



JRC SCIENCE FOR POLICY REPORT

An overview of European Platforms: Scope and Business Models

Fabo B., Beblavý M., Kilhoffer Z. and Lenaerts K.

2017

This publication is a Science for Policy report by the Joint Research Centre (JRC), the European Commission's science and knowledge service. It aims to provide evidence-based scientific support to the European policymaking process. The scientific output expressed does not imply a policy position of the European Commission. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use that might be made of this publication.

JRC Science Hub

<https://ec.europa.eu/jrc>

JRC109190

PDF ISBN 978-92-79-77251-1 doi:10.2760/762447

Luxembourg: Publications Office of the European Union, 2017
© European Union, 2017

Reuse is authorised provided the source is acknowledged. The reuse policy of European Commission documents is regulated by Decision 2011/833/EU (OJ L 330, 14.12.2011, p. 39).

For any use or reproduction of photos or other material that is not under the EU copyright, permission must be sought directly from the copyright holders.

How to cite this report: Authors, *Title*, Publisher, Publisher City, Year of Publication, ISBN, doi, PUBSY No.

All images © European Union 2017

Title An Overview of European Platforms: Scope and Business Models

Abstract

The platform economy has become an important consideration within the European Commission's Digital Economy agenda. By mapping the platform economy within the 28 European Union (EU) Member States, this report draws on a database of 200 service platforms active in Europe, and aims to serve as a resource for the development of a European policy response. It identifies a huge diversity of platforms within the EU in terms of size, geographical scope, services offered and business models. Further, the innovative potential of platforms is confirmed, notably the way in which they employ technology to facilitate socially beneficial activities, such as volunteering or ridesharing. At the same time, we note the tendency of a number of platforms to withhold information about their functioning. There are also inconsistencies in the treatment of service providers, whose autonomy in organising their work is quite limited even though their status is almost universally that of independent contractors, which raises questions about the protection of workers. The European platform environment comprises both domestic and international actors, with the latter usually being the market leaders. These platforms often operate across national boundaries, strengthening the case for EU-level intervention.

Contents

Acknowledgements2

Executive summary3

1 Introduction4

2 Data and methodology5

 2.1 Case selection5

 2.2 Limits of coverage5

 2.3 Analytical Strategy6

 2.4 Terminological note.....6

3 Analysis..... 8

 3.1 Structure of the European platform economy 8

 3.2 Work assignment and business models 12

 3.3 Size of platforms 15

 3.4 Innovations, transparency and the social dimension of platforms 17

4 Policy implications 20

References 22

List of boxes 24

List of figures 25

Annexes 26

 Annex 1. Database values defections 26

 Annex 2. List of included platforms 28

Acknowledgements

The authors are grateful to Fabianne Abadie, Federico Biagi and Annarosa Pesole of the Joint Research Centre (JRC) of the European Commission for the excellent collaboration and insightful comments on their work. Research assistance by Ana Silva is thankfully acknowledged. We are grateful to Katerina Dukova, Alina Poliakova, Mindaugas Savickas and Donát Szűcs for valuable help with cataloguing the platforms, and to Jackie West and Anne Harrington for editorial assistance.

Authors

Brian Fabo, Miroslav Beblavý, Zachary Kilhoffer and Karolien Lenaerts

Executive summary

- The European platform economy has evolved rapidly, with most platforms having been set up since 2010.
- Due to the recent creation of platforms, they tend to be quite unstable: merging, disappearing and becoming inactive.
- Platforms of a European origin compete with international platforms, mainly from the US.
- Platforms can be classified in three main types: transportation platforms, which can be further divided into platforms that either focus on the transportation of people or goods; platforms trading online services (e.g. design, IT services); and platforms trading offline, local services (e.g. delivery or housework).
- Large central EU countries tend to host a broad array of platforms, while the platform 'offer' in small peripheral EU states is more limited, creating different policy challenges in these two groups of countries.
- Platforms differ greatly in terms of the autonomy they grant to their service providers. While some let them decide the organisation of their work and remuneration, many limit autonomy to an extent that resembles dependent employment. This difference is not always reflected in the legal treatment of service providers.
- As creatures of the internet age, platforms create very few jobs related to the functioning of the platform. The job creation aspect is thus almost entirely limited to service providers who are often not employees, but independent contractors. This could lead to an increase in precarious work in the EU.
- In general, platforms are not particularly forthcoming about the scale of their operations. This contributes to information asymmetries, acts as a barrier to the creation of trust between customers and service providers and hinders innovation. This may be problematic for the platforms that receive public funding.
- Many European platforms seek to promote social goals, such as helping disabled citizens or reducing the negative effects of individual transportation through ridesharing, using innovative technology to empower actors engaged in socially beneficial activities, including volunteer groups. Furthermore, many platforms support cultural exchange and connect people across borders.

1 Introduction

'Online platforms' is a rather ill-defined term that describes all online spaces where users engage in commercial and non-commercial interaction with each other (Gillespie, 2010). These platforms are an increasingly important means of accessing goods, services and information in Europe, however, and as such have been of interest to policy-makers for some time. Given the potential of such platforms to regulate access to various markets, the European Commission has identified platforms as an important area of interest to the Digital Single Market strategy (European Commission, 2015).

While there are many different kinds of platforms, a specific subgroup allows people to exchange goods and services without an intermediary and is a distinct topic of interest. Concepts such as 'sharing', 'collaborative' or 'on-demand' economies have become increasingly popular because they promote a vision of the future whereby under-utilised assets (such as accommodation, cars, or equipment), as well as people's free time and unused skills become a resource to fuel societal progress. These platforms might promote a more sustainable and communal way of life while also offering new economic opportunities, particularly for disadvantaged communities, which in turn could promote economic growth (Heinrichs, 2013; Dillahunt and Malone, 2015). Nevertheless, the platform economy has also become a source of concern: of a further increase in precarious employment and a regulatory race to the bottom (Degryse, 2016; Huws, 2016).

Despite the relative novelty of the platform phenomenon, the topic has received considerable attention from researchers. It would thus be redundant to devote space to exploring the platform economy in general in this report. Indeed, a large number of high quality conceptual pieces have already tackled the topic quite exhaustively (Teubner, 2014; Schor, 2014; Codagnone et al., 2016a; Codagnone et al., 2016b; Codagnone and Martens, 2016; Drahokoupil and Fabo, 2016; Martin, 2016; Maselli et al., 2016; Puschmann and Alt, 2016). Furthermore, a large and growing number of empirical studies focus on specific platforms, or offer a comparison of a set of platforms, providing insights into many aspects of the sharing economy.¹ Finally, significant attention has been paid to the legal aspects of the platform economy, including the need for and implications of platform regulation at the European level (Cohen and Zehngelot, 2014; Koopman et al., 2014; Prassl and Risak, 2016; Fabo et al., 2017; De Groen et al., 2017).

One dimension of the field of research into the platform economy that so far appears to have been neglected is an overview of the 'population' of platforms, in particular from a European perspective. Consequently, the main aim of this report is to help address this shortcoming by providing information on the platforms for the trading of transportation, online and offline services – chosen according to the interests of the European Commission – active in the 28 Member States of the EU in the first half of 2017. In this endeavour, we methodologically draw upon previous mapping efforts of the platform economy in eight countries conducted by PwC on behalf of DG GROW (Vaughan and Daverio, 2016). To the best of our knowledge, this report represents the first such comprehensive mapping of Europe's platform economy.

