on the Polish or European market. The results are even more interesting since creative and multimedia jobs are the second most popular occupation among men in Poland, comprising more than ¼ of the male population. Alternative or supplementary interpretation may refer to the relatively low competitiveness of Polish workers in multimedia and creative services, which is rather less plausible or of less importance since we haven't found any evidence, in other research or our data, that would support such interpretations.

3.4 How much are freelancers paid?

Pay and working conditions in this online labour market vary significantly across continents (Payoneer, 2023; ILO, 2021; Stephany, Kässi, Rani, & Lehdonvirta, 2021; Upwork, 2025), even across the countries within the narrow geographic subareas (Anđelković B., Jakobi, Ivanović, Kalnić, & Radonjić, 2024), between different types of work (Kässi & Lehdonvirta, 2018; Martindale & Lehdonvirta, 2023) and gender characteristics (Litman, et al., 2020; Foong, Vincent, Hecht, & Gerber, 2018; Adams, Hara, Milland, & Callison-Burch, 2025). In general, a divide is clear and twofold: more skilled types of work (professions) tend to be better compensated (Martindale & Lehdonvirta, 2023) and workers from less developed regions tend to earn less compared to workers from industrialised countries (Datta, et al., 2023).

Still, despite the discrepancies in wages, an important trend is their diminishing importance, though not too remarkable, over time. In this regard, Lehdonvirta (2022, p. 80) points out that:

"as time passed,... (workers) from both rich and poor countries obtained higher rates as their experience grew—but for workers in poorer countries, this effect was in some cases noticeably faster. For instance, an average graphic designer in the United States earned about \$20 per hour, but one standard deviation's worth of additional project experience was associated with an increase of only 0.1 percent in their pay rate. Designers in the Philippines earned much less to begin with—about \$9 per hour—but their gain from additional experience was over 5 percent. Indian designers likewise earned about \$9 per hour but gained over 8 percent from additional experience. As a result, the more experience these workers racked up, the narrower became their pay gap with workers from rich countries."

While monetary incentives and different causes of unequal pay across geographies, professions or gender are broadly researched in the context of freelancing, less research has been done in the domain how important these differences are within the population of the top-performing workforce. Comparing the differences in hourly wages between Europe and Asia for top-rated freelancers, the most striking point is the fact that the best European freelancers have, on average, 68,9% higher hourly wages than the best freelancers in Asia. These differences are much higher than those found by other studies while observing the overall population of freelancers (Kempton, 2024). However, an important part of the explanation for these differences may be related to the reason that our sample consists of data from only one platform instead of multiple, that it is grounded on a different methodology, i.e., web scraping instead of surveys, and that we observe "demanded" instead of "charged" price for hourly work. Still, independently of how much the results diverge from the real values, the demanded wage is a good proxy for the real hourly wages, previously used by many studies (Litman, et al., 2020; Foong, Vincent, Hecht, & Gerber, 2018; Andelković B., Jakobi, Ivanović, Kalnić, & Radonjić, 2024; Kässi & Lehdonvirta, 2018; Stephany, Kässi, Rani, & Lehdonvirta, 2021), and indicates that there is a long path toward more equal earning outcomes between Europe and Asia. Supplementary explanation may be linked

to the different environments and broader working conditions for European and Asian freelancers. Namely, recent qualitative studies suggest that workers with better savings, safety networks, and alternative sources of income can afford to pick and choose their gigs on a platform (this may hold for the majority of European freelancers), whereas less privileged workers who depend on the platform for their day-to-day needs may experience lower wages (Martindale & Lehdonvirta, 2023).



Figure 34. Average hourly wages in Europe and Asia.

Source: Own elaboration.

On the (project) country level, the data points out, in another way, the differences between Asia and Europe. Expectedly, the average hourly wage in all partner countries is higher than the average hourly wage in Indonesia. However, the variation is remarkable, since the hourly wages in Indonesia are 53,4% lower than in Serbia and 82% lower than in Poland. This is, nonetheless, under the European influence of numerous factors, and one of the main factors is the different professional structure of the labour supply at national markets. Interestingly, if we compare the data we obtained (for top-rated workers) with those of Andjelkovic *et al.* (2025), it seems that the previously underlined claim of Lehdonvirta (2022) doesn't hold, at least when the best workers are observed. Namely, while top performing freelancers have 10,2% higher hourly wage in Romania than in Serbia, the difference in hourly wages is lower

in the overall population of gig workers, i.e., freelancers in Romania have 7,5% higher wages than the freelancers in Serbia.

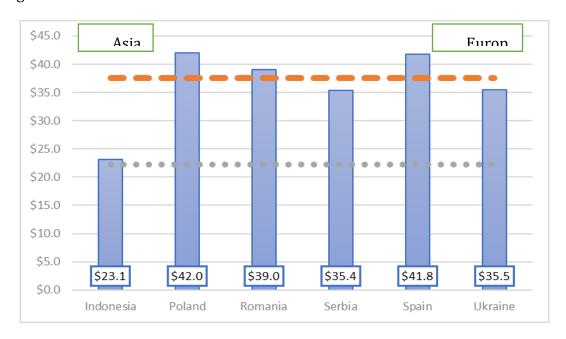


Figure 35. Average hourly wages in project countries.

Source: Own elaboration.

A more nuanced picture emerges when hourly wages are observed at the level of different professions (Figure 35). One constant remains: across all professions, hourly wages in Europe are higher than those in Asia. Everything else is different. Across four professions – professional services, clerical and data entry services, multimedia and creative services, and software development, wage gaps are similar and comparable, where European workers have, on average, 51,6% higher hourly wages than Asian workers. Contrary to that, Asian workers have relatively high hourly wages in the writing and translation profession, since European wages are 14,3% higher. Although this difference is not small, it is much smaller than in other professions when comparing European and Asian freelancers. Contrary to that, European freelancers in sales and marketing obtain disproportionately higher hourly wages than those in Asia. In other words, while European freelancers obtain, on average, 43 US\$ per hour, freelancers in Asia have only 14,5 US\$, i.e., a hourly wage of Asian freelancers in sales and marketing is almost 3 times lower than that of those in Europe.

The tendencies present at the continental level mirror, to a large extent, those in the population of top-rated workers in project countries. In all European countries across all professions, wages are higher than in Indonesia¹⁸. This is in line with the general finding that Asian workers are more cost-competitive than European workers. Still, differences vary considerably at the level of individual professions. For example, Ukrainian and Serbian freelancers in clerical and data entry services have only 7,5% and 13,6% higher hourly wages than the Indonesian workers.¹⁹ Contrary to this, the biggest difference occurs in sales and marketing, where Indonesian workers are 73,7% cheaper than the Ukrainians (as the freelancers with the most favourable hourly wages) and even 130,2% cheaper than the Spanish (as ones with the most expensive price per hour in our sample).

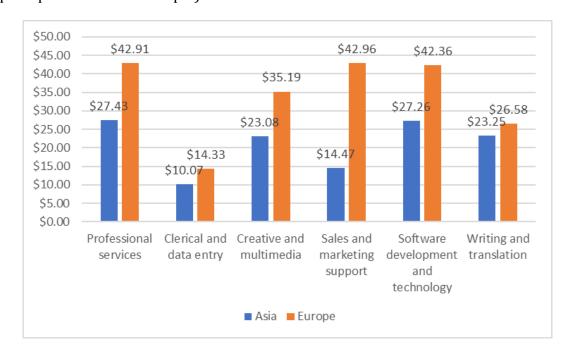


Figure 36. Hourly wages across professions in Europe and Asia.

Source: Own elaboration.

Comparing freelancers across professions in project countries with the average values for the continent they are coming from gives some insights into the

¹⁸ Although Indonesia has the lowest hourly wage, earnings of freelancers in Indonesia are still competitive and attractive compared with the other alternatives (Faisal, Sucahyo, Ruldeviyani, & Gandhi, 2019).

¹⁹ Contrary to that, Polish workers in the same profession are outliers and attain even 2,4 times higher hourly wages than Indonesians. This could be explained that, although active in the least sophisticated profession, their number is small (only 5 workers in the sample) and that they are highly specialised, combining advanced techniques and/or that they are occupying market niches in which the competition is limited, allowing them to require higher hourly wages.

competitiveness of freelancers in project countries. Namely, Indonesian workers are more competitive in professional services, creative and multimedia services and writing and translation, since the average hourly wages in these professions in Indonesia are lower than the average hourly wages in Asia. In a case of European partner countries, Spain is the only project country where the average hourly wages are higher across all professions compared with the average values for Europe. Contrary to that, Ukraine has the most cost-effective labour force, since across all professions, freelancers in Ukraine demand lower hourly wages compared with the continental average values. In this regard, the Serbian workforce is also quite competitive, since freelancers in Serbia, except those in creative and multimedia services and software development and technology, require as well lower wages than it is the case, on average, in Europe. An interesting finding is the fact that all the project countries, except Spain, are competitive in writing and translation. This, however, could be explained by the fact that professionals in this occupation in the most developed countries in Europe demand, on average, much higher prices. This is, at least, part of the explanation, since German (64,2 US\$) or British (52,3 US\$) workers doing writing and translation work demand very high hourly rates.



Figure 37. Hourly wages across professions in project countries.

Source: Own elaboration.

While there is clear evidence that the wages in project countries are the lowest in the least sophisticated profession, i.e., in simple jobs usually related to routine work, which corresponds to findings of other studies (Anđelković B., Jakobi, Ivanović, Kalinić, & Radonjić, 2025; Teutloff, Stenzhorn, & Käsi, 2025; Braesemann, et al., 2022), the situation is less clear in the case of the most highly paid professions. Namely, professional services are the most paid for profession in online freelancing (Martindale & Lehdonvirta, 2023), which our data (Figure 39) for Europe and Asia confirms. However, upon examining the figures for project countries, this finding is not unanimous. Moreover, this is the case only in Romania and Ukraine, while in other project countries, the most paid profession is software development and technology. One of the main explanations for it is the fact that professional services contain the highest diversity of jobs²⁰ that reflect considerably different levels and a set of skills required for a wide variety in complexity of different jobs, which consequently leads to a huge spread in wages²¹.

An important dimension regarding earnings refers to the gender differences. They are well documented in existing literature (Rodríguez-Modroño, Pesole, & López-Igual, 2022; Foong, Vincent, Hecht, & Gerber, 2018; Graber, 2022; Munoz, Kim, O'Neil, Dunn, & Sawyer, 2024) and redetermined by our findings at different levels. Generally, toprated women are paid globally less than men – an average hourly wage for men is 13,3% higher than for women. However, the pay gap is less pronounced in Asia than in Europe. In the former, men have 22,2% higher hourly wage, while in the latter the pay gap is 18,6%. Moreover, women earn less than men in every one of the project countries. Still, an important alignment with the continental trend is the fact that the gender pay gap has the lowest value in Indonesia compared with all European project countries. However, in Europe, there is obvious diversity. Namely, Poland and Spain are the only countries where the pay gap is over 30%, while in Ukraine, there is the lowest gender pay gap (16,4%). Observing all the project countries, a general

²⁰ For example, professional services encompass different, among other things, accounting, architecture, business services, consulting, legal or tax services (Martindale & Lehdonvirta, 2023; Lehdonvirta, 2022).

²¹ This is true if our data are observed. For example, the standard deviation for hourly wages in professional services (28,9) is the highest one, and it is 3,4 times higher than the one for clerical and data entry services.

conclusion is that there is almost perfect correlation: the more developed a country is, the greater the gender pay gap it has.

Our data on top-rated freelancers are in line with the pay difference found within the general population (Anđelković B., Jakobi, Ivanović, Kalinić, & Radonjić, 2025). It means that becoming the top freelancer doesn't lead to a decrease in the pay gap between the sexes. Lower hourly wages of women, independently of whether they are "average workers" or top-rated, could be explained by numerous factors – from the tendency of women to search for more flexible work arrangements, higher concentration in less paid professions, greater propensity to work part-time, up to different negotiation patterns and more modest expectations (Foong, Vincent, Hecht, & Gerber, 2018).

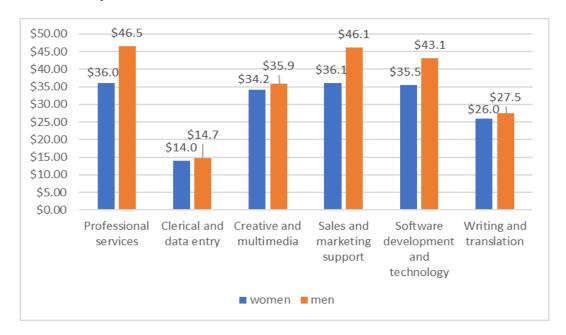


Figure 38. Wage differences across professions in Europe.

Source: Own elaboration.

Observing differences between the sexes across various professions at the continental level reveals interesting insights. However, a univocal conclusion is that men are better paid across all professions. In Europe, in three professions, there is a very small pay gap. An average hourly wage is only 5% higher for men than for women in creative and multimedia services, 5,4% in clerical and data entry and 5,8% in writing and translation. In the rest of the professional spectrum, the gap goes over 20%, i.e., highest in professional services (29,1%) and sales and marketing (27,8%), while a bit

lower, although pronounced in software development and technology (21,3%). The situation in project countries, however, varies considerably. There are even professions in some countries in which women earn more than men, although these cases are not numerous. In writing and translation, Polish and Romanian female workers have remarkably higher hourly wages than men. Wage differences in favour of women are 12,3% in Poland, and in Romania, surprisingly, 20,9%. Polish women earn, on average, more than men in clerical and data entry services, where their hourly wages are 13,3% higher than those of men. The same is true for Serbia, where women doing data entry jobs obtain, on average, 13,9% than men. However, the pay gap varies tremendously across professions and countries. The range goes from equal pay for both sexes in creative and multimedia services in Romania, over moderate differences in the same sector in Spain (2,6%) or Ukraine (4,4%), to much more pronounced differences in marketing (94,2%) and sales or software development and technology (56,9%) in Serbia or professional services in Spain (58,5%). The pay gap is present in most cases, while there are substantial differences on the country level, reflecting, at least partly, different educational, economic and technological circumstances in which men and women choose to pursue a freelance career.

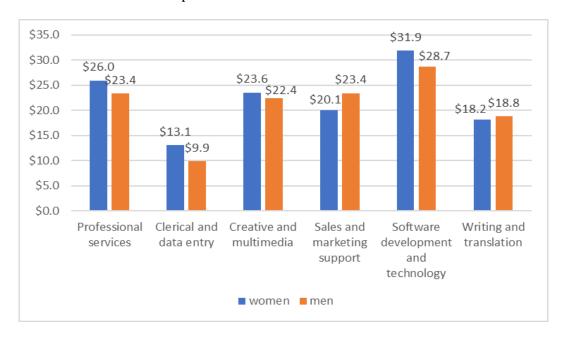


Figure 39. Hourly wages across professions and genders in Europe.

Source: Own elaboration.

A look at the wage differences in Asia leads to a similar conclusion to those in Europe. An important difference consists in fact that women, on average, have higher wages in professional services (7,9%). Contrary to that, the pay gap is quite pronounced in favour of men in the rest of the professions. The differences are considerable, ranging from 13,9% in clerical and data entry to 31% in sales and marketing. The only profession where the wages are practically equal between sexes is creative and multimedia services.

Indonesia, as the only project country from the Asian continent, has a unique landscape regarding the pay gap, not only compared to the average values in Asia, but also compared to other project countries in Europe. More precisely, women attain yet higher wages in four professions. The wages are modestly higher in creative and multimedia services (5%), go over 10% in professional services (10,8%) and software development and technology (11,2%) and reach quite a high difference in clerical and data entry services (32%). Contrary to that, men are considerably better paid in sales and marketing (16,6%), while the difference in favour of men in writing and translation is rather small (3,7%). One of the reasons for such results, in some aspect unexpected, is the nature (top-rated workers) and the structure (relatively few cases with female workers in some professions) of our sample. For example, there are only 13 women with top-rated status in Indonesia in the domain of software development and technology, while men outnumber women by a factor of 17. Moreover, there are exactly 13 men who earn more than the woman with the highest hourly wage (60 US\$). In other words, since a highly skewed distribution of wages by men (toward those who are ready to work for relatively low wages) and a small number of female workers (working for higher hourly wages than the dominant part of male workers), the obtained result reflects relatively better position of women in software development and technology profession. Still, the main message stays unchanged: gender barriers, on average, are not of detrimental importance and once a women succeed in positioning herself as a top-rated worker, she will not be disadvantaged compared to men.