¹ See Codagnone et al. (2016a) for an excellent literature review covering 140 studies, including many empirical ones.

2 Data and methodology

2.1 Case selection

The analysis presented in this report is based on thorough desk research, which resulted in a database containing information on 200 platforms active in the EU (see the list in Appendix 1). The list includes both the platforms originating within Europe (169 platforms, 84.5% of the sample) and those that originate from other countries (typically the US), but are also operational in Europe.

The identification of individual platforms used in the mapping exercise was based on the existing literature on individual platforms and media articles about the platform economy in individual EU countries. This initial identification was completed using web search engines, the analysis of media content,² relevant literature and information gleaned from platform economy experts.³ Additionally, for countries in which platforms were hard to identify,⁴ we asked local platform users identified through our networks to help us identify the locally active platforms.

2.2 Limits of coverage

Due to the focus on platforms' trading services, several well-known platform types have been omitted from this study. These are platforms for the trading of goods (such as Amazon or eBay) or which offer the use of assets (such as Airbnb for accommodation). Similarly, in keeping with the specific focus of this study, we leave out a large number of microloans platforms, crowd-funding platforms and other platform types that offer assets, information or other similar goods, rather than services.⁵ This specific focus allows us to better identify the main analytical dimension relevant for service provision platforms (see the explanation of examined variables in Appendix 2). Furthermore, this research focus allows us to extend our coverage to the entire EU28, rather than restricting it to selected countries.

Another limiting factor is that we are inevitably 'shooting at a moving target'. Eighty percent of the identified platforms were created after 2010, which means that the industry is dominated by young companies. Naturally, such a young industry is highly volatile because age strongly predicts the survival chances of platforms, as has been empirically shown by the example of the German crowd-investing platforms (Mäschle, 2012).

In this respect, most platforms can be seen as small enterprises in the first phase of growth, where survival itself is paramount, according to the widely used categorisation of the small business life-cycle by Churchill and Lewis (1983). Multi-billion-euro platforms such as Uber, care.com, 99designs, E-work and Task Rabbit have moved beyond this stage, having been founded before the 2010s when the main platform boom occurred. While there are some fast-growing newcomers, such as Foodora or Stars of Service, for each start-up there are many platforms that stop showing signs of life after a number of months or even earlier (see Box 1 for some typical trajectories of unsuccessful platforms). A cross-sectional study is, therefore, able to capture only a snapshot of an

² Focusing on content published in local media on local transportation and delivery platforms, platforms used by professionals, microwork and household chores platforms.

³ This mainly concerns attendants at the European Trade Union Institute's expert workshop on platform-mediated work, organised in September 2016, and the Eurofound expert workshop on Crowd Employment, of April 2017.

⁴ This concerns platforms in small countries such as Malta, Cyprus, Portugal and the Baltic countries.

⁵ The line between labour and non-labour platforms is not so clear in reality, however. The regular provision of an asset, such as accommodation or a vehicle, requires significant labour input to maintain the quality of the asset. Consequently, an element of work is involved in asset platforms as well, which is even starting to be covered by platforms, such as the Australian bnbbutler, which offers short-term rental management services.

ongoing process, which implies a need for caution when making generalisations about its findings as they can become obsolete rather quickly.

Box 1. The life trajectories of failed platforms

Given the relatively modest operating costs of some small-case platforms, it is possible to observe a 'zombie platform' phenomenon, which refers to platforms that remain formally active, but only a negligible (or in some cases zero) volume of activity is conducted through them. Additionally, some platforms might never have caught on, and while there is a website or an app developed as a proof of concept, it may never have been operational. In addition to such 'stillborn platforms', there are also 'mayfly platforms' that become operational but fail to acquire a 'critical mass' of customers and service providers, eventually turning into a zombie platform, merging with a competitor or disappearing altogether.

For this reason, we did not aim to compile an exhaustive list of all existing platforms. Rather, we aimed to capture the *relevant* platforms that are covered by mainstream media and are known to individual countries and as such can be expected to capture the key trends in the platform economy.

2.3 Analytical Strategy

The fluid nature of the platform economy has implications for our analytical strategy. Due to the cross-sectional nature of our data, our ability to generalise is limited. Consequently, we aim to capture at least the main developments with implications for policy.

In collecting data, we followed the approach of the PwC study (Vaughan and Daverio, 2016) and aimed to collect as much information as possible from the company website and media information about individual platforms. Departing from the PwC study, we avoided using the triangulation method⁶ to estimate data, sticking strictly to explicitly stated figures rather than attempting to produce our own estimates. Nonetheless, 48 platforms (24% of the sample) facilitated very few or no transactions, in which case we defined the revenue of the platform as negligible or zero.

In addition to desk research, we contacted all platforms with the request to participate in a short survey to obtain information. The participation rate was rather low, however, with only 11 platforms responding (a 5% response rate), many of which did not provide sensitive information, in particular regarding their turnover. While both non-response and refusal to respond to potentially sensitive questions are a common occurrence in web surveys (Tijdens, 2014), three respondents refused to answer, explicitly stating that data related to their business model are an important part of their competitive advantage. Further efforts to survey such platforms would be well-advised to take this factor into consideration.

2.4 Terminological note

We close the methodology section with a terminological note. Given the relatively recent nature of academic and policy discourse on platforms, there is so far no uniform terminology for many of the key concepts. As we point out in the methodology, it is not the aim of this report to contribute to conceptual development, and for that reason we use the most neutral terminology possible. Instead of 'sharing', 'cooperative' or 'on-demand' economy, we simply talk of platforms. Similarly, we avoid the ambiguous term 'user', which refers to both the providers and beneficiaries of services. For reasons of clarity, we use the terms 'service providers' and 'customers'.⁷ In communication with

⁶ The PwC study, meanwhile, would estimate some unknown figures on the basis of other known ones; for instance, revenue on the basis of the number of customers and the average price of service.

⁷ Note, however, that customers need not to pay for services; they only receive them.

platforms, we encountered situations where platform owners would dispute their designation as a 'platform', arguing that their business model differs substantially from other platforms. A non-profit platform disputed the division between providers and customers, explaining that the focus was rather on creating a tool for 'friends to help friends'. That said, we find the term 'platform' as defined by Gillespie (2010), and the distinction between 'service providers' and 'customers', to be the most neutral and accurate terminology for our purposes.

3 Analysis

In this section, we present the main findings of our mapping exercise, divided into individual thematic sections. The platform dataset is the source for all presented data, unless stated otherwise.

3.1 Structure of the European platform economy

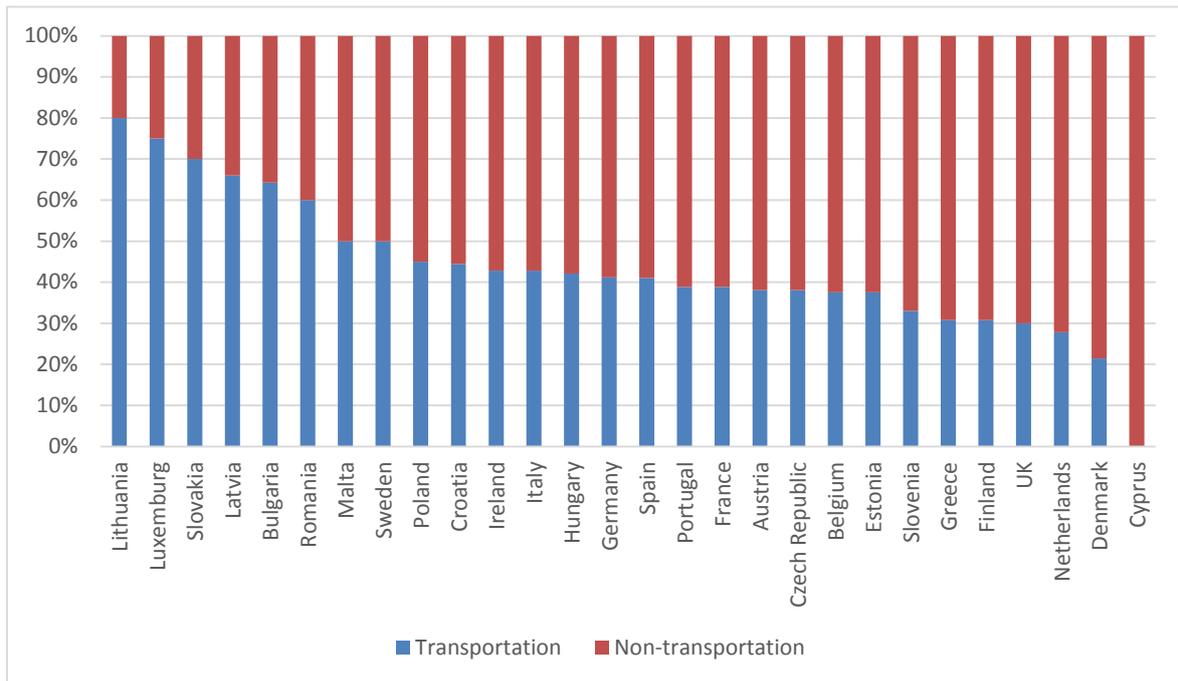
The service trading platforms can be, by and large, separated into three main groups: platforms facilitating transportation; platforms facilitating offline services; and platforms facilitating online services. The first two types are by their nature local and depend on the service provider being physically present (although many such platforms operate in multiple countries), while the third type allows for an efficient outsourcing of tasks, in many cases accompanied by offshoring whereby customers obtain services from a provider physically located anywhere in the world.

Transportation platforms can be further divided into platforms offering the transportation of people (about 66% of the transportation platforms) or the transportation of goods. There appears to be no platform offering both, although Uber has recently started to employ some of its idle drivers as food delivery workers through its platform Uber Eats.

Offline services platforms typically focus on the provision of low- and medium-skill services such as gardening, household chores, home maintenance, tutoring, baby/pet sitting and home watch services. Twenty-four percent of local task platforms provide a general marketplace for many different services, while the rest specialise in a particular market segment. Cleaning or care services are typical examples of platforms that fall into the latter category.

Finally, the platforms for online services (delivered exclusively digitally) offer services on all skill levels. Some of the online service platforms are truly global (53% of professional platforms), allowing the matching of customers and service providers regardless of country borders, while others operate in a specific country or countries. They tend to offer multiple categories of services, although there are some examples of single-purpose platforms, focused for example on medical or business consultancy, or academic assistance. Like offline service platforms, a smaller group (36%) of platforms are multipurpose, but most specialise in the provision of a specific task, typically design and creative endeavours or IT services. Here, it is important to note that not all service providers on online services platforms are professionals themselves. In some cases, they support professionals with auxiliary tasks, which can be quite routine, such as simple data entry for the purpose of training algorithms on the Crowd Flower platform. Transportation platforms represent the single-most numerous category, forming half or more of all identified platforms in seven EU countries (Figure 1). This can be partly explained by “low cost” ride sharing platforms, which appear to be comparably easy to set up, because they do not typically facilitate any payments and limit their activities to connecting ride offers with travellers.

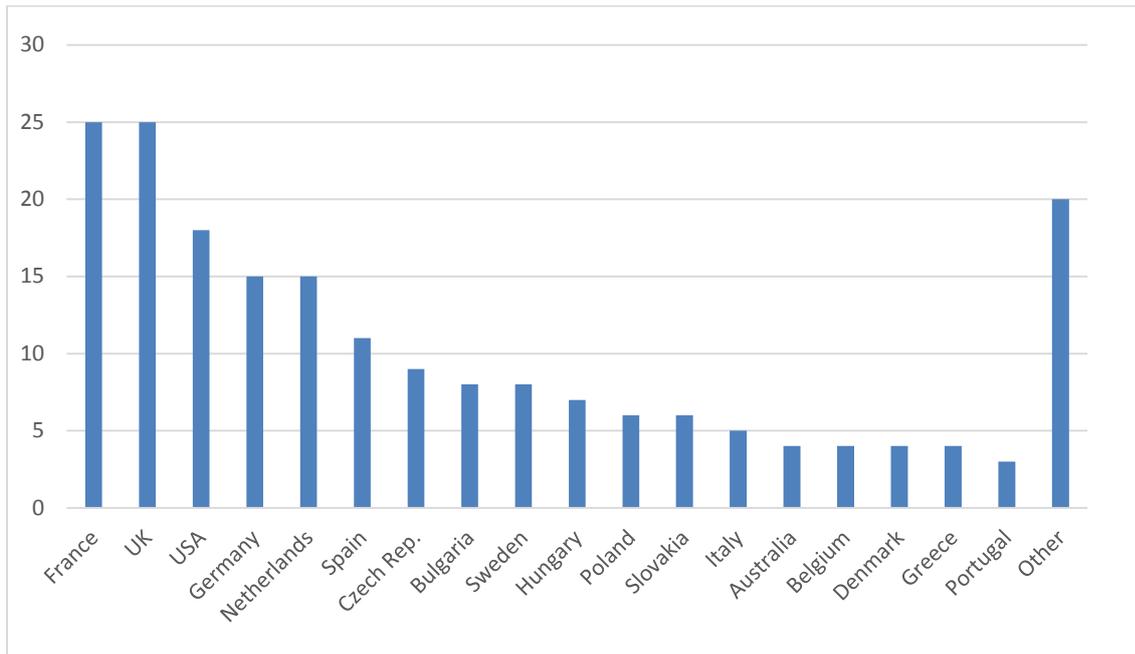
Figure 1. Share of transportation platforms per country



Source: own formulation.

The platform economy has developed very differently across the EU Member States (Figure 2). The main countries of origin for platforms tend to be the big European economies – France, the UK and Germany. The USA is also a major source of origin for global platforms active around the world, including in Europe. Nearly 15% of our sample is of non-European origin, for the most part (62% of the non-European platforms) originating in the USA.