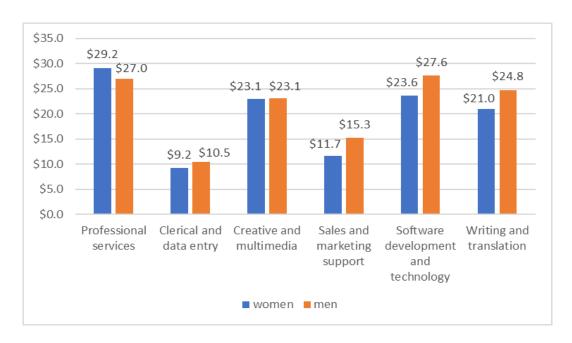


Figure 40. Hourly wages across professions and genders in Asia.

Source: Own elaboration.

Connecting hourly wages, gender, and professions sends an important message. The main message is that the choice of careers for women and for men is non-trivial based on the hourly wage an individual freelancer may obtain. It is under the strong influence of continental and national specific factors, besides technological trends and broader demand conditions, that determine the longevity of jobs and monetary payoffs for women and men. Moreover, since the freelancers are "hybrid" workers, in the sense that they possess "cross-occupational" skills (from different professions) ²², choosing the "right" career path, whether someone is a woman or a man, is quite different in Europe and Asia and could substantially determine prospects for long-term success. Analysing occupations in the digital realm, however, requires considering at least two more aspects with an immense influence. The one refers to the need to encompass the characteristics of the offline environment of freelancers, since stratification into different educational streams takes place before labour market entry. It then, in consequence, influences labour market outcomes, especially in

²² According to Anđelković *et al.* (2025), more than 60% of the freelancer population has skills and knowledge from different occupational fields. It gives them, at least theoretically, enough flexibility, which enables them to switch from one to another profession in the digital realm in some time frame, that is long enough.

occupations that require specific qualifications. The other one refers to the fact that the success of an individual is strongly determined by the algorithmic design of platforms, since enterprises look for worker job histories, reputation ratings, skill tests, and observational performance metrics provided by the platforms when choosing among candidates (Martindale & Lehdonvirta, 2023). However, many of the elements in algorithmic metrics are consequences of conscious decisions and the path of career development that freelancers choose on their own.

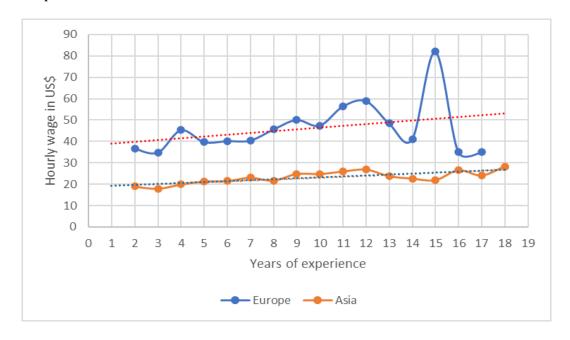


Figure 41. Relationship between hourly wage and experience.

Source: Own elaboration.

In the literature, the level of experience is frequently observed as one of the key factors determining the pay of skilled workers (Dustmann & Meghir, 2005). Those workers who have a level of experience of more than 6 years and 2 months (median level of experience) obtain, on average, 20,2% higher wages. In other words, those with experience above the median value have 28,3 US\$ per hour, while those with less experience obtain 23,5 US\$ per hour. However, observed in a dynamic manner (Figure 19), it is obvious that the relationship is nonlinear (see Figure 19). However, although the magnitude of change is different between continents, in a sense, it is more modest in Asia than in Europe, the general direction stays relatively straightforward. An interesting observation is that after the 12th year, the hourly wages decline slightly. This may lie in an explanation of one of the most robust findings in traditional labour

economics that "older workers" earn less because they work less (Neumark, 1995). In a case of a digital labour platform, since they work less, they may not be able to require as much as "younger workers". Still, their hourly wages are higher than those with little experience. An additional explanation may reflect the rising obsolescence of skills of older workers, which is especially relevant in digital professions and especially by workers who perform less sophisticated jobs, like in the clerical and data entry professions. All of this reflects the fact that the relationship between experiences and the level of hourly wage is complex and dynamic over time, depending on a mix of online and offline factors with multiple mutual influences, feedback and reinforcing relationships.

4 How does the Demand for Freelancing Services in Europe and Asia look?

4.1 What are the major demand markets?

To identify the major demand markets, an analysis of the origin of the employers who posted job offers was performed. The distribution of the job postings by continents is presented in Figure 42.

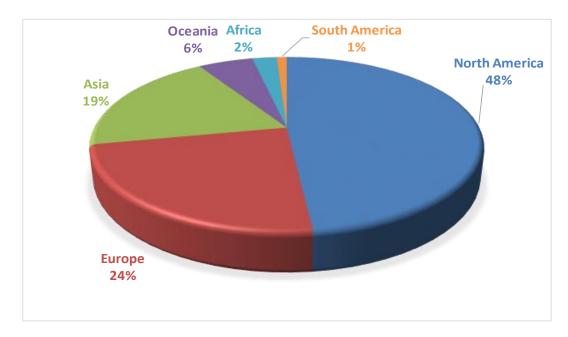


Figure 42. The distribution of the job postings by continents.

Source: Own elaboration.

Most job postings originate from North America, followed by Europe (24%), Asia (19%), and Oceania (6%). This is not surprising, since the US businesses are by far the biggest users of online labour (Kässi & Lehdonvirta, 2018; Rani & Dhir, 2020), although an important fact is that this is an English-speaking platform, suggesting that on other

non-English-speaking platforms demand for online labour force is differently distributed across countries. At the very end of this list are Africa (2%) and South America, with only 1% of collected job postings. This represents another important feature of the current state of the freelancing world-wide: the Global South is the main provider of the labour force, while businesses from the Global North are the outsourcers of digital services (Trajano, 2022). A separate look at shares in Europe and Asia confirms this fact, although Europe has a bit larger demand market.

If we look deeper into the origin of job postings, we can analyse which countries are the most important players on the demand side in freelancing, and the results of this analysis are presented in Figure 43.

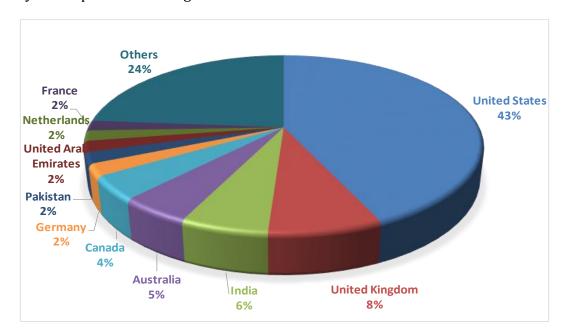


Figure 43. The distribution of the job postings by countries.

Source: Own elaboration.

The United States are the major demand market in global freelancing, as 43% job offers posted on Upwork come from this country. All other countries are less important markets, which is reflected in a relatively small and comparable share in global demand for freelancing services. The United Kingdom is in second place with a share of 8%, followed by India with 6%, and Australia and Canada with 5% and 4% shares, respectively. The list of top 10 countries also includes Germany, Pakistan, UAE, Netherlands and France.

Top 10 countries can be divided into two distinct groups: on one side, we have highly developed countries, such as United States, United Kingdom, Australia or Canada, while on the other side we have developing countries, such as India and Pakistan, which are also the most important destinations on the supply side of freelancing. Again, when comparing Europe and Asia, 4 out of the top 10 countries come from Europe (the United Kingdom, Germany, Netherlands and France), while 3 come from Asia (India, Pakistan and UAE). An especially interesting case are UAE, where the development of online labour work is a result of massive investment in the creative sector (Mellor, 2025) and the inclination of the UAE government to transform toward a knowledge-based economy (Ahmed & Abdalla Alfaki, 2013). This additionally emphasises the uneven distribution of demand for the online labour force, since the demand is almost twice as big in Europe compared with Asia. This difference becomes even more obvious if we account for the fact that some of the Asian countries are the most important offshore outsourcing hubs for services, i.e., that most jobs on the global online labour market are obtained by workers from Asia. For example, Indian online workers take up to 40% of freelancer jobs globally (Leung, D'Cruz, & Noronha, 2021), while in our sample, only 6% of jobs are posted by companies in India.

If we analyse just the countries which participate in ENTEEF+ project, we can see that none of them is in the Top 10 list. The number of job postings and the percentage in the total sample are presented in Table 9.

Country	Job postings	%
Spain	330	1.0%
Ukraine	246	0.7%
Poland	159	0.5%
Romania	114	0.3%
Indonesia	74	0.2%
Serbia	55	0.2%
TOTAL	978	2.9%

Table 9. The distribution of the job postings by partner countries.

Source: Own elaboration.

Among project partners, Spain (11^{th} on the global list) and Ukraine (19^{th} on the global list) are the markets from which the most demand comes. In total, all six partner countries contribute 2.9% to the global demand market. It places this group in the 6^{th} position on the global list.

4.2 Distribution of major job posting characteristics

There are several important characteristics by which we can split and compare job postings on digital labour platforms. First and one of the most important ones is the type of the task, i.e., is it paid by the hour or as a lump-sum payment (fixed price for a unit/task). Each of these two models has its advantages and disadvantages, and there are no strict rules on which one to use. However, generally fixed pay by task is more often used for smaller tasks, with clear output (e.g., logo design), while payments by the hour are usually used for tasks done in a longer period (e.g., marketing campaign). However, one of the reasons for offering fixed-price jobs instead of payment per hour may consist of a circumvent strategy to minimise the costs, since it is hard for a freelancer to calculate *ex ante* the exact number of hours needed for some jobs. The distribution of job postings by job type is presented in Figure 44.

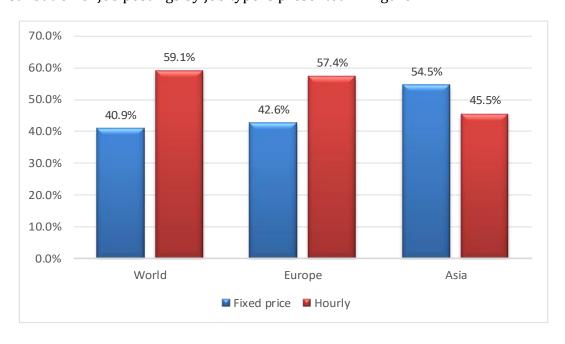


Figure 44. The distribution of the job postings by job payment type.

Source: Own elaboration.

Generally, pay by the hour is more frequent than pay by task (fixed price) worldwide. The same trend holds for Europe. But in Asia, the distribution is opposite. Namely, 54.5% of jobs in Asia are paid by task, while 45.5% are paid by the hour. This finding may reflect a tendency of firms in this region to minimise costs by introducing a fixed price more frequently. It may, however, be related to other factors as well, for example, with a different business culture or deeply rooted in pricing practices of enterprises in this region, which diverge from patterns characteristic of Western Europe.

Furthermore, an important issue refers to the differences in payments across the regions. The average hourly wages offered per job posting on the global level, in Europe and Asia are presented in Figure 45.

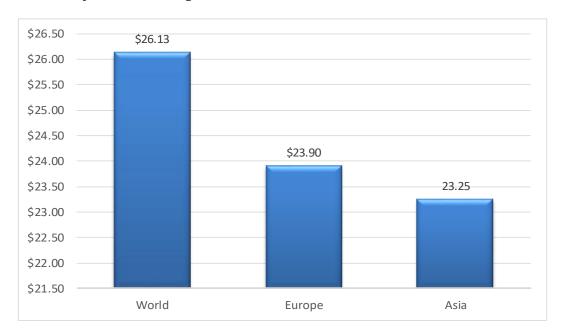


Figure 45. The average hourly price across the continents.

Source: Own elaboration.

European companies offer a bit more per hour than Asian employers, but both are far behind the global average of \$26.13 per hour. This reflects, however, indirectly an important difference on the global level. The USA market, as by far the most developed market, offers not only more abundant opportunities for freelancers, but also much generous monetary rewards for them. So, if freelancers are governed by monetary incentives and if they could specialise in some market, from the perspective of monetary incentives, the USA market should be the first choice.

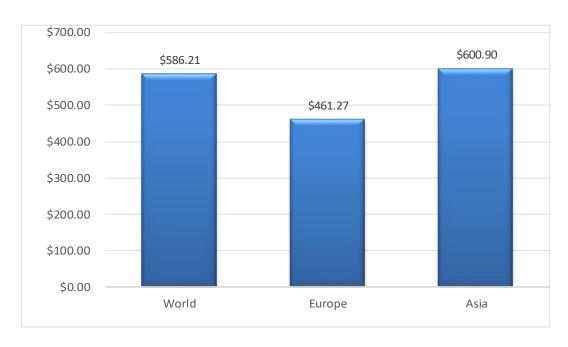


Figure 46. The average fixed price across the continents.

Contrary to results for average price per hour, the average fixed price is higher in Asia than in Europe. This price in Asia is even higher than the world average. The results in this regard are presented in Figure 46. This may be related to the pricing strategies, as previously mentioned, where companies are trying to reach qualified labour for the minimal price, since it is sometimes hard to predict *ex ante* the real volume of the job (expressed in hours). However, from the point of view of the worker, this feature of the demand on the online labour market is not necessarily disadvantageous. Namely, despite the challenges with measuring knowledge workers' productivity (Iazzolino & Laise, 2018), the plausible assumption is that there are productivity differences between workers. And for those with appropriate skills who can do the job more efficiently, the regime of a fixed price per job is not necessarily a disadvantage.

Observing hourly prices, two additional characteristics can be analysed. They refer to expected job duration and weekly workload. Figure 47 presents the distribution of the hourly job postings by expected job duration.

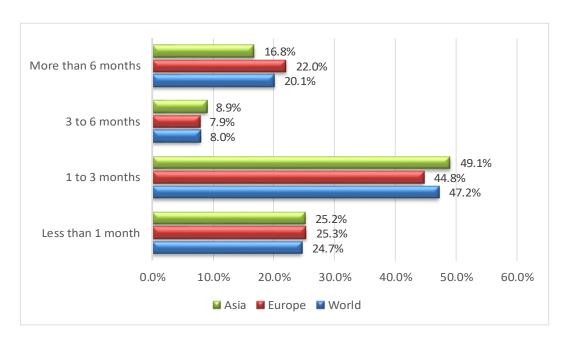


Figure 47. The distribution of hourly jobs by expected job duration.

Most of the job postings are short-term jobs, within a period of three months. In this regard, there is no significant difference between Europe and Asia, which has an implication for strategies pursued by freelancers. Namely, independently of the market/geography, the character of most jobs is that they are short-term. It suggests that pursuing a freelance career is, as a rule, more focused on short-term (generally one-term) business relationships, where long-term prospects and engagement offers are scarce. It additionally emphasises the importance of an entrepreneurial approach to freelancing, where a proactive stance and constant search for opportunities is not only determinant of success, but also of survival in the online world. Average values of expected workload are presented in Figure 48.

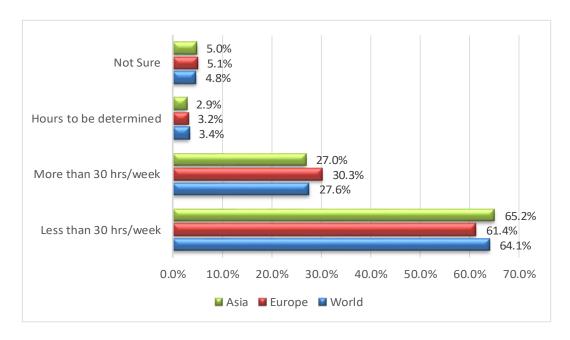


Figure 48 .The distribution of hourly jobs by expected workload.

Most of the jobs on the online labour market are not "full-time jobs", meaning that they are expected to be done with less than 30 hours per week. This is generally a confirmation of the "micro nature" of a work in the online realm, where traditional-like work regimes (as is the case in the offline world) are very rare. Moreover, it indirectly emphasises the "entrepreneurial" side of freelancing, since survival as well as success depend on proactive business strategies in searching and exploiting opportunities in digital labour markets. However, it could be, at least partially, an explanation why a considerable part of people works on an irregular basis as freelancers, i.e., from time to time, using, among other things, freelancing as an additional source of income. So, the core feature of freelancing is the orientation toward working on more (successive or in parallel) smaller jobs, carefully balancing between payoff and effort needed. From the spatial perspective, regarding the longevity of jobs, there are no significant differences between Europe and Asia, but on a global level as well. This, undoubtedly, confirms the nature of demand, independently of geography, i.e., from where the demand for freelancer services is generated.

There is no data about the expected duration of jobs paid by task (jobs for a fixed price). However, there is the distribution of engagement duration, which is presented in Figure 49.