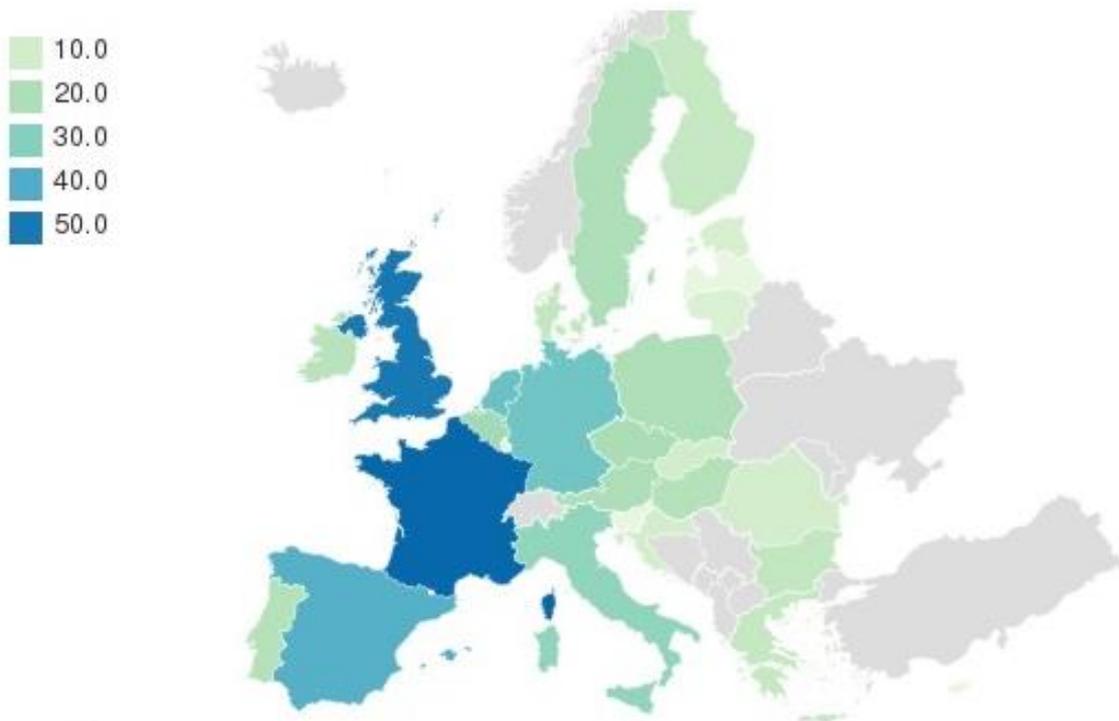
Figure 2. Number of platforms operating in the EU per country of origin



Source: own formulation.

Such differences between countries can also be identified when considering the number of active platforms per country, regardless of their country of origin. As evident in Figure 3, in the EU the highest number of platforms is found in France and the UK, followed by Germany, the Netherlands and Spain.

Figure 3. Number of platforms active in the EU per country

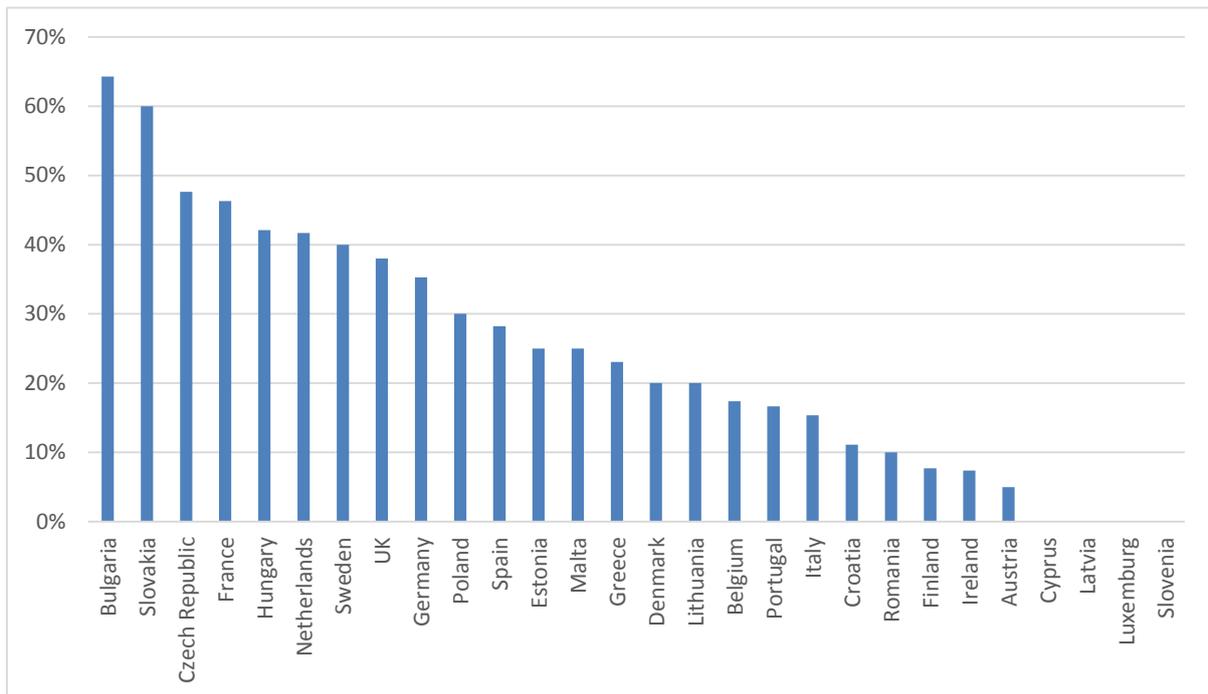


Source: own formulation. Visualisation via Datawrapper.

Nonetheless, there are differences in the landscape of platforms between countries. The UK is typically the first country in which international platforms originating in the English-speaking world try to gain a foothold in Europe. Platforms such as handy.com are so far only available for European customers who live in the UK. On the continent, however, French platforms are gaining a strong position, the most well-known being Bla Bla Car. Germany-based platforms tend to focus on German-speaking markets. In the Netherlands, particularly in Amsterdam, the public authorities actively support the development of innovation in the platform economy (Malhotra and Van Alstyne, 2014). The case of Spain is also interesting; due to its connection to Latin America there is a high presence of Latin American platforms in Spain and Spanish platforms in Latin America. At the same time, in small countries such as Luxembourg, Cyprus and Malta, only three or four platforms have been identified.

When looking at the share of platforms of domestic origin for each MS (Figure 4), we see that in all countries other than Bulgaria and Slovakia the number of platforms with a domestic origin is less than 50% of all platforms active in the county. In small economies such as Cyprus, Latvia, Luxembourg and Slovenia, all identified platforms are of foreign origin. The platform economy is, therefore highly international, as also evidenced by the fact that nearly 40% of the identified platforms are available in two or more languages – typically, the local language and English.

Figure 4. Share of platforms of domestic origin



Source: own formulation. Visualisation via Datawrapper.