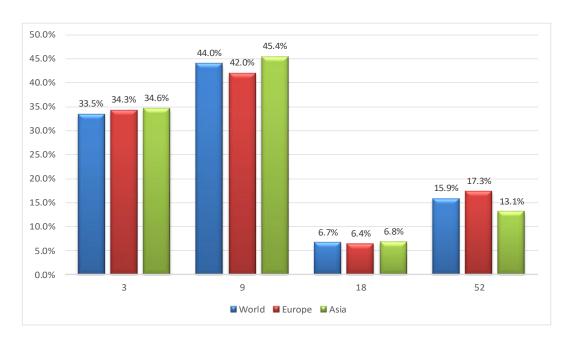


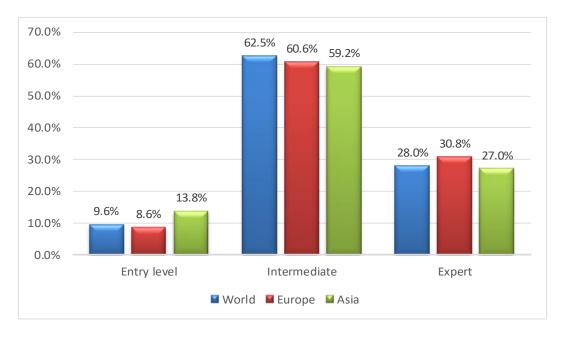
Figure 49. The distribution of job postings by expected duration in weeks.

Source: Own elaboration.

Most jobs are in the category of 9 weeks (or two months), followed by jobs lasting 3 weeks, which is in line with previous results and discussion. In addition, jobs paid by task are usually shorter, as the total averages are lower than the averages of jobs paid hourly basis. Finally, here again there are no significant differences among Europe, Asia and the global sample, except a bit higher percentage of long-lasting jobs in Europe, particularly compared to Asia. This is important because it determines the way freelancers should shape their business strategies in the online labour markets. Namely, when working for a fixed price, not only is the time shorter, but also the potential income is consequently lower. It means, when calculating whether to apply for a job or not, this aspect should be considered. Moreover, higher transaction costs (searching, making an offer, negotiating and costs coming from similar activities) for those relying dominantly on those (fixed-price) jobs should be calculated in the final evaluation of desirability and general payoff of the selected business strategy of every freelancer. From the point of businesses, domination of short-term projects has its clear pros and cons. Among the advantages belong the fact that the short duration of projects makes stakes to every hire relatively low, while to disadvantages refer to the fact that the search and screening process is both more important, as companies must perform it more frequently. However, the platform's algorithms are mitigating this aspect by making it easier and faster, where the selection could be made within a few hours (Chen & Horton, 2016).

4.3 How important is the experience of the freelancer?

The experience of the freelancer is undoubtedly very important in searching, finding, obtaining and performing jobs on digital platforms. But the odds are not equally distributed. Namely, chances are higher for beginners in simpler and, generally, low-paid jobs. Upwork provides employers with the opportunity to set the level of experience required for the posted task, i.e., to categorise it into one of the three levels: Entry, Intermediate and Expert. The distribution of the job postings based on required experience level, i.e., comparison among global, European and Asian job postings, is presented in Figure 50.



 $Figure\ 50.\ The\ distribution\ of\ the\ job\ postings\ by\ requested\ experience.$

Source: Own elaboration.

Most of the job postings require an intermediate level of experience, followed by an expert level. As expected, the fewest job offers require entry-level experience, as employers often do not want to cooperate with beginners or they use them only for very simple, generally short, and, by rule, low-paid tasks. Generally, there are no some differences between Europe and Asia: Asian employers are more open to beginners,

and European ones more often request an expert level of experience. It, at least partially, reflects different levels of complexity in business operations since European companies have a more complex structure of industry that requires a higher level of experience because of more demanding and longer projects on which the freelancers are engaged.

Hourly wages that companies are ready to pay across regions and for different levels of experience are presented in Figure 51.

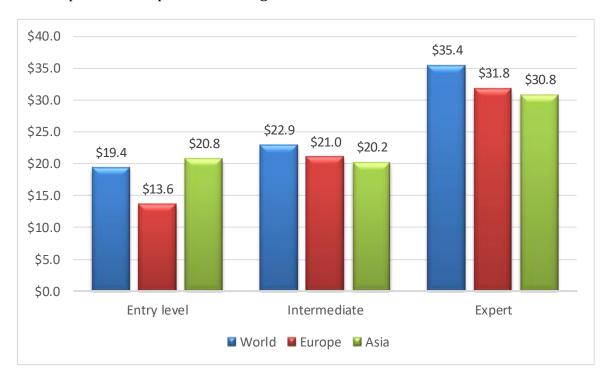


Figure 51. The distribution of hourly wages across experience levels and geographies.

Source: Own elaboration.

As expected, the highest hourly wages are offered to freelancers with an expert level of experience, followed by medians and eventually by juniors. A minor outlier is the high value of hourly wages offered to freelancers with entry-level experience by companies from Asia. Moreover, companies in Asia are ready to pay beginners a higher hourly rate than intermediate experts. Although there are many possible explanations for this irregularity, two are especially plausible (and probably with a simultaneous influence). One comes from supply conditions, since the relatively high supply of labour force with an intermediate level of experience pushes hourly wages down. Contrary to that, companies are experimenting with simpler tasks (of usually lower value) in

search of talent, trying to find the most suitable human resources not only for the job in question, but also for future engagements. Generally, the inconclusive influence of experience on (hourly) wage differentials is in line with the study of Beerepoot & Lambregts (2015, p. 236) who argue that "experience and skills hardly translate into better remuneration" because of "the intense competition and the inherent restrictions of this type of marketplace".

In Europe, however, there is an obvious "premium" on experience, and it accounts for around 50% of every "upgrade" in experience level, i.e., those with intermediate experience are offered 54,4% higher hourly wage than those who are beginners, while experts, on average, obtain 51,4% higher hourly wage than those with the intermediate level of experience.

Interesting conclusions are reached if fixed-price job postings are observed. Namely, the average values of jobs paid by task across experience levels and geographical coverage are presented in Figure 52.

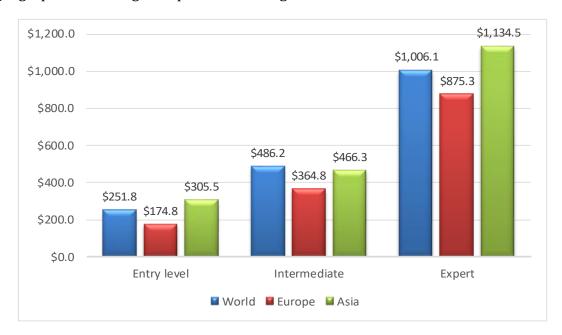


Figure 52. Distribution of jobs paid by task across experience levels and geographies.

Source: Own elaboration.

As is the case with hourly wages offered, by fixed-price job offers, as expected, higher amounts are offered for the jobs that require higher levels of experience. But here we have the opposite trend at the level of continents. Asian companies offer more

per project task than European companies, and in many cases, even more than global averages. However, caution is needed in interpretation, because this is more the result of the higher propensity of Asian firms to post job offers more frequently, followed by longer engagements, which influences the real earning possibility per unit of work (hour).

4.4 What are the most in-demand freelancer professions?

When submitting a job posting to the digital labour platform, each employer is asked to define several skills that a freelancer would need to finish the job successfully. The required skills of all job postings within the sample were analysed, and the list of the twenty most frequently required skills in global, European, and Asian samples is presented in Table 10.

The most frequently required skills are those related to graphic and web design and development, followed by video editing and production, marketing, content writing, and programming. There are no significant differences between European and Asian job listings, nor compared with the global sample. Furthermore, out of the top 20 skills in the global sample, the first 18 can be found in both, European and Asian top 20 skills.

Since there are no visible differences in skill composition across continents, a more appropriate analytical approach is to observe the distribution of job postings across professions. Following the same methodology used to determine the supply of digital labour force across professions (Stephany, Kässi, Rani, & Lehdonvirta, 2021), six professions are observed (Software development and technology, Creative and multimedia, Sales and marketing support, Professional services, Writing and translation, and Clerical and data entry). The distribution of the job postings across different professions is presented in Figure 53.

No.	World	Europe	Asia
1.	Graphic Design	Graphic Design	Graphic Design
2.	Web Development	Web Development	Web Development
3.	Web Design	Web Design	JavaScript
4.	Adobe Photoshop	Video Editing	Web Design
5.	JavaScript	JavaScript	WordPress
6.	WordPress	WordPress	Adobe Photoshop
7.	Video Editing	Adobe Photoshop	English
8.	Data Entry	Adobe Illustrator	Python
9.	Adobe Illustrator	Content Writing	Video Editing
10.	Social Media Marketing	Social Media Marketing	Adobe Illustrator
11.	Lead Generation	Data Entry	HTML
12.	Content Writing	English	Content Writing
13.	English	Lead Generation	CSS
14.	Python	Video Production	Data Entry
15.	HTML	HTML	PHP
16.	РНР	Python	Lead Generation
17.	Video Production	CSS	API
18.	CSS	PHP	Social Media Marketing
19.	Facebook	Adobe Premiere Pro	Video Production
20.	Search Engine Optimisation	API	Android

Table 10. The most frequently required skills by job postings.

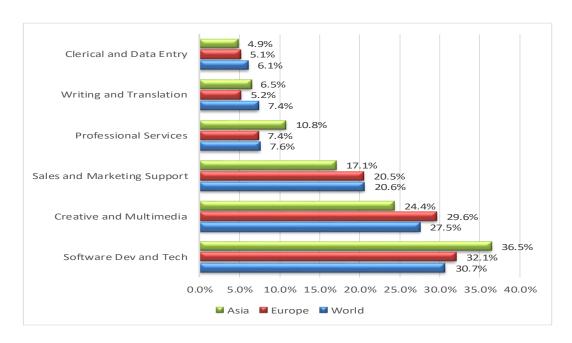


Figure 53. The distribution of the job postings across different professions.

Source: Own elaboration.

Most of the job offers in our sample belong to the Software development and technology, confirming strong demand for IT professionals in modern business globally. It is followed by Creative and multimedia, and Sales and marketing support, with a significant presence in both continents, Europe and Asia. Finally, the fewest job offers, less than 10% across each category, are in Professional services, Writing and translation, and Clerical and data entry. Moreover, demand patterns are quite similar across the individual countries, reflecting an important feature of global online markets. Namely, it reflects the fact that it is mainly the information technology sector (in each country/continent) that generates predominantly demand for online labour. The structure of demand (and supply) will probably stay relatively stable until the other industries enter on a larger scale the online labour market (Kässi & Lehdonvirta, 2018).

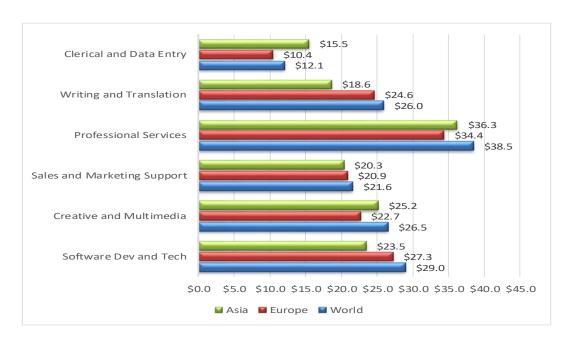


Figure 54. The comparison of offered hourly wages across different job categories.

Source: Own elaboration.

As can be seen from Figure 54, there is no significant difference in the distribution of job postings across six categories when we compare Europe and Asia. When compared with European employers and global averages, Asian companies post more job offers related to software development and professional services, while European companies lead in job offers related to creative and multimedia. The difference in demand in favour of Software development and technology in Asia reflects, at least partially, the strong expansion of the IT sector, combined with large markets, on one hand, and possibly the shortages in supply of adequate labour in traditional (local) labour markets, which spurs demand in the online labour market.

If we analyse the global sample, the highest values of hourly wages are offered for jobs related to professional services. This is a quite broad category that includes some of the high-value services, such as specialised consulting, accounting, or legal services. Offers for Software development and Creative and multimedia are following with 23,5 US\$ in Asia and with 27,3 US\$ in Europe. The difference is quite significant, as on average \$38.5 per hour is offered for professional services, and only \$29 is offered for next on the list (Software development), or \$26.5 for Creative and multimedia. The least paid profession is Clerical and data entry, with only \$12.1 per hour, because tasks in this category usually do not require any specific and sophisticated knowledge.

Generally, European and Asian employers offer less money per working hour than the global average (Figure 54). The only exceptions are Asian companies for jobs in Clerical and data entry. An important conclusion refers to counterintuitive and generally established beliefs that Asian companies are more cost-effective. Namely, in our sample, compared with Asia, European firms are paying higher wages (per hour) in three professions: Sales and marketing, Writing and translation, and Software development and technology. However, the difference is negligible in Sales and marketing, where European firms offer, on average, only 0,6 US\$ higher wages per hour. In the remaining three professions, the wages offered by Asian businesses are more competitive: they offer 5,5% higher hourly wages in professional services, 11% higher wages in Multimedia and creative services, and almost 50% higher wages for data entry jobs. However, these at first glance surprising differences in favour of Europe emerge because there are huge differences in hourly wages paid by businesses within Europe: much lower from south and east European countries and much higher in western countries. Additionally, although we don't have data over time, the current state may reflect the changes happened over the last decade, where it came to convergence in (hourly wages) among continents. Moreover, since the monetary remuneration is only one part of motivation, non-monetary incentives play an important role as well (Mourelatos, Giannakopoulos, & Tzagarakis, 2024), which makes European firms attractive despite the somewhat lower price they are on average ready to pay.

The comparison of offered budgets for single units/tasks across different job categories is presented in Figure 55.

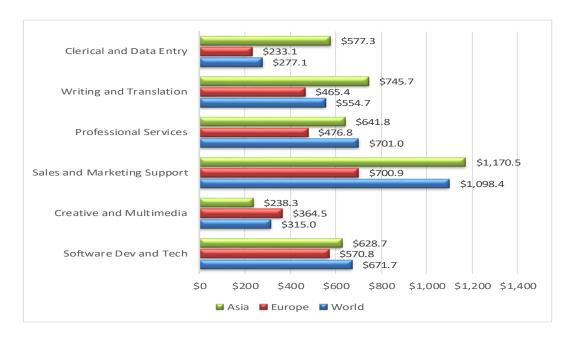


Figure 55. The comparison of the offered budgets for single units/tasks across different job categories.

Here, we can notice significant differences. First, there are very high differences in offered budgets for tasks, starting from just a few dollars (for very simple tasks), up to tens of thousands of dollars (for complex, long-term projects). This composition of different values undoubtedly produces significant differences visible in Figure 56. Globally, the highest paid tasks/projects belong to Sales and marketing support, followed by Professional services and Software development and technology, while the least paid tasks come from Clerical and data entry. If we compare Europe and Asia, Asian companies offer significantly more money per task in all professions. Moreover, in many professions, they offer even more than global averages, except in Creative and multimedia, in which Europe leads – \$364.5 compared to \$238.3.

Maybe the most striking conclusion coming from previous analysis is that building business strategies as a freelancer requires profound analysis and knowledge about possibilities and offers from different markets. This is especially important bearing in mind that a considerable number of lucrative opportunities for freelancers, in monetary terms, are unexpectedly to be found by Asian companies.

Conclusions

Depicted comparative analysis of the platform-mediated freelance economy in Europe and Asia offers profound insights into the dynamics, key features and structures of this phenomenon, aiming to answer formulated research questions and create a basis for further steps in the realisation of the ENTEEF+ project. Through the combined analysis of the broader environmental conditions and the positioning of Europe and Asia in the global online labour market, a comprehensive framework is developed and employed, leading to valuable conclusions regarding the current state and prospects of the rapidly evolving freelancing landscape.

Each project country has a unique combination of environmental factors that, together with the achieved level of freelancer market development, codetermine not only the current state but also the prospects for the development of freelancing. However, there are (structural) differences that cause a differential approach in accessing the real potential and attractiveness of the freelancer profession.

Economic performance is, after the shock caused by the COVID-19 pandemic, in all countries on an upward trend. Since it is followed by broadening employment opportunities on the conventional labour market, a restrictive impact on freelancing labour supply is a consequence. On the other hand, depending on other factors in the economy and the quality of growth, new demand for freelance services is created. However, this impact is rather of limited importance, bearing in mind the fact that the "local" (national) markets for freelancers are relatively small. Closely related to economic performance are unemployment rates in project countries, which are additionally squeezing the labour supply. Namely, relatively low unemployment rates mean that there is a relatively limited number of people who could be searching for freelancing opportunities, at least on a full-time basis. This aspect is especially pronounced in countries such as Romania, where extremely low unemployment within the population with tertiary education is present. Contrary to that, Spain and Serbia are the countries where, from the reason of the relatively higher levels of unemployment, a greater potential for freelancing exists. A similar case is with

Indonesia, but for other reasons. Namely, Indonesia has a relatively low unemployment rate, but a huge population (the 4th most populous country in the world). Concretely, more than 7 million people are unemployed, and within them, a considerable number of those who may find freelancing as an attractive employment opportunity. However, the potential is, in reality, relatively limited, since not only the number, but also the character of unemployment (domination of structural unemployment and low-skilled workers, and in Indonesia considerable size of population which is not in education nor in training, but unemployed), is relevant, which is probably not the case for most individuals within those populations. An important aspect of the economic environment refers to inflation rates in project countries, because they were on the rise after the pandemic, and although they are slowing down, they may influence payoffs from freelancing compared to traditional employment, since the payments for freelancers are in foreign currency (mainly in US\$, especially if the most important online labour markets are observed). It is, on the other hand, relatively stable exchange rates and modest growth of hourly wages (in the online labour market) in the last few years, except for Ukraine, that are not having an influence on the payoffs of freelancing profession. And if the wages in the conventional employment experience strong growth, as is the case in Serbia last few years, it further relativises freelancing as an attractive option. However, there is an opposite influence as well. Namely, elevated inflation directly erodes purchasing power and financial predictability for individuals, often encouraging them to seek flexible or supplementary income. Freelancing becomes particularly attractive in such periods, offering faster monetisation of skills, international access to customers, and often payments in stable foreign currencies. Still, how successful someone will be, in circumstances of intense global competition, where obtaining a job is a very challenging task, is an important aspect in deciding to work as a (part-time) freelancer. Generally, economic conditions in the project countries, even in Ukraine, which faces unprecedented war conditions since the Russian invasion in 2022, suggest that freelancing is not, at least for most people, a necessity born of unemployment but a strategic and voluntary professional pathway.

Innovation of the project countries is much more diverse, ranging from 28th place for Spain to 60th place for Ukraine, suggesting considerably different conditions in which the development of freelancing is taking place. The innovation performance in

the project countries across seven pillars of the global innovation index reveals a unique texture of innovation landscape in each country, with specific implications for the freelance development. The only common trait for all the countries, though to much less extent for Spain, refers to relatively low performance in the domain of institutions, which exert direct influence, making the regulatory environment less predictable and stable for individuals, and indirect impacts, via influences on the business operations of firms, on attaining full potential of freelancing. In Poland, relatively high performance in the market and business sophistication, combined with an educated workforce and a considerable share of people with a tertiary level of education, creates a supportive environment for individuals and businesses to engage and use opportunities offered by freelancing. Key advantages in Romania, influencing the supply side of the freelancer market, refer to a large pool of talent in science and engineering (26th place globally) and knowledge diffusion (26th place globally). Spain has a well-balanced and highly developed (compared to other project countries) innovation system, where infrastructural prerequisites and human capital and research traits are especially supportive aspects of the innovation environment, facilitating remote working. Moreover, Spain has a strong tradition in design, media, literature, film and digital content creation, which additionally contributes to the development of freelance talent and demand for its services. The main advantage of the Serbian innovation system is its upward dynamic over time (Serbia is ranked 52nd globally), where more numerous training opportunities for employees, the share of knowledge workers in the overall workforce and greater female participation are of great importance, contributing significantly to the pull of talents that match needs of global demand for freelancing services. Ukraine's strength lies in knowledge and technology outputs (34th place in global ranking), demonstrating strong capabilities in producing and exporting knowledge-intensive goods and services, creating a strong knowledge base of great importance for both the demand and supply side of the freelancing market. Indonesia's specific fabric of innovation landscape, reflected, among other things, in extraordinary performance in some aspects, like universityindustry R&D collaboration (ranking 6th globally) or its state of cluster development (ranking 7th), creates a system where information flows are functioning uninterruptedly, which makes one of the elementary preconditions for the engagement

of different actors in the system (freelancers and businesses), but also for best possible matching between them with amplifying effect on freelancing.

There are, however, many hurdles that restrain freelancing development, more on the demand side for freelancing services, reflecting partially the underdeveloped and unbalanced development of the innovation system. For example, in Poland is the state of the knowledge creation is such that freelancers might find more opportunities in established market sectors, while in Romania, Serbia, Indonesia and Ukraine, challenges arise in the high-tech sector, limiting growth opportunities for innovative freelance projects. Moreover, Romania, Serbia and Ukraine are performing poorly in business–university collaboration and innovation linkages, which further restrains the development of adequate skills and matching between actors from the supply and demand side for freelancing services. Solely Spanish challenge, but only in relative terms (since the situation is much better than in other project countries), refers to the fact that the business fabric is dominated by SMEs with limited innovative capacity, which generates limited demand for freelancing.

An especially important aspect regarding the creation of a knowledge base refers to the state of human capital development in project countries. As in other domains, there exists a considerable variation between the project countries. For example, while performing excellently regarding the number of graduates in science and engineering, Romania faces serious challenges regarding mobility in tertiary education, limited internationalisation and knowledge flow. Similar findings hold for Ukraine, which has one of the highest tertiary education enrolment rates in the world, but defiance remains especially visible in the domain of the quality of education. Contrary to Spain and Ukraine, Serbia, Poland and Romania have lower enrolment rates in tertiary education, making it potentially a structural barrier to the development of economies based on knowledge, and, through it, a less propulsive freelancer milieu, both on the demand and supply side of the freelancer market. However, not only the quality of education, but also the matching between educational outputs and market inputs is of huge importance. For example, in Spain, where tertiary enrolment rates are over 80%, one of the highest in Europe, mismatches between degrees and real demand for skills arise as one of the most important inefficiencies, besides the need for encouraging autonomous career paths. This aspect is even more pronounced in Indonesia, where 60% of employers prioritise reskilling and upskilling initiatives to equip the workforce for the digital economy.

However, the generic conclusion is that while there is some considerable potential, especially in the domain of knowledge creation, the biggest obstacles refer to insufficient levels of financing of research and education, which erode long-term prospects for the development of freelancing. Moreover, an important aspect is that in all the countries, except for Ukraine, because of war conditions, the improvements of human capital are visible, still more or less remarkable over time, constituting an essential pillar in building a market-ready workforce for the future.

Many aspects of digitalisation, which is a driving force behind the rise of freelancing and digital online platform work, are still "under construction", appearing, at the same time, as an actual obstacle and future chance for freelance development. The usage of ICT is an obvious strength in all the project countries, which creates one of the underlying preconditions for the consumption of digital services, provided by businesses and created by freelancers. However, a generally low level of digital literacy among the population and comparably low levels of digital intensity among the enterprises pose serious limitations on further expansion of freelancing, especially in Poland, Romania and Serbia. Although on average level for Europe, Spain overperforms among the project countries, where Spanish workers show higher levels of digital literacy in tasks related to communication, problem solving and information processing, while public policies are aligned with training objectives, although it is necessary to continue reducing access gaps to ensure that freelance work is consolidated as an inclusive and viable option for all segments of the population. Generally, since the project countries are lagging the most advanced market economies concerning digitalisation, it means that freelancing is not broadly spread across all the sectors in the economy. It is plausible to expect that in a conceivable future, as digitalisation spreads more across the sectors and businesses, which will cause inevitable business model transformation, the demand for digital services will grow, unlocking the potential for freelancing.

The attitudes and values of people are a groundbreaking factor profoundly shaping the choices and determining possibilities of individuals and organisations when deciding on how they perform tasks and organise their businesses. Cultural dimensions are among the most constraining factors in freelance development, since many of them in most of the project countries are not very supportive. Still, there are certain variations across the project countries that influence in a partially distinct manner, in combination with other factors, different aspects of freelancing. All the project countries show relatively high Power Distance Index (PDI) compared to frontier economies, like the USA or Switzerland, while showing some variation within the group. Namely, while Ukraine, Romania and Serbia, and to a lesser extent Indonesia, register high power distance, Poland and especially Spain are less inclined to hierarchical orders. It means, in the case of Spain, that there is moderate acceptance of hierarchy and power inequalities in society, respecting hierarchy, but expecting a certain horizontality in labour relations. High values for PDI suggest a greater tendency toward centralisation of authority and control, alongside a cultural acceptance of clear hierarchical dependency between subordinates and superiors, which, in consequence, leads to diminishing inclination to initiate independent business activities, including freelance work. Moreover, it may, indirectly, also imply a lower propensity to assume risk, which hampers autonomous activity in the labour market, leaving traditional, regular full-time, salaried employment a preferable option for individuals. Another consequence is reduced tendency toward occupational mobility and lower engagement with new technologies and innovative work models, additionally narrowing the attractiveness of freelancing both by business organisations and individuals. There is, however, a potentially good aspect of unequal power structures, meaning that the respect for client authority that is followed by clear role definitions in project relationships may boost work performance and satisfaction on both sides of the business relationship.

The same pattern as by PDI, although with inverted values, is recorded in the Individualism Index (II). A high individualism score reflects a society oriented towards personal independence, where people are expected to make their own decisions and take responsibility for their success or failure, which is mostly not the case in the project countries. But low values of II incline that freelancers might rely heavily on

networks of family, friends, and former colleagues to secure work, reflecting collectivist tendencies. It may, however, be good for freelancing because, as some studies (Martindale & Lehdonvirta, 2023) showed, the support from family and friends could be of decisive importance when starting a freelancing career.

Poland overperforms regarding the Masculinity versus Femininity Index (MFI), approaching the cultures of frontier entrepreneurial societies, like the USA, which reflects a strong emphasis on competitiveness, personal achievements, and success. Such an orientation encourages the decision to undertake entrepreneurial activity, thus contributing to greater readiness to work as a freelancer. Moreover, a high value of MFI contributes to a cultural climate that is conducive to self-employment, in a way that it promotes the recognition and valuation of personal success, where not only an inclination toward entrepreneurial endeavours exists, but also client satisfaction and personal branding are important ingredients in business and work activities. Contrary to the situation in Poland, in other project countries, the differences regarding MFI are minuscule, while the value of MFI is less supportive for individuals to choose a freelance career, since people are more prone towards well-being and quality of life, than to compete and demonstrate pronounced ambition toward success.

If there is a low level of comfort with uncertainty, a strong preference for avoiding potential risks, and a high emphasis on stability and predictability, it may substantially limit a country's potential for freelance development. This is the case with all the project countries, where the value of the Uncertainty Avoidance Index (UAI) is significantly high. However, an exception is Indonesia, with a value higher than in many developed market economies, indicating that freelancer engagement is not a less appealing alternative compared to a stable employment relationship, which is characteristic of jobs in the offline world, where exist reliance on structured situations, clear rules, and predictable outcomes, as well as reluctance to change employers.

Maybe the most widely spread results between the countries are recorded in the Index of Long-Term Orientation (LTOI). This is, however, not surprising, since the huge differences are also present among the most developed countries. Moreover, the implication for freelancing is not one-sided. Namely, a smaller inclination to long-term objectives indicates a focus on short-term results rather than future rewards. This can

affect freelancers by encouraging a project-to-project mentality rather than building a sustainable, long-term, independent career. Contrary to that, a higher propensity to long-term perspective in business operations indicates a cultural setting which is supportive of investments in skill development among freelancers and strengthens persistence on (online labour) market fluctuations.

Although there is considerable variation in the Indulgence Index (INDI), all the countries are remotely positioned compared to frontier entrepreneurial societies. Low levels of INDI mean that people in such societies tend to control their desires and impulses, classifying those countries as "restrained nations", a cultural trait that hurts entrepreneurship development. Moreover, when correlating INDI with the propensity to engage in freelancing, it is useful to refer to the tendency toward pessimism often observed in cultures with low indulgence scores. Consequently, a higher level of cultural pessimism may constitute a barrier to the adoption of individual forms of employment, which are frequently associated with elevated levels of risk and uncertainty compared to traditional salaried employment, which offers a greater sense of long-term security and predictability. However, a greater affinity to indulgence may facilitate freelancer outcomes, once an individual decides to pursue this career path. Namely, while low values of INDI are shrinking the propensity to entrepreneurship, they amplify freelancers' work ethic, emphasising diligence and responsibility over immediate gratification or leisure.

The regulatory framework is the environmental dimension with almost opposite appropriateness for businesses and individuals. While under the prevalent legal regimes, there are no obstacles for the engagement of freelancers, suggesting the right fit of a regulatory environment for the actors on the demand side of the freelancer market. However, a range of issues emerge when it comes to the supply side of the market, i.e., the position of freelancers and their rights. Freelancers can work under several existing legal forms, both registered and without the need for registration, as is the case in Poland and Serbia. The main deficiency is, however, still a relatively ambitious status, affecting a wide set of social rights of people working as freelancers, sometimes followed by a relatively high tax burden, especially for those starting their career as freelancers, which is the case in Serbia. Moreover, freelancing is under the

absence of a clear regulatory framework, a troublesome career choice with a substantial administrative burden. However, in all the project countries, there are several choices individuals may pick, reflecting not only the existence of a legal framework covering freelancers, independently of the fact how imperfect it may be. Indirectly, since the freelancing sector has been flourishing in the last few years, administrative and legal issues are not insurmountable obstacles for its development. The only exception concerning regulation is Indonesia, where a specially designed law regulates the rights and obligations of freelance professionals under other laws. However, in the EU countries, the new European Directive on Platform Work was adopted at the end of 2024 (The European Parliament & the Council of the European Union, 2024), which is relevant to accession candidates as well, aims to resolve many of the ambiguities related to work status and related rights of those acting as freelancers.

The analysis of the demand and supply side characteristics on the online labour market enables a closer look into the conditions under which individuals succeed in building a successful freelance career. Since most freelancers find their jobs through online digital labour platforms (Payoneer, 2023), insights obtained from the primary data on one of the most popular online labour markets (Upwork) enable a look into the dynamics of online work in Europe and Asia, and possible strategies those who strive to succeed in it should follow.

Concerning the supply of the labour force, Europe and Asia developed their presence at the online labour market at the same pace, since there are, on average, no significant differences regarding the time when freelancers from both continents started their careers. This dynamic suggests that platform work has become more and more popular over time and over different meridians, showing unprecedented expansion at the end of the second decade of the XXI century. When it comes to the structure of the supply, Asia is dominating the online labour market landscape with a share in the labour force of 43,3%, which is 5.3 times greater than in Europe. This finding is in line with several other studies (Kässi, Lehdonvirta, & Stephany, 2021; Kässi & Lehdonvirta, 2018). It suggests that freelancing is widely spread and a very developed branch of economic activity on the Asian continent. Such a result is expected,

since four out of the five most populous countries are in Asia, with Indonesia being the fourth largest nation in the world. It corresponds to the interest of businesses searching for cost-effective strategies, since the mean hourly rate for Asian freelancers is half of that for European workers, i.e., 22.1 US\$ compared to 44.1 US\$. On the other hand, hourly wages on the online labour market generally surpass the wages usually offered on the traditional labour market in Asian countries, meaning that monetary incentives for individuals in Asia to engage in freelancing are preserved. Measured by size (share in global population), Asia is dominating, but Europe, generally, has a more developed supply of freelance workforce. Namely, outside India, Bangladesh and Pakistan, no other Asian nation has a highly developed freelancer market, since the market shares of other countries are not going over 1% of the global workforce, while in Europe, there are 15 countries with shares in the global population that reach more than 1%.

An important conclusion refers to the fact that making a successful career as a freelancer, besides an adequate mix of knowledge, skills and business strategies (for acquiring the clients), requires considerable time, since only 0.03% of workers in Asia and 0.27% of workers in Europe achieved it in a period within a year. Data further highlights an interesting regularity: as time passes by, fewer workers stay in the top-performing cohort. While a combination of various factors contributes to it, an increased competition, growing obsolescence of skills in a disruptively changing technological environment (for example, the rise of AI technology) and the complexity of work combined with pressure under which freelancers are working (causing the outflow toward traditional labour employment arrangements), decisively determine this outcome.

The look into the professional structure of the labour supply reveals some interesting but still expected results. Namely, Asian workers outnumber European peers by more than 53 times in the clerical and data entry profession, suggesting that the coordination by establishing employment relations goes via price mechanism and since the Asian freelancers work for considerably lower hourly wages in this, the least paid, profession, they dominate the market. However, clerical and data entry services are mostly, besides writing and translation jobs, exposed to technology substitution

(by the newest AI applications), exposing a considerable part of the freelancer market in Asia to disproportionally higher risks compared to Europe. An important implication is that the survival on the online labour market requires continuous efforts toward upskilling and reskilling and a more advanced set of (technical) skills incorporating different AI competencies, which is a prerequisite for freelancer career development across all occupations, not only those currently exposed to substitutions by AI applications. However, if someone in the clerical and data entry profession succeeds in reaching excellence in performing their tasks, despite the mentioned challenges related to the negative influence of technological change, their position on the market tends to be more stable. Data leading to this conclusion could be found in the case of Romania, since the most experienced workers from all the project countries are Romanians in data entry and clerical services, with an average experience of 8 years and 7 months.