We have thus shown that the big markets (the UK, France, and Germany) are at the same time major countries of origin for platforms, and attract a large number of international platforms. One possible reason for this is that global platforms aim to cover the large (and thus probably the most lucrative) markets first and spread to smaller markets later. An additional important factor for platform diffusion appears to be proximity, with platforms typically spreading to neighbouring countries first. We thus see

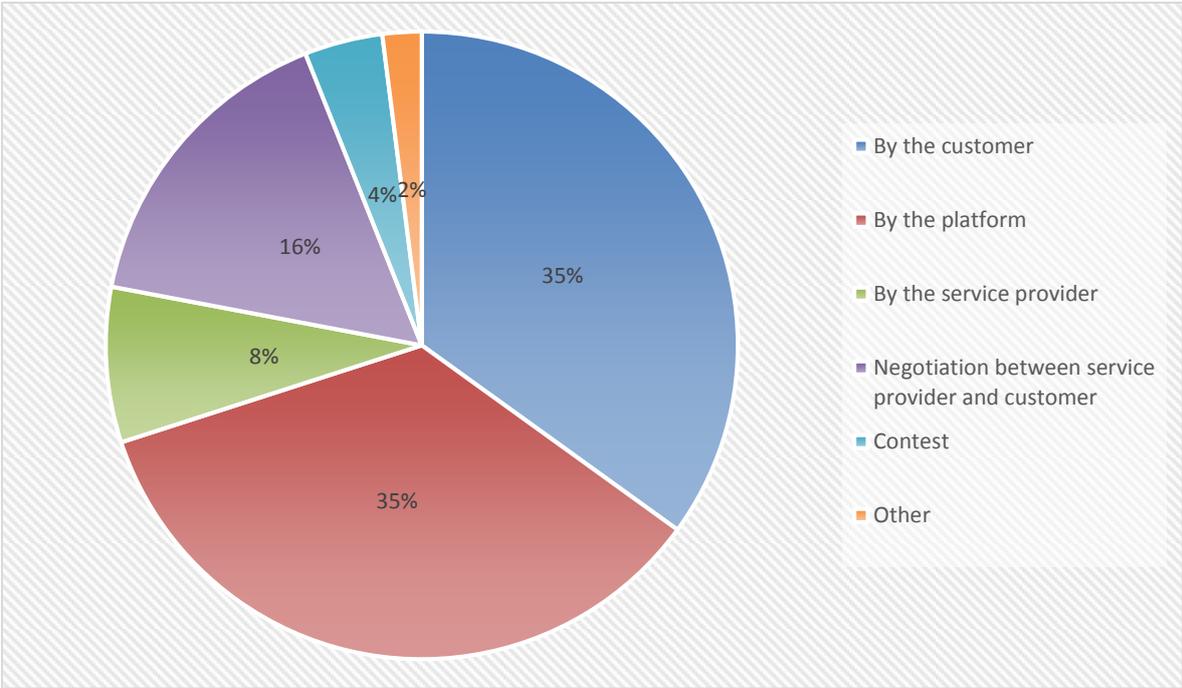
platforms operating exclusively within regional groupings such as in the Baltic, Visegrad or Benelux countries. Nonetheless, proximity can be linguistic and cultural, for instance Spanish platforms being active in Latin America, or American platforms being more likely to offer services in the UK than in other EU countries.

3.2 Work assignment and business models

There are four main ways in which tasks are assigned to workers (see Figure 5). The two most common ones are either platforms that serve as a marketplace with customers choosing their service providers, or direct assignment by the platform. The marketplace platforms either allow customers to hire service providers directly based on their profiles, or allow them to specify their requirements and then have service providers submit their offers, with the final choice being made from the pool of applicants. In some cases, the platform makes a pre-selection of service providers by only making those that fit the customer’s criteria aware of the opportunity. If the work is assigned by the platform, this can either be done ‘manually’ or automatically through an algorithm.

There are several additional models supplementing the two main ones. Thirty-two platforms, typically in the fields of ridesharing or volunteering, connect individual users who are free to negotiate the conditions of work between themselves, including in many cases engaging in a one-sided transaction where work is not remunerated in any way other than the ‘good feeling’ of the service provider. This makes the distinction between service providers and customers much less clear, with several platform owners rejecting the terminology altogether, claiming that they are rather a community of neighbours helping each other out. Additionally, 16 platforms allow qualified service providers to pick their tasks autonomously. Finally, 16 platforms assign work through contests, in which service providers respond to task specification by the customer with up to three solutions; the solution receiving the highest rating by the client wins a monetary prize. This is a typical arrangement in platforms facilitating creative work.

Figure 5. Work assignment method



Source: own formulation.

As in the case of work assignment, platforms employ different business models to generate revenue (see Figure 6), the two main models being a commission fee or a flat-rate fee.

In our data, 80 platforms (40% of the sample) appear to charge a commission fee. The most common commission fee is 15% of the service provider's rate⁸, but values can range from anything between 10% and 50%. In some cases, the commission decreases with the volume of services provided or can be decreased by paying a fixed fee. A commission fee typically implies freedom for the service provider to set his or her own rates, but platforms sometimes apply restrictions to this. For example, the Czech platform Stomanie allows service providers to only advertise small tasks priced at 100 CZK (about 3 EUR), and take 20% of the amount for itself. Service providers are, nonetheless, still free to define what they are willing to do for that amount. The commission fee can either be levied to the customer or to the service provider.

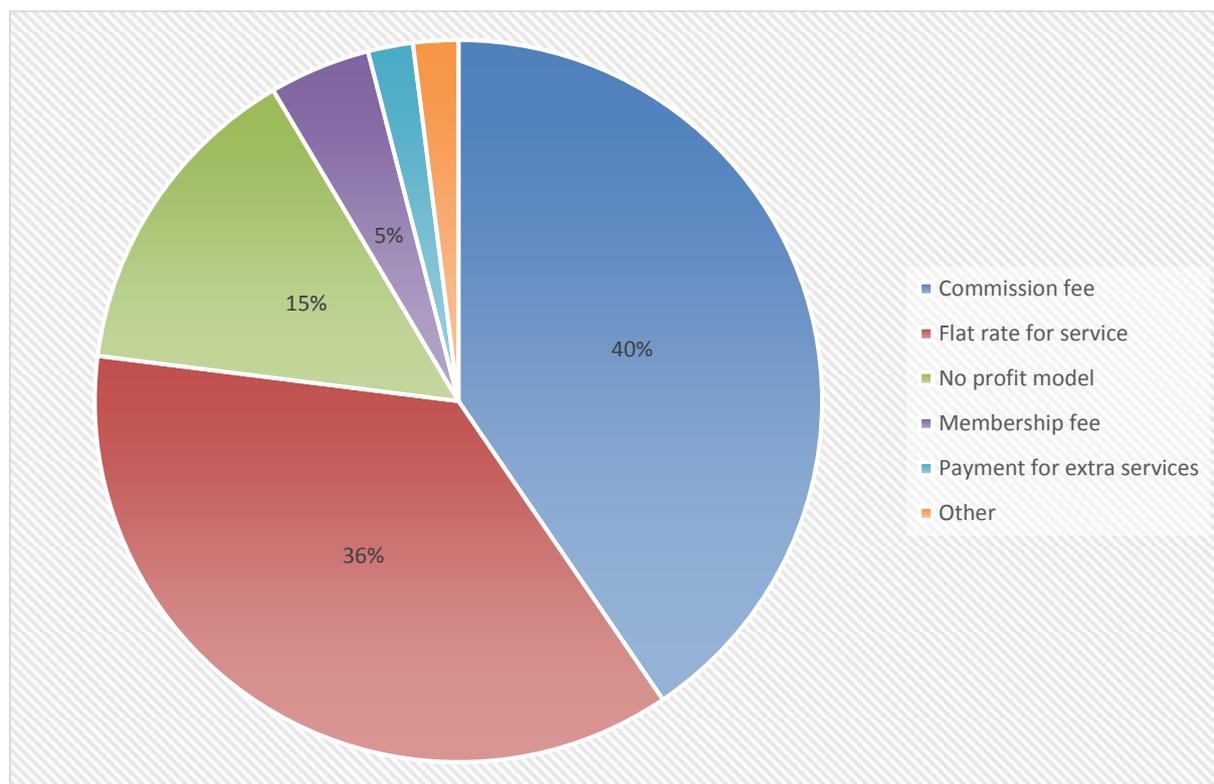
On the other hand, 82 identified platforms set a flat rate for service, which presumably incorporates both the reward for the service provider and the platform's share.⁹ Due to this set price strategy, these platforms offer very little autonomy to service providers, who cannot set the price for their work and have to perform standardised tasks as defined and priced by the platform.