If solely occupational structure in Europe and Asia is compared, Europe has a more skewed distribution toward software development and technology and creative and multimedia occupations than Asia, since workers in these two professions comprise 74% in Europe and considerably less in Asia (57%). It indicates a greater concentration of technically more advanced occupations in Europe, which, at the same time, brings better payoffs for workers. Moreover, it means additionally that the European market is much better accommodated to the current demand conditions and needs of the global business community for digital services, since the global demand for services is concentrated exactly in those two professions. Moreover, an important implication occurs when it comes to those who want to start a career as freelancers. In professions where a greater concentration of freelancers exists, it is easier for newcomers to start a freelancer career, since a much more developed network exists, providing valuable information and potentially decreasing barriers to market entry. For example, there are only 5,1% of freelancers in the sales and marketing sector in Indonesia, which is by far smaller than the share of this profession in the Asian continent (18,6%), making it a more challenging undertaking for those who start their career in this profession compared to creative and multimedia services, where almost every second top-rated worker in Indonesia is active, and where already dense (supportive) network exists. Although there are general patterns in professional structure, it also varies according to national specificities. For example, Spain has an unusually high share of workers (compared to average values for Europe) in professional services, sales and marketing and writing and translation professions. Specificities like this mean that starting the career as a freelancer will require a different approach in different countries, still the same, adequate set of skills and entrepreneurial dedication, to succeed on the global labour markets.

Our findings confirm gender disparities on the online labour market. This is in line with the findings of other studies (Payoneer, 2023; Stephany, Kässi, Rani, & Lehdonvirta, 2021). Moreover, gender disparities vary across the regions, and Europe offers more equal opportunities for women and men (Payoneer, 2023). Our findings univocally confirm these findings. However, a more important implication is revealed: for women is much harder to reach top-performing status, since their share in our sample (of top-performing workers) is lower than the share of women in other studies targeting the whole population of freelancers (see, for example, Andjelkovic et al. (2024)). Still, women in Asia are not disadvantaged, since the probability of levelling up to top-performing status is not significantly different for them than for women in Europe. And gender disparities are dominantly, if not exclusively, related to other factors in the offline world, concerning cultural, educational and social particularities of every society. In project countries, there is, however, considerable variation in the level of equality. When the project countries are observed, Poland has the lowest share of female top-performing workers, which may signal that freelancing is a less popular career choice within the female population in this country. But, since the women in Poland, as the case of those active in creative and multimedia professions suggests, have only recently discovered possibilities on the online labour markets (with an average experience of 2 and half years), it may indicate that freelancing is only recently becoming attractive option that will attract more women in the future. Although Indonesia has a higher share of women, it is still considerably lower than in the other project countries, which reaffirms the thesis of the importance of broader societal conditions in which women integrate into the online labour markets across continents.

The premium on reaching top-rated status is much higher for European freelancers than for Asian freelancers, since they may earn, on average, 68,9% higher hourly

wages, which is a considerably higher difference than in the overall population (Kempton, 2024). This doesn't necessarily make freelancing a less desirable option, since the differences in the traditional labour markets are even higher. An important explanation for wage differences lies in the different structure of professions across continents, because the better-paid professions make up a larger part of the European market. Still, observing wage differentials across professions, hourly wages in Europe are higher than those in Asia across all professions. But important differences emerge. Namely, in professional services, clerical and data entry services, multimedia and creative services, and software development, wage gaps are similar and comparable, where European workers have, on average, 51,6% higher hourly wages than Asian workers. Contrary to that, Asian workers have relatively high hourly wages in the writing and translation profession, since European wages are 14,3% higher. The biggest difference emerges in the sales and marketing profession, where European workers obtain almost 3 times higher wages than Asians. The same finding holds when the wage differences are observed at the level of the project countries. There are, however, important differences across professions in hourly wages if project countries are compared with average values for the respective continent. In this sense, Indonesia is more wage competitive in professional services, creative and multimedia services and writing and translation, while the opposite holds for the data entry and clerical services, software development and technology and sales and marketing support. In Europe, Spain has a more expensive and Ukraine a less expensive labour force across all professions, while in other project countries, wages in some professions are lower and in some higher than the European average.

Not only the women comprise a smaller part of the labour supply, but they also earn less than men. And they learn less than men across all professions. Asia is, however, more egalitarian than Europe, since a smaller wage gap. Further, the pay gap is not equally pronounced across all professions in both continents. Namely, in Europe, there is only a small pay gap in creative and multimedia services (5%), clerical and data entry (5,4%) and in writing and translation (5,8%). Moreover, Asian freelancers in professional services earn even higher wages (7,9%) than men. Looking at the level of professions in project countries, there are cases where women tend to obtain higher wages than men, although these are exceptions. It is the case with writing and

translation in Poland and Romania, or data and clerical entry in Serbia and Poland. Indonesia is a unique example of a situation where women earn more than men in four professions: creative and multimedia services (5%), professional services (10,8%), software development and technology and in clerical and data entry services (32%). Abstracting from all the other conjectures and influences of other factors, the main message for Indonesian female freelancers is straightforward: gender barriers, on average, are not of detrimental importance and once a women succeed in positioning herself as a top-rated worker, she will not be disadvantaged compared to men.

Two other aspects are of importance when observing wage potential on the online labour markets. One refers to the influence of the level of development. Observing it at the level of project countries, it follows that as it rises, the wage gap also rises. It could be explained by the tendency of women to search for more flexible work arrangements, higher concentration in less paid professions, greater propensity to work part-time, up to different negotiation patterns and more modest expectations (Foong, Vincent, Hecht, & Gerber, 2018). The second is related to the fact that experience produces positive and significant effects on wage differentials, although the relationship between experience and the level of hourly wage is complex, dynamic and varies over time. For example, those workers who have a level of experience of more than the median level of experience obtain, on average, 20,2% higher wages. The effect is more pronounced in Europe than in Asia.

The main message from linking different online professions with earning potential across countries and continents, while, at the same time, considering the payoffs of jobs under conventional labour contracts, is that it could significantly influence the career choices of individuals, i.e., determine the degree of desirability of freelancing as a career path. Depending on gender, geography, experience, specific skills and knowledge, capacity for upskilling and reskilling, matching all of it with one's expectations and individual characteristics, determines in an unstructured way the suitability of the freelancing profession for every individual. More concretely, from a gender perspective, linking hourly wages, gender, and professions sends a message that the choice of careers for women and for men is non-trivial based on the hourly wage an individual freelancer may obtain. It is under the strong influence of continental

and national specific factors, besides technological trends and broader demand conditions, that determines the longevity of jobs and monetary pay-offs for women and men.

While Europe and Asia, particularly, are dominating the supply side of the global online labour market, their combined share in the global demand is important 43%, still lagging a lot the North America. It is not surprising, since the largest global online platforms are American technology enterprises, with a stronghold in the national economy. There is an important implication for freelancers, requiring them to develop competencies and skills demanded from the currently largest freelancer market in the world and business strategies that accompany the best corporate culture from North America, particularly the USA. Moreover, since the rest of the global demand is fragmented across different countries, implying different corporate practices and formal and informal norms, considerable flexibility enabling quick adjustments in business strategies by freelancers is required. A bit surprising is the relatively high importance of the developing countries, since India and Pakistan and, to a lesser extent, the UAE, generate considerable demand for freelance services. If the trend of rising demand coming from these countries continues, it may considerably impact the requirements for how freelancing services are offered and deals reached in the future. The countries participating in the project generate some demand, but it is rather small, and they emerge primarily as suppliers of the global labour force. It means additionally that the valuable part of human capital formation and development ("learning by doing") for freelancers comes from the global arena, while local environments play only a role in initially providing skills and a stimulative regulatory environment. The importance of local (national) freelance markets is rather limited and of only secondary importance.

Two modes of pricing, instalment payment and hourly price, could exert an important effect on freelancers' strategy when bidding for a job and the strategies for negotiating the price. Most jobs globally are paid on an hourly basis, which simplifies strategy by job application. The situation is a bit different in Asia, compared to the world and to Europe, where enterprises offer more frequent instalment payments for the tasks to be executed. It could be the result of different business strategies of

enterprises when hiring talent or the result of a different corporate culture. However, the differences are not significant. On average, a bit more (world and Europe) or less (Asia) than half of the jobs are offered at a fixed price. It may require the development of a differentiated approach from individuals when applying for jobs, especially since the instalment payments are usually envisaged for longer-term tasks.

Previously becomes more important if the monetary remuneration is observed. Namely, the hourly wages offered by enterprises are significantly higher in the USA than in the rest of the world. But the difference between the European and Asian markets is rather minuscule in favour of the former. The implication for freelancers is rather simple: for those searching for the highest monetary rewards, the North American market should be of primary interest, while other factors, like aggregated income, job attractiveness, prestige of the client (e.g., Fortune 500 company) or prospects for building a long-term business relations with clients should be considered in an integrative way when deciding to work for clients coming from Europe or Asia. Even more, if only a higher price is a factor shaping freelancers' choices, in the case of payment per task (instalment payment) Asia seems to represent a considerably better alternative than Europe and as attractive an alternative as North America. Again, for those searching for a longer-term engagement, and since the predominant portion of job postings with fixed price arrangements is such, Asian employers may be a preferable option when freelancer decides which job offers to apply for.

The fact that 2/3 of all job postings are projected to last no more than three months further emphasises the importance of agility and adaptability in working as a freelancer. Furthermore, although there are 1/5 of jobs with an expected duration of more than six months, the "step" of acquisition of shorter-term jobs cannot be bypassed, since these jobs are "proofs" of adequacy and an important tool in signalling to employers that the person is the right person for some job. In other words, chances for longer-term engagement via the digital online labour market generally require proven expertise. To them, individuals come more easily via short-term engagement and proven excellence in simpler tasks.

Another important dimension of work engagements is the expected workload (in hours) per week. In a case of jobs paid on an hourly basis, the demand on the market

undoubtedly confirms the predominant "micro-nature" of freelancing. Namely, less than a third of jobs require work engagement more than 30 hours per week (equivalent to the employment). Even more pronounced orientation toward the short-term nature of tasks is visible among the jobs paid on a fixed-price basis, since 1/3 of them last up to one month, and more than 70% less than 3 months. All of this reinforces the importance of the previously underlined need for proactive approaches in developing freelancers' careers.

The composition of jobs according to the level of experience they require indicates that there is a remarkable barrier for newcomers on the market, since less than 10% of jobs are posted with announced eligibility for those who are beginners. Most jobs, paid on an hourly basis, are targeting those who are of intermediate experience, while 30% in Europe and nearly 30% in Asia are aimed at those of expert level. Moreover, the "experience premium", despite some interesting differences between the continental practices, is obvious among enterprises: those with an intermediate level of experience earn 18% more than beginners, while experts earn 54,6% more than those with an intermediate level of skills. The same patterns, even more pronounced and with smaller differences among different geographies, between level expert and renumeration hold for jobs paid on a fixed-price basis. Previously described features of the demand produce important consequences for someone who is starting their career as a freelancer. They refer to the fact that developing a portfolio is a heavy undertaking, especially at the beginning of a career, and newcomers should be ready for numerous trials before a more solid establishment on the market. Additionally, surviving in the market is determined by constant improvement in skills and competencies that align best with the requirements of the demand and specificities of the business entities coming from different cultural and economic environments. And all of these pay off only in a longer period in a visible way, when accumulated human capital starts to bring premiums.

Since the skills are quite uniquely distributed among the continents and reflect the dominance of different professions, the analysis of the professional structure enables more appropriate insights into some of the important characteristics of global demand for freelance services. Combined observation of the shares of different professions

from the demand and supply sides suggests that the highest burden emerges for those profiles in the data and clerical entry, while the freelancers in the software and development are under the least competitive pressures, which are, however, considerable, since the mismatch between (relatively low) demand and huge supply of freelancer services. Those patterns, among other things, depict the structure of the demand, where most of it is generated by companies in the ICT sector. When solely the professional structure of the demand side is observed, Europe generates a bit stronger demand in creative and multimedia services, while Asia has a more pronounced demand in software development and technology. The differences are, however, not vast. But an interesting fact is that Asian companies offer higher hourly wages across three professions: sales and marketing, writing and translation, and software development and technology, while in the rest three professions, Europeans are offering higher hourly wages. The result is partially related to the considerable variation in offered hourly wages within Europe. Even more interesting insights are obtained by observing the different monetary rewards across continents and professions when fixed-price offers are considered. Asian companies offer better payment than European in all the professions, except for the jobs in multimedia and creative services. They, moreover, offer higher renumerations than other parts of the world in the jobs related to data and clerical entry and sales and marketing services. So, geography matters, and within-European geography matters as well! An important implication of previously described causalities, for those aiming to start or develop a career as freelancers, is that careful development of the professional profile (since more than 50% of freelancers have competencies from different digital professions (Andjekovic, Jakobi, Ivanovic, Kalinic, & Radonjic, 2024)), which may determine the longevity and long-term payoffs of freelancer profession.

Summing up, this report brings indispensable insights for further realisation of the ENTEEF+ project from mapping freelancer competences and the development of the competences assessment tool (WP3) to the design of MOOCs as the most valuable outcome of the project (WP4). Global online markets are offering opportunities for individuals across the globe that come from across the globe. The generic message stemming from the report is that although national characteristics determine the size and shape the dynamics on online digital labour markets, the degree to which

individuals can exploit opportunities created by the rise of the global freelancing economy highly depends on a carefully designed, sophisticated approach that requires adequate matching of individuals' competences, demand characteristics and continuous dedication to learn and evolve in highly complex and disruptively changing market that offers valuable monetary and non-monetary rewards.

References

- Abad, R. (2022, November 04). *Freelancing in demand among marketers in Asia Pacific–study.* Retrieved from Business Mirror:

 https://businessmirror.com.ph/2022/11/04/freelancing-in-demand-among-marketers-in-asia-pacific-study/
- Adams, A., Hara, K., Milland, K., & Callison-Burch, C. (2025). The gender wage gap in an online labour market: The cost of interruptions. *Review of Economics and Statistics*, 107(1), 55-64.
- ADB & LinkedIn. (2022). *Digital Jobs and Digital Skills A shifting landscape in asia and the pasific.* Metro Manila: Asian Development Bank (ADB) & LinkedIn. doi:http://dx.doi.org/10.22617/SPR220348
- Agencia Tributaria. (2024). *Información tributaria para autónomos.* Retrieved from https://www.agenciatributaria.es
- Ahmed, A., & Abdalla Alfaki, I. (2013). Transforming the United Arab Emirates into a knowledge-based economy: The role of science, technology and innovation. World Journal of Science, Technology and Sustainable Development, 10(2), 84-102.
- Ahmed, A., Khan, M. A., & Ishtiaq, A. (2023). Web Scraping for Scientific Discovery: Strategies for Secure Data Retrieval, Structured Transformation, and Relevant Content Selection. *IEEE-SEM Journal*, 11(10), 17-31.
- Akbar, M. A., & Ghazali, A. (2024). Addressing Market Saturation and Competition in Digital Freelancing. *American International Journal of Business Management* (AIJBM), 106-123.
- Akhmetshin, E., Kovalenko, K., Mueller, J., Yumashev, A., & Khairullina, A. (2018). Freelancing as a type of entrepreneurship: Advantages, disadvantages and development prospects. *Journal of Entrepreneurship Education*, 21(2), 1-10.