While the two business models discussed above are dominant, there is further variation. There are 30 platforms that are either not set up as for-profit enterprises, or are focused on growing their user base (commonly due to being recently founded) and are not currently generating any profit. These platforms sometimes still allow service providers to obtain monetary recompense for their work, however. Ten platforms generate income by charging a membership fee and four platforms do not charge the customers or service providers, but offer extra (paid) services to service providers, such as tax advice and accounting.

⁸ This can be charged either to the service provider or the customer.

⁹ The specificities with regards to how the payment is divided are typically not available on these platforms.

Figure 6. Apparent business models of the platforms

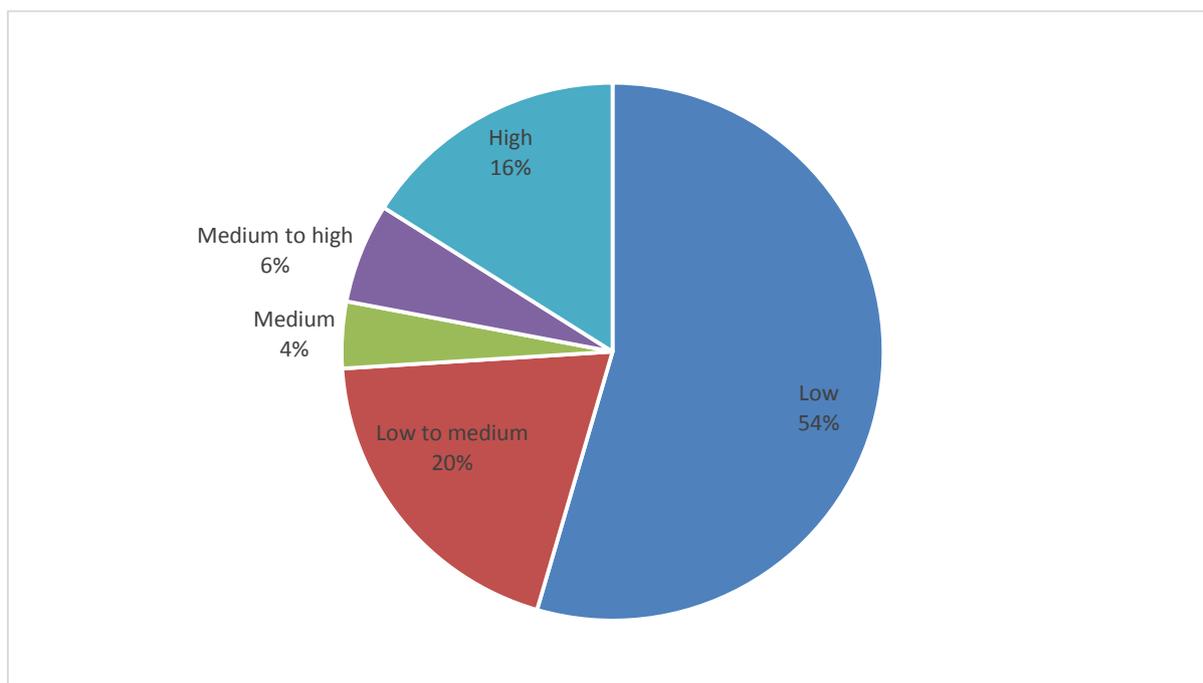


Source: own formulation.

From the discussion above, it is clear that platforms differ in terms of the degree of autonomy they offer to service providers. While some serve as marketplaces where service providers are free to offer services with a large degree of autonomy, many platforms assign work to service providers and determine the price. While our study does not focus on legal arrangements, our examination of platforms has shown that service providers are almost always treated as independent contractors. As such, there appears to be a tension between the legal definition and the actual implementation of the working relationship in many of the platforms examined. Naturally, such misclassification has potentially severe implications for the fair treatment and living conditions of platform workers. As discussed in Fabo et al. (2017), platform workers face serious issues such as lack of stable income and the expectation to work at any time, including inconvenient hours, in some cases for extremely low earnings (less than 1 euro per hour). In spite of the dependent nature of their work, the lack of employee status is possibly a barrier that prevents them from seeking the protection of labour legislation.

What makes this issue particularly salient is that 74% of the identified platforms focus on low- to medium-skilled work. Many of the platform workers thus fall into the 'cybertariat' category as defined by Ursula Huws (2014), which describes workers in the digital economy who possess the general skills needed to participate in it (i.e. basic computer literacy, potentially a command of English), but do not necessarily have the specific skills that would allow them to set themselves apart from other workers and take on more complex tasks. This makes the large mass of data-entry workers, bike couriers and pet-sitters potentially easily replaceable, especially in view of their legally precarious situation vis-à-vis the platforms they work for.

Figure 7. Breakdown of platforms per required skill level of workers



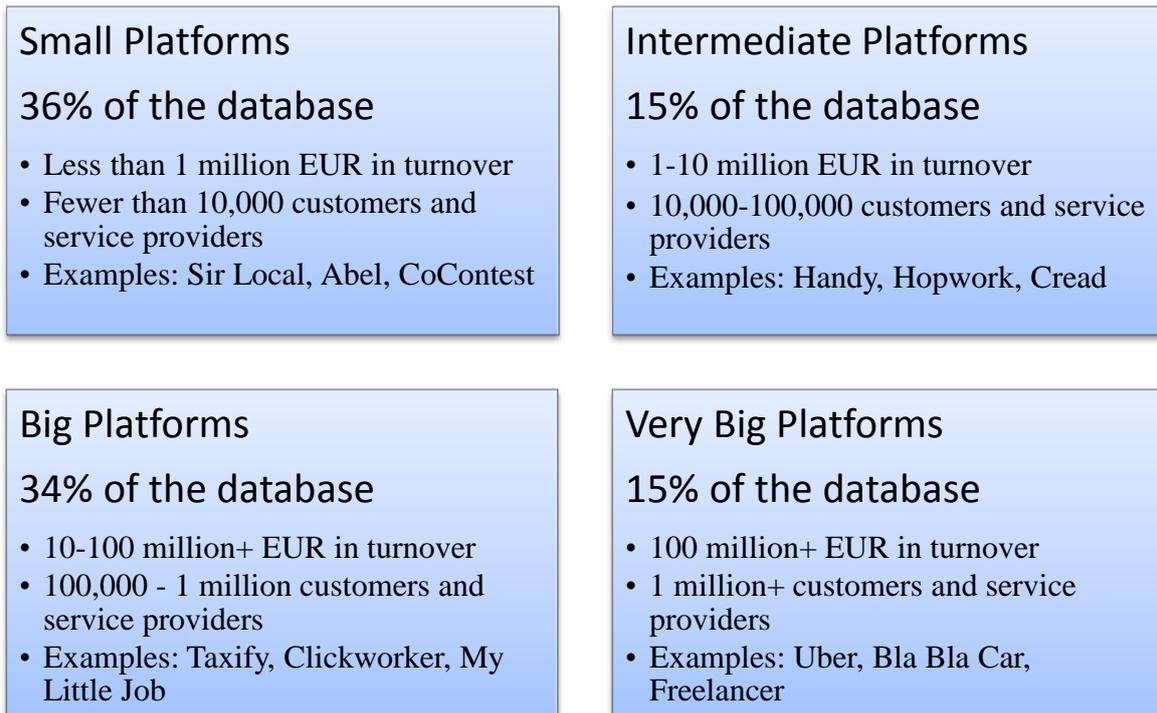
Source: own formulation.