- Aleksynska, M., Bastrakova, A., & Kharchenko, N. (2019). Working Conditions on Digital Labour Platforms: Evidence from a Leading Labour Supply. *IZA Discussion Papers* (12245). Retrieved from https://www.econstor.eu/bitstream/10419/196743/1/dp12245.pdf
- Anđelković, B., Jakobi, T., Ivanović, V., Kalinić, Z., & Radonjić, L. (2025). *Gigmetar Region*. Belgrade: Public Policy research Center.
- Anđelković, B., Jakobi, T., Ivanović, V., Kalnić, Z., & Radonjić, L. (2024). Gigmetar Serbia, October 2024. Belgrade: Public Policy Research Center. Retrieved from http://gigmetar.publicpolicy.rs/en/serbia-2024-2/
- Anđelković, B., Šapić, J., & Skočajčić, M. (2019). Digging into Gig Economy in Serbia: Who are digital workers from Serbia and why they work on global digital platforms? Belgrade: Centre for Public Policy Research.
- Andjekovic, B., Jakobi, T., Ivanovic, V., Kalinic, Z., & Radonjic, L. (2024). *Gigmetar Srbija, Oktobar 2024.* Beograd: Centar za istrazivanje javnih politika. Retrieved from Centar za istraživanje javnih politika: http://gigmetar.publicpolicy.rs/srbija-2024-2/
- Arifianto, C. F., & Vallentino, M. (2022, February). A Study and Review of Freelancer Value Proposition. *Journal of Research in Business, Economics, and Education*, 1-13. Retrieved from https://www.researchgate.net/profile/Chandra-Arifianto/publication/372108083_A_Study_and_review_of_Freelancer_Value_P roposition/links/64a4f19eb9ed6874a5f9bd44/A-Study-and-review-of-Freelancer-Value-Proposition.pdf?origin=publication_detail&_tp=eyJjb250ZXh
- ATA. (2023). Informe anual sobre el trabajo autónomo en España. Retrieved from https://www.ata.es
- Baltador, L. (2016). Sustainability-Why Culture Matters-A Comparative Study Between Moldavian And Romanian Approach On Sustainable Development. *Revista Economica*, 68(4), 20-32.
- Bank of Spain. (2024). *Boletín económico trimestral.* Retrieved from https://www.bde.es

- Barros, P. (n.d.). *Remote blog.* Retrieved from How to set up as an independent contractor in Ukraine: https://remote.com/blog/set-up-as-independent-contractor-ukraine
- Batrancea, L. M., Nichita, A., Agostini, R. D., Narcizo, F. B., Forte, D., Mamede, S. d., . . . Kopyt, M. (2022). A self-employed taxpayer experimental study on trust, power, and tax compliance in eleven countries. *Financial Innovation*, 8(96).
- Beerepoot, N., & Lambregts, B. (2015). Competition in online job marketplaces: towards a global labour market for outsourcing services? *Global Networks*, 15(2), 236-255.
- Beerepoot, N., & Lambregts, B. (2016). Competition and wage effects in the global online market for microwork and services outsourcing. In B. Nicholson, R. Babin, & M. C. Lacity, *Socially Responsible Outsourcing: Global Sourcing with Social Impact* (pp. 119-137). Palgrave Macmillan.
- Beslać, M., Cogoljević, V., & Janjušić, D. (2023). Controversies of Foreign Direct Investments The Case of Serbia. *International Review* (3-4), 137-145.
- Bollen, A. (2018). The Rise of Platform Economies: Analysis of Regulatory Requirements in Europe and Implications for Employment Relationships. Bremen, Germany.
- Bondarenko, A. (2023). *Freelancehunt*. Retrieved from Портрет фрилансера 2023: як війна вплинула на доходи, навантаження та зайнятість: https://freelancehunt.com/blog/portriet-frilansiera-2023/
- Bošković, N., & Marjanović, M. (2024). Citezens' Attitudes Towards the Use of the eGOVERNMENT Portal (eUPRAVA) in the Republic of Serbia. *Sinteza 2024-International Scientific Conference on Information Technology, Computer Science, and Data Science* (pp. 112-118). Novi Sad: Singidunum University.
- BPS. (2024). *Income Statistics August 2024.* Jakarta: BPS-Statistics Indonesia. Retrieved from https://www.bps.go.id
- BPS. (2025). Statistical Yearbook of Indonesia 2025. Jakarta: Statistics Indonesia.

- Braesemann, F., Stephany, F., Teutloff, O., Kässi, O., Graham, M., & Lehdonvirta, V. (2022). The global polarisation of remote work. *PloS one, 17*(10), e0274630.
- Bucevska, V., & Kozheski, K. (2022). Determinants of Youth unemployment in SEE countries. *Management Research & Practice*, 14(4), 62-74.
- Burke, A. (2012). The Role of Freelancers in the 21st Century in British Economy. London: IPSE.
- Burke, A., & Cowling, M. (2015). The use and value of freelancers: The perspective of managers. *International Review of Entrepreneurship, 13*(1), 7.
- Buzoianu, C., Bîră, M., Ignat, M., & Gheţu, A. (2023). Gig economy in Romania: Insights from a preliminary qualitative study with gig workers. *Romanian Journal of Public Affairs*(6/2023), 54-60. Retrieved April 18, 2025, from https://rjpa.ro/index.php/rjpa/article/view/40
- Charles, L., Xia, S., & Coutts, A. P. (2022). *Digitalization and Employment.* Geneva: International Labour Organization.
- Chen, D., & Horton, J. (2016). Research note—Are online labour markets spot markets for tasks? A field experiment on the behavioral response to wage cuts. *Information Systems Research*, *27*(2), 403-423.
- Chen, L., Ramli, K., Hastiadi, F. F., & Suryanegara, M. (2023). *Accelerating Digital Transformation in Indonesia*. Jakarta, Jakarta, Indonesia: Economic Research Institute for ASEAN and East Asia (ERIA).
- Choczyńska, A., Rani, S., & Tora, J. (2024). Comparison of international digitalisation indexes: A quantitative analysis perspective. *International Entrepreneurship Review, 10* (2), pp. 25-42.
- Cieślik, J., & van Stel, A. (2024). Solo self-employment -- Key policy challenges. *Journal of Economic Surveys*, *38*, pp. 759–792.
- Civil Code. (2024). *Ustawa z dnia 23 kwietnia 1964 r. Kodeks cywilny.* Dz.U. z 2024r. poz. 1061, 1237.

- Čolović, P., Anđelković, B., & Jakobi, T. (2021). How many digital workers are there in Serbia? The first national estimation of workers on digital labour platforms. Belgrade: Centre for Public Policy Research.
- Consejo Económico y Social -CES-. (2021). *El trabajo en las plataformas digitales: impactos y retos.* Retrieved from https://www.ces.es
- Council of the EU. (2025). *Council of the EU*. Retrieved from EU rules on platform work: https://www.consilium.europa.eu/en/policies/platform-work-eu/
- Country Comparison tool. (2025). Retrieved from The Culture Factor: https://www.theculturefactor.com/country-comparison-tool?countries=serbia
- CRUE. (2023). Informe sobre inserción laboural de los egresados universitarios. Retrieved from https://www.crue.org
- Daba-Buzoianu, C., Ignat, M., Gheţu, A.-O., & Bîră, M. (2024). Navigating the gig economy in Romania: Unveiling perceptions of working on on-demand platforms. *The Learning Organization*, *32*(2), 217-236. doi:https://doi.org/10.1108/TLO-02-2023-0031
- Daniel, H., & Gatti, R. (2021, March 8). Human capital in 2020: Progress masks persistent gender gaps. World Bank Blogs. Washington, USA.
- Datta, N., Rong, C., Singh, S., Stinshoff, C., Iacob, N., Nigatu, N., . . . Klimaviciute, L. (2023). Working without borders: The promise and peril of online gig work. Washington: The World Bank.
- DLF Attorneys-at-law. (2022). *DLF*. Retrieved from Legal regulation of freelance work in Ukraine: https://dlf.ua/en/legal-regulation-of-freelance-work-in-ukraine/
- Donovan, S., Bradley, H., & Shimabukuru, J. (2016). What does the gig economy mean for workers? Retrieved from https://ecommons.cornell.edu/server/api/core/bitstreams/c768a7f6-106f-4c14-9a4f-822267dc3d78/content
- Dustmann, C., & Meghir, C. (2005). Wages, experience and seniority. *The Review of Economic Studies*, 72(1), 77-108.

- Dutta, S., Lanvin, B., & Rivera León, L. (2024). *Global Innovation Index 2024: Unlocing the Promise of Social Enterpreneurship.* Geneva: World Intellectual Property Organization.
- Dvouletý, O., & Orel, M. (2020). Individual determinants of entrepreneurship in Visegrád countries: Reflection on GEM data from the Czech Republic, Hungary, Poland, and Slovakia. *Entrepreneurial Business and Economics Review, 8*(4), pp. 123-137.
- Dymek, D., Vakaliuk, T. A., Konkol, P., Grabowski, M., Ivanovic, V., Kanclerz, J., & Balsamski, B. (2025). Gender equity at IT freelancer preliminary study on selected European countries. *33rd International Conference on Information Systems Development* (p. fortcoming). Belgrade: Faculty of Organizational Sciences University of Belgrade.
- Eas Ventures. (2023). East Ventures Digital Competitivness Index 2023. Jakarta: East Ventures.
- EF EPI. (2023). EF English Proficiency Index 2023. Retrieved from https://www.ef.com/epi
- El Diario de Madrid. (2025). España se consolida como potencia global del trabajo autónomo online. Retrieved from https://www.eldiariodemadrid.es
- EUROFOUND. (2022, November 25). European industrial relations dictionary.

 Retrieved from eurofound.europa.eu:

 https://www.eurofound.europa.eu/en/european-industrial-relationsdictionary/platform-work
- Eurofound. (2022). *Platform work in Europe: Evidence, impact and policy implications.*Retrieved from https://www.eurofound.europa.eu
- European Commission. (2024, 23 October). Directive (EU) 2024/2831 of the European Parliament and of the Council of 23 October 2024 on improving working conditions in platform work. Retrieved from https://eurlex.europa.eu/eli/dir/2024/2831/oj

- European Commission. (2021). *Digital Labour Platforms in the EU : Mapping and Business Models, Final Report.* Luxembourg: Publications Office of the European Union.
- European Commission. (2023). 2023 Country Report Romania. Brussels: European Commission. Retrieved April 21, 2025, from https://economy-finance.ec.europa.eu/publications/2023-country-report-romania_en
- European Commission. (2025). *Living conditions in Europe income distribution and income inequality.* Retrieved from https://ec.europa.eu/eurostat/statistics-explained/index.php/Living_conditions_in_Europe_-_income_distribution_and_income_inequality
- European Training Foundation. (2021). New forms of employment in the Eastern

 Partnership countries: Platform work Ukraine. Retrieved from

 https://www.etf.europa.eu/sites/default/files/2021
 06/platform_work_ukraine_0.pdf
- Eurostat. (2024). *Digitalisation in Europe 2024 edition.* Retrieved from Eurostat: https://ec.europa.eu/eurostat/web/interactive-publications/digitalisation-2024
- Eurostat. (2024). *Digitalisation in Europe 2024 interactive edition*. Retrieved April 20, 2025, from https://ec.europa.eu/eurostat/web/interactive-publications/digitalisation-2024
- Eurostat. (2024). *Labour market statistics Spain.* Retrieved from https://ec.europa.eu/eurostat
- Fahmi, F., Koster, S., & Van Dijk, J. (2016). The location of creative industries in a developing country: The case of Indonesia. *Cities*, *59*, 66-79.
- Faisal, L., Sucahyo, Y., Ruldeviyani, Y., & Gandhi, A. (2019). Discovering Indonesian digital workers in online gig economy platforms. *2019 International Conference on Information and Communications Technology (ICOIACT)* (pp. 554--559). IEEE.

- Filinovych, V., Derevianko, A., Pohorielova, O., & Denysiuk, M. (2025). Gig contract as a Ukrainian legal phenomenon and features of its occurrence in the framework of gig economy. *Research in Globalization*, *10*. doi:10.1016/j.resglo.2025.100274
- Foong, E., Vincent, N., Hecht, B., & Gerber, E. M. (2018). Women (still) ask for less: Gender differences in hourly rate in an online labour marketplace. *Proceedings of the ACM on Human-Computer Interaction* (pp. 1-21). New York: ACM New York, NY, USA.
- Freelance Workers Law. (2020). Freelance Workers Law Number 11 of 2020 Concerning Job Creation. Jakarta, Indonesia.
- Friedman, O., & Trines, S. (2019). *Education in Ukraine*. Education System Profiles. Retrieved from https://wenr.wes.org/2019/06/education-in-ukraine
- Fulker, Z., & Riedl, C. (2024). Cooperation in the Gig Economy: Insights from Upwork Freelancers. *Proceedings of the ACM on Human-Computer Interaction* (pp. 1-20). New York: ACM New York.
- FUNDAE. (2022). *Observatorio del Trabajo Autónomo.* Retrieved from https://www.fundae.es
- Gaublomme, S., Gevaert, J., & Kruithof, E. (2023). Sustainable Employment in the Age of Digitalisation: challenges, obstacles, and opportunities. *SEAD Working Paper* 2023.1, pp. 1-15.
- Geert Hofstede B.V. (n.d.). Retrieved from Hofstede's Globe Geert Hofstede B.V.: https://geerthofstede.com/
- Geetz, C. (1973). The Interpretation of Cultures Selected Essays. Library of Congress.
- Genicot, F. (2023). Freelances en entreprise: Recruter, motiver et fidéliser ces talents externes. Paris: Dunod.
- Geraghty, T. (2022, August 1). *Hofstede's cultural dimensions*. Retrieved from Psych Safety: https://psychsafety.com/hofstedes-cultural-dimensions/
- Ghosh, D., Ghosh, R., Roy Chowdhury, S., & Ganguly, B. (2025). AI-exposure and labour market: a systematic literature review on estimations, validations, and perceptions. *Management Review Quarterly*, 75(1), 677--704.

- Gigmeter Tim. (2022). *Gigmeter special report #3 Until war do us part: Comparison of gig work markets in Ukraine, Romania, and Serbia.* Retrieved from https://publicpolicy.rs/publikacije/b9c85789bda61915f74b1d115ea5db634 0f34e99.pdf
- Gilchrist, K. (2021). *Make it*. Retrieved from The 10 countries with the fastest-growing earnings for freelancers: https://www.cnbc.com/2019/08/07/the-10-countries-with-the-fastest-growing-earnings-for-freelancers.html
- Gov.pl. (2025a). *Co musisz wiedizeć zanim zarejestrujesz firmę*. Retrieved from Biznes.gov.pl: https://www.biznes.gov.pl/pl/portal/00120
- Gov.pl. (2025b). *Działalność nierejestrowa i inne rodzaje działalności, których nie trzeba rejestrować*. Retrieved from Biznes.gov.pl: https://www.biznes.gov.pl/pl/portal/00115
- Graber, C. (2022). Gender and precarity in platform work: Old inequalities in the new world of work. *New Technology, Work and Employment, 37*(2), 206-230.
- Gregory, P. R., & Stuart, R. C. (2014). *The global economy and its economic systems*. Mason: Cengage learning.
- Hightekers.com. (2024). *Jak zostać freelancerem w 2024? Podstawy prawne i działania przygotowawcze*. Retrieved from Hightekers.com: https://www.hightekers.com/pl-pl/insights/jak-zostac-freelancerem-w-2024/
- Hofstede Insights. (2025). *Country comparison bar charts.* Geert Hofstede. Retrieved from https://geerthofstede.com/country-comparison-bar-charts/
- Hofstede Insights. . (n.d.). Retrieved from Country Comparison: Romania.: https://www.hofstede-insights.com/country-comparison/romania/
- Hofstede, G. (2011). Dimensionalizing cultures: the Hofstede model. *Online readings in psychology and culture*, 2307-0919.
- Hofstede, G., Hofstede, G., & Minkov, M. (2012). *Culturi și organizații softul mental.*Humanitas, București.

- Höppner, J. (2021). How does self-employment affect pension income? A comparative analysis of European welfare states. *Social Policy Administration*, *55*, pp. 921–939.
- Huđek, I., Tominc, P., & Širec, K. (2023). The Human Capital of the Freelancers and Their Satisfaction with the Quality of Life. *Sustainability*, *13*(20), 11490.
- Hui, X., Reshef, O., & Zhou, L. (2024). The short-term effects of generative artificial intelligence on employment: Evidence from an online labour market. *Organization Science*, *35*(6), 1977--1989.
- Human Resources Observatory. (2024). España ocupa el puesto 20 en el ranking de retribución de talento freelance cualificado. Retrieved from https://www.observatoriorh.com
- Iazzolino, G., & Laise, D. (2018). Knowledge worker productivity: is it really impossible to measure it? *Measuring Business Excellence*, 22(4), 346-361.
- IG Rosales. (2025). *Genius*. Retrieved from Number Of Freelancers 2025 (By Country And Industry): https://joingenius.com/statistics/number-of-freelancers/
- ILO. (2021). World Employment and Social Outlook: The role of digital labour platforms in transforming the world of work. Geneva: International Labour Organisation.
- Indonesian Freelancer. (2025). *Community in Instragram @indonesian.freelancers*.