3.3 Size of platforms

A major driver behind the interest in platforms is their rapid growth. According to the PwC report, in 2015 transportation platforms in the EU generated 1.65 billion EUR in revenue, while household and professional services generated 450 and 100 million EUR, respectively (Vaughan and Daverio, 2016). Given the annual growth calculated by the PwC report, we can expect the size of the platform economy to reach 8 billion EUR in 2017, and possibly more if the pace of growth picks up as presented by the report. Nonetheless, the literature suggests that the platform environment produces a 'winner takes all' dynamic (Liu et al., 2015), which would suggest that growth is driven by a handful of platforms.

Our database is quite balanced (Figure 8) in terms of platform size. Given the likely bias in favour of the bigger platforms that are easier to find and monitor through desk research and are thus more likely to be included in the dataset, it is quite possible that the share of very small platforms is underestimated. Nevertheless, when looking at the structure of the platforms, we see that among the largest platforms (those with over 100,000 EUR in revenue and over 1,000,000 customers and service providers per platform), nearly half of them are based outside the EU, typically in the US. American platforms tend to be leaders in a large number of industries, including transportation (Uber), care services (care.com), design (99 Designs) and offline tasks (Task Rabbit).

Figure 8. Platform breakdown based on size

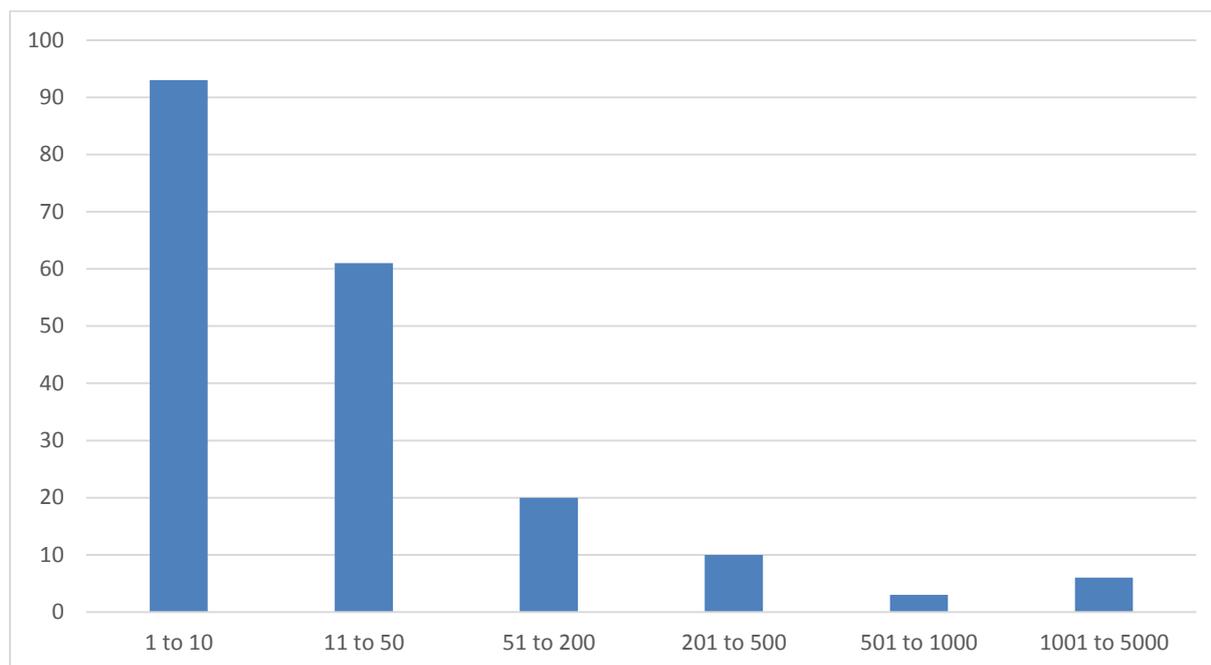


Source: own compilation.

Looking at the number of employees (see Figure 9, not to be mistaken with service providers) ,¹⁰ we see that the platforms themselves are certainly not major job generators beyond the opportunities offered to service providers. We have identified only 36 platforms that employ at least 50 people, suggesting that the total number of people employed in running platforms in the EU is likely to be in the range of several thousand at most.

¹⁰ It is important to distinguish between the people the platform itself employs, tasked with maintaining, developing, and promoting the platform, and the service providers, who use the platform to connect with customers.

Figure 9. Number of employees (not service providers) per platform



Source: own formulation.

3.4 Innovations, transparency and the social dimension of platforms

Many of the discussions about the 'collaborative economy' stress the innovative nature of the platform economy. For instance, EU Vice-President Jyrki Katainen pointed out that a "competitive European economy requires innovation, be it in the area of products or services. Europe's next unicorn could stem from the collaborative economy".¹¹ This is indeed true, with many platforms radically changing the organisation of labour within and across various industries. The potential for platforms to contribute to a more sustainable society by strengthening the social capital in communities and incorporating specific groups (such as single parents or immigrants) facing barriers on the 'standard' labour markets has also been stressed in the academic literature (Martin, 2016).

We have identified several innovative approaches in our platforms database of both a technological and social nature. Technological innovations are centred on the use of algorithms to organise labour, but also around enabling efficient coordination between groups of service-providers and clients. This might be seen as a positive trend among the platforms with a social mission, which use technology to improve the impact of socially beneficial activities (see Figure 10, for example). A very good example of this trend is the Danish platform Be My Eyes, which allows volunteers to help visually impaired and blind customers to orient themselves in the world, by describing the content of the pictures that the customers take with their phones. A further example of innovative platforms are those allowing travellers to transport a package addressed to someone at their destination, namely Favourful, which facilitates the exchange of favours, treated as a 'digital currency' among members. Especially important to European unity is the focus of some platforms on cultural exchange and connecting people across borders.

¹¹ See http://europa.eu/rapid/press-release_IP-16-2001_en.htm

Figure 10. Examples of socially beneficial activities conducted through platforms



Source: own formulation.

There is also a considerable degree of imitation. Platforms offering the transport of people (40 platforms) are by far the largest group in our database and most are very similar to industry leaders Uber and BlaBlaCar. Such dynamics also affect platforms that present ethical quandaries (e.g. plagiarism), such as those offering the preparation of academic deliverables (essays or theses, etc.) for payment. Such platforms are common in Eastern Europe and Germany, and are a source of significant controversy since they potentially allow customers to obtain academic qualifications fraudulently.