 Retrieved from Indonesia Freelancer:

 https://www.instagram.com/indonesian.freelancer/
- Indonesian Freelancers. (2025). *Indonesian Freelancers*. Retrieved from Instagram: https://www.instagram.com/indonesian.freelancer/
- INE. (2023). Encuesta de Población Activa (EPA). Retrieved from https://www.ine.es
- INE. (2025). Índice de Precios al Consumo (IPC). Retrieved from https://www.ine.es
- Inglehart, R. (2012). Modernization, Cultural Change, and Democracy: The Human Development Sequence. *Cambridge: Cambridge university press.* doi:10.1017/CB09780511790881

- Inglehart, R., Haerpfer, C., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., . . . et al. (2014). World Values Survey: Round Six Country-Pooled Datafile Version. Madrid, Spain.
- INJUVE. (2022). Cambios sociales y el empleo de la juventud en España. Retrieved from https://www.injuve.es
- International Bank for Reconstruction and Development. (2021). *Report No: PAD3535.*Progect Appraisal Document. Retrieved from https://documents1.worldbank.org/curated/en/248051620525628945/txt/Ukraine-Improving-Higher-Education-for-Results-Project.txt
- International Monetary Fund. (2025). *International Monetary Fund*. Retrieved from GDP per capita, current prices: https://www.imf.org/external/datamapper/NGDPDPC@WEO/UKR?zoom=UK R&highlight=UKR
- Ionan, V. (2023). Delivering Digital Transformation in Ukraine. *Governance Matters Magazine*, pp. 11-17. Retrieved from Chandler Institute.
- Istratie-Macarov, A., & Buzarna-Tihenea, A. (2019). Legal issues encountered by translators and interpreters in Romania, in their activity. *Scientific Bulletin of Naval Academy*. doi:10.21279/1454-864x-19-i2-015
- Ivanović, V. (2024). Serbia is innovating (better) after all! Progress of Serbia's Innovation Ecosystem Amid the Looming Perfect Storm (unpublished manusscript). Belgrade: ICT Hub.
- Ivanović, V., Anđelković, B., Jakobi, T., Kalinić, Z., Radonjić, L., & Čolović, P. (2023). How do we SEE digital platform workers' skill patterns? Evidence from South-Eastern Europe. *Psihologija*, *56*(3), 261-281.
- Ivanović, V., Kalinić, Z., Dymek, D., Grabowski, M., Kanclerz, J., Paliwoda-Pękosz, G., . . . Vakaliuk, T. (2025, February 4). Methodology of Data Gathering and Analysis. Krakow, Poland.
- Ivanović, V., Radonjić, L., & Kalinić, Z. (in print). Digital labour market in the time of crisis: how resilient are the Serbian and Polish markets? In A. Jaki (Ed.),

- Contemporary Economy in The Face of Economic, Social and Political Crises: Economic, Managerial, Social and Legal Aspects. Kraków: Wyd. UEK.
- Jandrić, M., & Molnar, D. (2017). Kvalitet zaposlenosti i tržište rada u Srbiji Koliko je Srbija daleko od EU? Beograd: Friedrich Ebert Stiftung.
- Jandrić, M., & Żakowska, M. (2022). Unemployment in Serbia: Characteristics and Challenges. In M. Żakowska, *Social Security in the Balkans–Volume 3: An Overview of Social Policy in Serbia and Kosovo* (pp. 89-126). Ledien: Brill.
- Janicijevic, N., & Marinkovic, I. (2015). Empirical testing of Hofstede's measures of national culture and their impact on leadership in four countries. *Ekonomika preduzeca*, 63, 264-278.
- Jarzębowski, S., Bozhenko, V., Didorenko, K., Tkachenko, O., Blyznyukov, A., Melnyk, M., & Cieslik, J. (2024). The Impact of Digitalisation on the Competitiveness of European Countries. *SocioEconomic Challenges*, 8(3), 238-261.
- Jourdan Jr, L. F., & Smith, M. (2021). National culture dimensions as predictors of innovation, creativity, and entrepreneurship. *Journal of Global Business Insights*, 6(2), 154-171.
- Jourdan, L., & Smith, M. (2021). National culture dimensions as predictors of innovation, creativity, and entrepreneurship. *Journal of Global Business Insights*, 6(2), 154-171.
- Kässi, O., & Lehdonvirta, V. (2018). Online labour index: Measuring the online gig economy for policy and research. *Technological forecasting and social change*, 241-248.
- Kässi, O., Lehdonvirta, V., & Stephany, F. (2021). How many online workers are there in the world? A data-driven assessment. *Open Research Europe*, 1-29.
- Kementerian Ketenagakerjaan. (2025). Gali potensi dirimu dengan Kartu Prakerja. Jakarta, Indonesia.
- Kempton, B. (2024, November 7). Gig Economy Statistics and Market Takeaways for 2025. Retrieved from Upwork: https://www.upwork.com/resources/gigeconomy-statistics

- Ken Research. (2024). *Indonesia Freelance Platforms Market Outlook to 2028.* Jakarta:

 Ken Research. Retrieved from https://www.marketresearch.com/Ken-Research-v3771/Indonesia-Freelance-Platforms-Outlook-40721131/
- Kenney, M., & Zysman, J. (2016). The rise of the platform economy. *Issues in science and technology*, 32(3), 61-69.
- Khan, M., Panditharathna, R., Hossain, M., & Bamber, D. (2022). Entrepreneurship and Culture: Challenges and Opportunities. In D. Hyams-Ssekasi, & F. Agboma, *Entrepreneurship and Change: Understanding Entrepreneurialism as a Driver of Transformation* (pp. 209-237). Springer.
- Khan, M., Panditharathna, R., Hossain, M., & Bamber, D. (2022). Entrepreneurship and Culture: Challenges and Opportunities. In D. Hyams-Ssekasi, & F. Agboma, Entrepreneurship and Change: Understanding Entrepreneurialism as a Driver of Transformation (pp. 209-237). Cham: Springer International Publishing.
- Kholid, H., Kurnia, R., Hidayah, F., Panuntun, B., Ivanović, V., Kalinić, Z., . . . Higueras-Castillo, E. (2025). *Global Freelancer Market Report: The rich picture of the global freelancer market*. Krakow: Krakow University of Economics.
- Kitching, J., & Smallbone, D. (2012). Exploring the UK freelance workforce, 2011.

 Retrieved from https://www.
 pcg.org.uk/sites/default/files/media/documents/RESOURCES/01267%
 20PCG
- Kolisnichenko, P. (2025). Poland's Society 4.0: How Digital Tools are Changing Everyday Life. *Economics, Finance and Management Review, 1*(21), 4-16.
- Kominfo. (2022). 100 Smart Cities and Smart Village. Jakarta: Ministry of Communication and Technology.
- Kominfo. (2025). Digital Talent Scholarship. Jakharta, Indonesia.
- Komunitas Freelancer Indonesia. (2025). *Komunitas Freelancer Indonesia*. Retrieved from Facebook: https://www.facebook.com/groups/2597255050526232/

- Kosanović, R., Paunović, S., & Sergi, S. B. (2017). Comparative analysis of wages in central and eastern Europe. *SEER: Journal for Labour and Social Affairs in Eastern Europe*, 159-179.
- KPMG. (2025). Retrieved from Ukraine: Proposed legislation for digital platform reporting and withholding tax requirements: https://kpmg.com/us/en/taxnewsflash/news/2025/04/tnf-ukraine-proposed-legislation-for-digital-platform-reporting-and-withholding-tax-requirements.html
- Krajewska, A., & Krajewski, P. (2021). Taxation of the Self-employed in Poland and other EU Countries a Comparative Analysis, Comparative Economic Research. Central and Eastern Europe. *Comparative Economic Research. Central and Eastern Europe, 24*(2), pp. 69-85.
- Krakow University of Economics. (2024, March 05). Fostering Entrepreneurship through Freelancing. Krakow, Poland.
- Krasavina, A. (2023). *Spain Digital Spain Agenda 2026.* Retrieved from https://digital-skills-jobs.europa.eu
- Law 20/2007. (2007). Ley 20/2007, de 11 de julio, del Estatuto del trabajo autónomo.

 BOE. Retrieved from https://www.boe.es/buscar/act.php?id=BOE-A-2007-13409
- Law on Diia.City. (2021). Law of Ukraine No. 1667-IX "On stimulating the development of the digital economy in Ukraine".
- Lehdonvirta, V. (2022). Cloud empires: How digital platforms are overtaking the state and how we can regain control. Boston: Mit press.
- Lenaerts, K. (2023). Workforce diversity and digital labour platforms: implications for occupational safety and health. *European Agency for Safety and Health at work* (EU-OSHA) Discussion Paper, 1-33.
- Leung, W.-F., D'Cruz, P., & Noronha, E. (2021). Freelancing globally: Upworkers in China and India, neo-liberalisation and the new international putting-out system of labour (NIPL). In J. Haidar, & M. Keune, *Work and Labour Relations in*

- Global Platform Capitalism (pp. 134-156). Cheltenham: Edward Elgar Publishing.
- Litman, L., Robinson, J., Rosen, Z., Rosenzweig, C., Waxman, J., & Bates, L. M. (2020). The persistence of pay inequality: The gender pay gap in an anonymous online labour market. *PloS one, 15*(2), e0229383.
- Liu, J., Chen, K., & Lyu, W. (2024). Embracing artificial intelligence in the labour market: the case of statistics. *Humanities and Social Sciences Communications, 11*(1), 1-14.
- Liu, J., Xu, X., Nan, X., Li, Y., & Tan, Y. (2023). Generate" the Future of Work through AI: Empirical Evidence from Online Labour Markets. *arXiv e-prints*, 1-65.
- Mariska. (2023, 27). *Apakah Freelancer Wajib Bayar Pajak? Ini Jawabannya.* Retrieved from KontrakHukum: https://kontrakhukum.com/article/pajak-freelance/
- Mariska. (2023, 10 31). *Jangan Abai! Ini Legalitas Usaha Yang Wajib Dipenuhi*Freelancer. Retrieved from KontrakHukum:

 https://kontrakhukum.com/article/legalitas-usaha-freelancer/
- Markovic, M. R., Vujicic, S., Nikitovic, Z., & Milojevic, A. (2021). Resilience for freelancers and self-employed. *Journal of Entrepreneurship and Business Resilience*, 30-36.
- Martindale, N., & Lehdonvirta, V. (2023). Labour market digitalization and social class: evidence of mobility and reproduction from a European survey of online platform workers. *Socio-Economic Review*, *21*(4), 1945-1965.
- Matijević, M., & Šolaja, M. (2022). *ICT in Serbia At a Glance, 2022.* Novi Sad: ICT Cluster in Vojvodina.
- Matuszewska-Kubicz, A., & Warwas, I. (2023). Human resource management of economically dependent self-employed and subordinate employees. *176*, 391-429.
- MEFP. (2024). *Datos y cifras del sistema educativo español 2023-2024.* Retrieved from https://www.educacionyfp.gob.es
- Mellor, N. (2025). Navigating Precarity: Freelancers in Dubai's Creative Economy. *Journal of Creative Communications*, 09732586251337571.

- Mikuła, B. (2010). Polska kultura organizacyjna jako źródło barier tworzenia organizacji opartych na wiedzy. *Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie*, 820, 63-74.
- Ministerio de Inclusión, Seguridad Social y Migraciones. (2023). Sistema de cotización por ingresos reales. Retrieved from https://www.seg-social.es
- Ministerio de Trabajo y Economía Social. (2021). *Real Decreto-ley 9/2021.* Retrieved from https://www.boe.es
- Moore, J. (2024). *Ukraine IT services firms target new markets as exports drop*. Retrieved from Informa TechTarget: https://www.techtarget.com/searchitchannel/feature/Ukraine-IT-services-firms-target-new-markets-as-exports-drop
- Mourelatos, E., Giannakopoulos, N., & Tzagarakis, M. (2024). Payment schemes in online labour markets. Does incentive and personality matter? *Behaviour & Information Technology*, 43(11), 2544-2565.
- Munoz, I., Kim, P., O'Neil, C., Dunn, M., & Sawyer, S. (2024). Platformization of Inequality: Gender and Race in Digital Labour Platforms. *Proceedings of the ACM on Human-Computer Interaction* (pp. 1-22). New York: ACM New York, NY, USA.
- Muthuvani, M., & Samuel, I. (2024). A comprehensive study on the evolution of freelancing in the modern workforce. *International Conference on Commerce* and Management in the Digital Age: Trends, Challenges & Innovations (pp. 150-156). Madurai: Shanlax Publications.
- Nagy, C. (2016). Why do we need human capital index. *Annals of Faculty of Economics*, 1(1), 375-385.
- Nawaz, Z., Zhang, J., Mansoor, R., Hafeez, S., & Ilmudeen, A. (2020). Freelancers as part-time employees: Dimensions of FVP and FJS in E-lancing platforms. *South Asian Journal of Human Resources Management*, 7(1), 34-60.
- Neumark, D. (1995). Are rising earnings profiles a forced-saving mechanism? *The Economic Journal*, 105(428), 95-106.

- Nikulin, D. (2021). The Determinants of False Self-Employment: A Survey of Polish Enterprises. *Eastern European Economics*, *59*(1), 70–81.
- OECD. (2017). *OECD Employment Outlook 2017. Paris: OECED Publishing.* doi:http://dx.doi.org/10.1787/empl_outlook-2017-en
- OECD. (2022). How vocational education and training (VET) systems can support Ukraine. Retrieved from https://www.oecd.org/content/dam/oecd/en/publications/reports/2022/07/how-vocational-education-and-training-vet-systems-can-support-ukraine_968d4f89/e8e86ce2-en.pdf
- OECD. (2023). *Education at a Glance 2023: Spain.* Retrieved from https://www.oecd.org
- ONTSI. (2024). Competencias Digitales. Retrieved from https://www.ontsi.es
- Ostoj, I. (2023). Institutions for digital labour platforms: results of a study conducted in Poland. *Ekonomia i Prawo. Economics and Law, 22*(1), 143-155.
- Ostoj, I. (2024). Platform-mediated work in Poland: Worker characteristics and prevalence in society. *International Journal of Management and Economics*, 60(2), 132-146.
- Pauli, U. (2016). The Quality of Work of Self-Employed Youth in Poland. *Zarządzanie Zasobami Ludzkimi HRM [ZZL], 1*(6), 93-101.
- Pavlović, D., Bjelica, D., & Domazet, I. (2019). What characteristics in the youth labour market of Serbia are likely to result in employment? *Stanovnistvo*, *57*(2), 35-47.
- Payoneer. (2022). Global freelancer income report. The ongoing rise of the freelance revolution. Payoneer.
- Payoneer. (2023). 2023 Freelancer Insights Report. Retrieved from https://pages.payoneer.com/freelancer-insights-report/
- Payoneer. (2023). 2023 Freelancer Insights Report. New York: Payoneer.

- Pejovich, S. (2006). The effects of the interaction of formal and informal institutions on social stability and economic development. *Institutions, globalisation and empowerment, 56*(29), 164-181.
- Pidgaina, Y. (2023). The war sparked a boom in the freelance market": How much do freelance workers earn, and what fields do they choose? Retrieved from Mind: https://mind.ua/en/publications/20259524-the-war-sparked-a-boom-in-the-freelance-market-how-much-do-freelance-workers-earn-and-what-field
- Popiel, P. (2017). "Boundaryless" in the creative economy: assessing freelancing on Upwork. *Critical Studies in Media Communication*, 220-233.
- Porumb, A., Bogdan, R., Săcara-Oniţa, A., & Porumb, C. (2022). Types de Rémunération du Travail Indépendant (Etude Comparative Français-Roumain) / Types of Compensation of Independent Work (French-Romanian Comparative Study).

 The Annals of the University of Oradea. Economic Sciences. doi:10.47535/1991auoes31(1)032
- President of Indonesia. (2022). Government Regulation in Lieu of Law Number 2 of 2022

 concerning Job Creation. Retrieved from Legal Documents and Information

 Network

 JDIH:

 https://jdih.komdigi.go.id/produk_hukum/view/id/848/t/peraturan+pemeri

 ntah+pengganti+undangundang+nomor+2+tahun+2022
- President of Indonesia. (2023). Law Number 6 of 2023 concerning Job Creation replaces

 Government Regulation Number 2 of 2022. Retrieved from Legal Documentation
 and Information Network JDIH:

 https://jdih.kemenkeu.go.id/api/download/53aa253f-c2e0-4a7a-9f3351606c127c3b/2023uu006.pdf
- Pulignano, V., Muszyński, K., & Tapia, M. (2025). Freelancing, platform work and precarious careers. In J. Akkermans, A. Keegan, & F. Pichault, *Research Handbook of Careers in the Gig Economy* (pp. 167-179). Cheltenham: Elgaronline.
- Puzio-Wacławik, B. (2013). Samozatrudnienie w okresie spowolnienie gospodarczego w Polsce. *Research Papers of Wrocław University of Economics, 307*, 477-488.

- Rabenu, E. (2021). Twenty-First Century Workplace Challenges: Perspectives and Implications for Relationships in New Era Organizations. Lanham, Maryland: Rowman and Littlefield.
- Radulović, S., Todorović, K., Radović-Marković, M., Petrušić, I., & Dragojević, A. (2023). Socio-Economic Profiles Of Remote Workers. *IPSI Transactions on Advanced Research*, 19(1), 42-49.
- Rainone, S., & Aloisi, A. (2024, September). The EU Platform Work Directive: What's new, what's missing, what's next? *ETUI Policy Brief*, p. 10.
- Rakić, S. (2024, September 9). How many workers left Serbia vs how many came to Serbia? Beograd, Srbija. Retrieved from https://www.serbianmonitor.com/en/how-many-workers-left-serbia-vs-how-many-came-to-serbia/
- Rani, U., & Dhir, R. (2020). Platform work and the COVID-19 pandemic. *The Indian Journal of Labour Economics*, 63(1), 163-171.
- Ratkaj, I., Sibinović, M., & Manić, E. (2021). Ratkaj, I., Sibinović, M., & Manić, E. (2021). FDI in Serbia. Foreign Direct Investment in the Successor States of Yugoslavia: A Comparative Economic Geography 25 Years Later,. In J. I. Deichmann, Foreign Direct Investment in the Successor States of Yugoslavia: A Comparative Economic Geography 25 Years Later (pp. 23-50). Cham: Springer Nature.
- Red.es & FUNDAE. (2023). *Digitalizate Plus.* Retrieved from https://www.digitalizateplus.es
- Red.es. (2023). *Informe de avance del programa Kit Digital.* Retrieved from https://www.red.es
- Rhogust, M. (2023, July December). Labour Law Reform in the Gig Economy Era:

 Analysis of the Impact of Regulatory Changes on Freelancers in Indonesia. *Journal of Law, Social Science and Humanities, 1*(1), 48-60. Retrieved from https://myjournal.or.id/index.php/JLSSH

- Rodríguez-Modroño, P., Pesole, A., & López-Igual, P. (2022). Assessing gender inequality in digital labour platforms in Europe. *Internet Policy Review, 11*(1), 1-23.
- Rodrik, D. (2003). Institutions, integration, and geography: In search of the deep determinants of economic growth. USA.
- Rojek, M. (2024). Coworki, (akademickie) inkubatory przedsiębiorczości i startupy nowe środowiska pracy i uczenia się dorosłych. *Rocznik Andragogiczny*, 31, 17-41.
- Roşca, M. (2024). The digital work platforms in Romania: An overview of the current state and possible advancements. *Proceedings of the Central and Eastern European eDem and eGov Days 2024.* doi:https://doi.org/10.1145/3670243.3670257
- Roșioru, F. (2020). The status of platform workers in Romania. *Comparative Labour Law & Policy Journal, 41*(2), 423-442. Retrieved from https://cllpj.law.illinois.edu/archive/vol_41/
- Roşioru, F. (2021). The social protection of platform workers in Romania: Meeting the growing demand for affordable and adequate coverage? *International Social Security Review, 74*(3-4), 155-175. doi:https://doi.org/10.1111/issr.12282
- Rossi, I., Record, R., & Sidarenk, M. (2025). *Adapting for Sustainable Growth. Western Balkans Regular Economic Report. No. 27 Spring 2025.* Washington: International Bank for Reconstruction and Development / The World Bank.
- Salem, Y. (2021, Jun 30). Freelancers and Talent Management: Advantages and disadvantages of freelancing to help create a freelance policy leading to decent work. Tilburg, Netherlands.
- Samoiliuk, M. (2025). *Ukraine War Economy Tracker*. Centre for Economic Stratrgy. Retrieved from https://ces.org.ua/en/tracker-economy-during-the-war/
- Sattayathamrongthian, M., & Vanpetch, Y. (2023). A qualitative examination of Thai freelancers' business model enhancement through the integration of social and

- human capital in the global market. *E3S Web of Conferences* (p. 05030). EDP Sciences.
- Seifried, M., Jurowetzki, R., & Kretschmer, T. (2020). Career paths in online labour markets: Same, same but different? *ZEW-Centre for European Economic Research Discussion Paper (20-090)*.
- Semencha, I., Kuriacha, N., & Hordieieva-Herasymova, L. (2024). Freelancing as an Additional Income: Commercialization of Personal Ideas and Activity Features. *Journal Cover, 7.* doi:10.37634/efp.2024.7.11
- SEPE. (2023). *Plan Nacional de Competencias Digitales.* Retrieved from https://www.sepe.es
- Shevchuk, S. (2023). Навчитися жити за власний рахунок. Уряд планує реформу спрощеної системи для ФОП і компаній, сумнівається у «Дія.Сіту» і думає над податком на багатство. Головне з Національної стратегії доходів до 2030-го. Forbes. Retrieved from https://forbes.ua/money/ukraina-zhitime-za-vlasniy-rakhunok-uryad-planue-reformu-sproshchenoi-sistemi-dlya-fop-i-kompaniy-sumnivaetsya-u-diyacity-i-dumae-nad-podatkom-na-bagatstvo-golovne-z-natsionalnoi-strategii-dokhodiv-do-27122023-18174
- Shkoler, O., & Tziner, A. (2022). Freelancers in organizations: a novel perspective. In L. B.-B. A. Tziner, *Engineering the World of Work* (pp. pp. 21-38). Cheltenham: Edward Elgar Publishing.
- Signum International AG. (2024). *The world's largest ranking of countries and regions* by English skills. Retrieved from https://www.ef.com/wwen/epi/
- Ślebarska, K., Stremska, A., & Kowalski, G. (2023). Central European Management Journal. Managing effective labour market entry: proactive coping and self-employment intention among Polish small business owners, 31(1), 115-129.
- Solomon, M., & Blumberg, R. (2021). 5 key ways freelancers help companies stay nimble. *Strategic HR Review, 20*(2), 38-41.
- Soni, V., Sinha, E., Shinde, Y., & Jain, H. (2025). Freelancing Platforms: Revolutionizing

 The Gig Economy. *International Conference on Advances and Applications in*

- *Artificial Intelligence (ICAAAI 2025)* (pp. 1127-1140). Raipur, Chhattisgarh, India: Atlantis Press.
- Statistical Office of the Republic of Serbia. (2025). Labour Force Survey, IV Quarter 2024. Belgrade, Serbia.
- Statistical Office of the Republic of Serbia. (2025, April 25). Labour Market Earnings. Belgrade, Serbia.
- Statistics Poland. (2025a). *Education in Poland*. Retrieved from Statistics Poland: https://stat.gov.pl/en/
- Statistics Poland. (2025b). *GDP in Poland.* Retrieved from Statistics Poland: https://stat.gov.pl/en/
- Statistics Poland. (2025c). *Inflation in Poland.* Retrieved from Statistics Poland: https://stat.gov.pl/en/
- Statistics Poland. (2025d). *Unemployment in Poland.* Retrieved from Statistics Poland: https://stat.gov.pl/en/
- Stegeman, H., & Hardy, K. (2025). Locating online labour: The salience of the national scale in remote digital work. *Environment and Planning A: Economy and Space,* 57(OnlineFirst), 1-22. doi:https://doi.org/10.1177/0308518X251322361
- Stephany, F., Kässi, O., Rani, U., & Lehdonvirta, V. (2021). Online Labour Index 2020:

 New ways to measure the world's remote freelancing market. *Big Data & Society*, 8(2), 1-7. doi:https://doi.org/10.1177/20539517211043240
- Suranto, B., Setiawan, M., Hidayatullah, A., Haryono, K., Kurnia, R., Hidayah, F., . . . Higueras-Castillo, E. (2025). *Global Freelancer Market Report.* Krakow: Krakow University of Economics.
- Teutloff, O., Stenzhorn, E., & Käsi, O. (2025). Skills, job application strategies, and the gender wage gap: Evidence from online freelancing. *ZEW Discussion Papers, No. 25-016*, pp. 1-70.
- The Culture Factor Group. (n.d.). *Country comparison tool*. Retrieved May 25, 2025, from The Culture Factor: https://www.theculturefactor.com/country-comparison-tool

- The Culture Factor Group Oy. (2025). *The Culture Factor Group*. Retrieved from Country Comparison tool: https://www.theculturefactor.com/country-comparison-tool?countries=ukraine
- The Economist Group. (2023). Bridging the skills gap: fuelling careers and the economy in Asia-Pacific. The Economist Group Supported by Google. Retrieved from https://east.vc/id/reports/east-ventures-digital-competitiveness-index-2023/#report_download
- The European Parliament & the Council of the European Union. (2024, November 11).

 DIRECTIVE (EU) 2024/2831 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL. Brussel, EU.
- The Global Economy. (2022). *Spain: Tertiary school enrollment.* Retrieved from https://www.theglobaleconomy.com/Spain/Tertiary_school_enrollment
- The World Bank Group. (2025, April 5). *World Bank Group Data*. Retrieved from School enrollment, tertiary (% gross) Ukraine: https://data.worldbank.org/indicator/SE.TER.ENRR?locations=UA
- Trajano, J. (2022). Rights-Based Approach to Governing Online Freelance Labour: Towards Decent Work in Digital Labour Platforms. Singapore: JSTOR.
- Tusińska, M. (2024). The Business Model of Digital Labour Platforms and the Income of Platform Workers in Poland: Theory and Practice. *Krakow Review of Economics and Management*, 83-97.
- UATAE. (2023). Informe sobre condiciones labourales de autónomos. Retrieved from https://uatae.org
- UATAE. (2023). Propuestas para una nueva regulación del trabajo autónomo digital.

 Retrieved from https://www.uatae.org
- Uche, E., Ngepah, N., Odionye, J., & Effiom, L. (2023). Drivers of gender differentiated self-employment in developing countries: The instances of finance and information and communication technology. *International Social Science Journal*. doi:https://doi.org/10.1111/issj.12467

- Ukraine Media Group LLC. (2022). Experts predict a boom in the Ukraine's freelance market. Retrieved from UBN: https://ubn.news/experts-predict-a-boom-in-the-ukraines-freelance-market/
- Ukraine Media Group LLC. (2022). *UBN*. Retrieved from Experts predict a boom in the Ukraine's freelance market.: https://ubn.news/experts-predict-a-boom-in-the-ukraines-freelance-market/
- Ukrainian Startup Fund. (2023). *USF*. Retrieved from We support ideas that shape the future!: https://usf.com.ua/en/about-usf/
- UPTA. (2023). Estudios y datos del colectivo autónomo. Retrieved from https://www.upta.es
- Upwork. (2022, March). Suspended operations in Russia and Belarus. Retrieved from Support Upwork: https://support.upwork.com/hc/en-us/articles/5691956088339-Suspended-operations-in-Russia-and-Belarus
- Upwork. (2025, 05 06). *31 Upwork Statistics (2025) Number of Freelancers & Revenue.*Retrieved from Upwork: https://www.demandsage.com/upwork-statistics/
- Upwork. (2025, June 04). *Connecting clients in need to freelancers who deliver*. Retrieved from Upwork: https://www.upwork.com/
- Van den Born, A., & Van Witteloostuijn, A. (2013). Drivers of freelance career success. ournal of organizational behavior, 34(1), 24-46.
- van der Zwan, P., Hessels, J., & Burger, M. (2020). Happy free willies? Investigating the relationship between freelancing and subjective well-being. *Small Business Economics*, 55(2), 475-491.
- Visit Ukraine Today . (2023). How has the year and a half of war affected the freelance market in Ukraine? Retrieved from Visit Ukraine Today: https://visitukraine.today/blog/2547/how-has-the-year-and-a-half-of-war-affected-the-freelance-market-in-ukraine#what-is-a-freelancer-in-ukraine-in-2023

- Vukmirović, V., Kostić-Stanković, M., Pavlović, D., Ateljević, J., Bjelica, D., Radonić, M., & Sekulić, D. (2021). Foreign direct investments' impact on economic growth in Serbia. *Journal of Balkan and Near Eastern Studies*, 23(1), 122-143.
- WEF. (2025). *Future of Jobs Report 2025.* Geneva: World Economic Forum. Retrieved from https://www.weforum.org/publications/the-future-of-jobs-report-2025/
- Wheelahan, L., & Moodie, G. (2022). Gig qualifications for the gig economy: microcredentials and the 'hungry mile'. *Higher Education*, 83(6), 1279-1295.
- WIPO. (2024). *Global Innovation Index 2024.* Geneva: World Intellectual Property Organization. doi:https://doi.org/10.34667/tind.50062
- WIPO. (2024). Global Innovation Index 2024. Retrieved from https://www.wipo.int/global_innovation_index; Data: https://www.wipo.int/gii-ranking/en/spain; https://www.wipo.int/edocs/gii-ranking/2024/es.pdf
- WIPO. (2024). Global Innovation Index 2024: Unlocking the Promise of Social Entrepreneurship. Geneva: World Intellectual Property Organization (WIPO).
- WIPO. (2024). Global Innovation Index 2024: Unlocking the Promise of Social Entrepreneurship. Geneva: Organization World Intellectual (WIPO). Retrieved April 18, 2025, from https://www.wipo.int/global_innovation_index/en/
- World Bank. (2020). *Human Capital Index 2020.* Retrieved from https://www.worldbank.org/en/publication/human-capital
- World Bank. (2024, October 30). Human Capital Country Brief Serbia. Washington,
 USA. Retrieved from
 https://humancapital.worldbank.org/content/dam/sites/data/humancapital/
 pdf/country-briefs-2024/Serbia.pdf
- World Bank. (2024). Human Capital Index (HCI) (scale 0–1) Serbia. Washingthon, USA.
- World Bank. (2024). *World Development Indicators*. Retrieved April 18, 2025, from https://databank.worldbank.org/source/world-development-indicators

- World Bank. (2024). *World Development Indicators: Spain.* Retrieved from https://data.worldbank.org; Data: https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2023&locations=ES&start=1961&view=chart
- World Bank. (2025). *Adapting for Sustainable Growth. Western Balkans Regular Economic Report. No. 27 Spring 2025.* Washington: International Bank for Reconstruction and Development / The World Bank.
- World Bank. (2025). Europe and Central Asia Economic Update, Spring 2025:

 Accelerating Growth through Entrepreneurship, Technology Adoption, and Innovation. Washington: International Bank for Reconstruction and Development / The World Bank.
- World Bank. (2025). *Our World in Data.* Retrieved from Data Page: Human Capital Index 2020: https://ourworldindata.org/grapher/human-capital-index-in-2018?tab=chart&country=~UKR
- World Bank. (2025, April 10). *Serbia*. Retrieved from The World Bank in Serbia: https://thedocs.worldbank.org/en/doc/d5f32ef28464d01f195827b7e020a3e 8-0500022021/related/mpo-srb.pdf
- World Bank. (n.d.). World Bank national accounts data, and OECD National Accounts data files. Retrieved from data.worldbank.org: https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?end=2023&locations =ID&start=1993&view=chart
- World Economic Forum. (2020, October 21). *COVID-19 shows it's time to rewrite the script on jobs in the creative economy.* Retrieved from Weforum: https://www.weforum.org/stories/2020/10/covid-19-shows-it-s-time-to-rewrite-the-script-on-jobs-in-the-creative-economy/#:~:text=The%20creative%20economy%20often%20relies,10%25%20for%20the%20wider%20economy.&text=These%20forms%20of%20work%20are%20more%20pr

- World Economic Forum. (2023). *The future of jobs report 2023.* Geneva: World Economic Forum. Retrieved from https://www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf
- World Health Organization. (2025). GINI coefficient (income distribution) (Serbia).

 Retrieved from European Health Information Gateway:

 https://gateway.euro.who.int/en/hfa-explorer/ginicoefficient/serbia/#wD1uEH9Ofl
- World Intellectual Property Organization. (2024). *Global Innovation Index 2024: Innovation leaders in 2024.* Retrieved from https://www.wipo.int/web-publications/global-innovation-index-2024/en/gii-2024-results.html
- World Values Survey. (2023). *Inglehart–Welzel Cultural Map of the World.* Retrieved from https://www.worldvaluessurvey.org
- World Values Survey Association. (2022). *World Values Survey*. Retrieved from World Values Survey Data analysis tool, WVS Wave 7: Country Data Ukraine: https://www.worldvaluessurvey.org/WVSOnline.jsp
- Worldometer. (2025). Serbia population (live). Worldometer. Retrieved from https://www.worldometers.info/world-population/serbia-population/
- WVS. (2022). World Value Survey Wave 7 (2017-2022). Austria: World Value Survey
 Association. Retrieved from
 https://www.worldvaluessurvey.org/WVSDocumentationWV7.jsp
- YCharts. (2024). *Spain Unemployment Rate.* Retrieved from https://ycharts.com/...
- Zarifhonarvar, A. (2024). Economics of chatgpt: A labour market view on the occupational impact of artificial intelligence. *Journal of Electronic Business & Digital Economics*, 3(2), 100-116.
- Zelma, E. (2024). The gig economy from the freelancer's perspective: The risk of precarianization. *International Journal of Contemporary Management*, 60(1), 211-226.

Міністерство цифрової трансформації України. (2023). *Дія Освіта*. Retrieved from Дослідження цифрових навичок українців.: https://osvita.diia.gov.ua/research

Народна Банка Србије. (2025). *Извештај о инфлацији.* Београд: Народна Банка Србије.

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