Another issue is that of transparency. As discussed in the section on methodology, platforms are not typically very forthcoming about the scope of their operations. Such behaviour is not atypical for start-ups and generally companies in the internet age (Black, 1998). Nonetheless, transparency in the platform economy has been identified as the key ingredient for the development of trust among service providers and customers and for fostering innovation.¹²

In our examination of platforms, we found that information such as the approximate numbers of service providers and clients is mostly not publicly divulged. Additionally, we observe that some platforms report a very high number of service providers relative to their size as inferred from the turnover. That is probably due to the very low cost of registering on the platform, which often entails merely filling out a simple form or allowing the platform to gather personal data from social media. As such, information presented by platforms has the potential to be misleading.

As a result of the shortage of reliable data, significant information asymmetries persist in the platform environment, making it impossible for a prospective service provider to estimate the scale of the competition and the size of the market and thus to develop a realistic expectation of prospective earnings. This is a crucial point, because empirical research tends to show that most service providers earn very little if anything at all (Codagnone, et al., 2016; Fabo et al., 2017). An additional dimension to the lack of transparency issue is that 11 platforms in our database disclosed having received funding

¹² See <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-288-EN-F1-1.PDF>

from the EU, in particular from the Horizon 2020 programme, which as a rule of thumb places great emphasis on the dissemination of results. While we do not know what the arrangements are in specific projects, the public could potentially benefit from better insight into the impact of these platforms.

4 Policy implications

The platform landscape differs greatly across Europe. While in larger countries multiple platforms often compete in the same field, in smaller peripheral countries we observe only a handful of platforms. As a consequence, the extent to which customers benefit from competition between platforms differs. Additionally, the service providers might have a weaker negotiating position in countries where there are fewer active platforms.

Due to the differences in environment, any policy approach to platforms needs to consider the local conditions. In well-developed platform economies such as France and the UK the platform environment is potentially more shaped by competition, to the benefit of both service providers and customers. In smaller, peripheral economies such as Malta, there is often little or no choice because the market is controlled by a single platform. In such a situation, the competition authorities should concentrate on ensuring that the platform does not abuse its monopolistic position.

An additional spatial dimension of the platform economy relates to the international nature of many of the platforms. In some cases, this simply means that the platform is serving many European markets; Uber, for example, is available throughout Europe (although it is increasingly facing legal challenges that force it to cease operations in Hungary, Denmark and Bulgaria).

In other cases, many virtual platforms allow service providers to sign up from wherever they live and provide services to customers located anywhere. This obviously has implications for the taxation system, the protection of workers, data protection and many other areas. Given the potential conflicts around national authority jurisdiction, this might be one area where a solution at European level is preferable.

The Communication of the European Commission on the Collaborative Economy calls for a balance to be struck between protecting service providers and not hindering the innovative potential of the platform economy with overly burdensome regulation (European Commission, 2016). Our analysis shows that the current state of the platform economy justifies such an approach, for the reasons explained below.

Platforms that aim to facilitate socially beneficial activities, such as ridesharing (which is potentially beneficial in reducing the negative effects of individual travel, especially in urban areas), strongly depend on the regulatory burden being light, as they generate little in terms of profit and are often run by volunteers. From the perspective of European integration, the potential of platforms to facilitate intercultural exchange and contacts between people across borders, thereby supporting European integration, is also important.

Additionally, some of the platforms focusing on profit generation allow service providers a great degree of autonomy in providing services and determining their pricing. This in turn supports entrepreneurship by allowing service providers to monetise their skills while leaving activities not related to their core skillset, such as customer acquisition, paperwork or payment facilitation, to the platform.

At the same time, some platforms tend to micromanage service providers in terms of the organisation of their work and remuneration, while still legally treating them as independent contractors. This is a well-recognised issue, which we identified in our previous research as being rather straightforward to solve, given that most EU countries already have regulation for both regular and occasional dependent work, respecting the specificities of both activities (De Groen et al., 2016). The main challenge is, therefore, more connected to law enforcement, where complexities may arise due to territoriality issues. As a consequence, a European-level response to protect service providers against precarious employment is needed.

The nature of platforms as technological companies allows them to grow, even in the absence of a large employee base. Indeed, the vast majority of platforms captured in our survey employ fewer than 50 people. At the same time, platforms rely on service

providers to generate business for them, in some cases requiring a sufficient network of service providers to be able to offer a continuous service (i.e. platforms facilitating the transportation of people need a large network of drivers to ensure a smooth service). Given that most platforms focus on the provision of low- to medium-skill labour, these service providers are typically easy to substitute with other workers (and potentially machines). This dynamic might become paradoxical, however, as this new economy becomes an engine for the creation of jobs with relatively limited value added, but which at the same time is disconnected from the work of highly skilled workers involved in running the platform.

Finally, it is important to address the issue of transparency and information asymmetry; service providers should have the information they need to make an informed decision about offering services through any individual platform. The lack of transparency in the platform economy might be appropriate from a business perspective but is not conducive to engendering an atmosphere of trust between platforms, service providers and customers. This issue is particularly relevant for the public funding of individual platforms.

References

- Black, B. (1998), *Information Asymmetry, the Internet, and Securities Offerings*, Journal of Small and Emerging Business Law, Vol. 2, pp. 91–99.
- Codagnone, C. and B. Martens (2016), *Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues*, JRC Technical Report (<https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/scoping-sharing-economy-origins-definitions-impact-and-regulatory-issues>).
- Codagnone, C., F. Abadie and F. Biagi (2016a), *The Future of Work in the 'Sharing Economy'. Market Efficiency and Equitable Opportunities or Unfair Precarisation?*, JRC Science for Policy Report (<https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/future-work-sharing-economy-market-efficiency-and-equitable-opportunities-or-unfair>).
- Codagnone, C., F. Abadie and F. Biagi (2016b), *The Passions and the Interests: Unpacking the 'Sharing Economy'*, JRC Science for Policy Report (<https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/passions-and-interests-unpacking-sharing-economy>).
- Cohen, M. and C. Zehngelot (2014), *What's Old Becomes New: Regulating the Sharing Economy*, Boston Bar Journal, Vol. 58, No. 2.
- Churchill, N.C. and V.L. Lewis (1983), *The five stages of small business growth*, Harvard Business Review Vol. 61, No. 3, pp. 30–50.
- Degryse, C. (2016), *Digitalisation of the Economy and its Impact on Labour Markets*, ETUI Working Paper 2/2016, European Trade Union Institute, Brussels (<https://www.etui.org/Publications2/Working-Papers/Digitalisation-of-the-economy-and-its-impact-on-labour-markets>).
- de Groen, W.P., K. Lenaerts, R. Bosc and F. Paquier (2017), *Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations*, CEPS study for the European Parliament (<http://www.eesc.europa.eu/m?i=portal.en.publications.43914>).
- De Groen, W.P., I. Maselli and B. Fabo (2016), *The Digital Market for Local Services: A one night stand for workers?*, CEPS study for JRC (<https://ec.europa.eu/jrc/en/publication/digital-market-local-services-one-night-stand-workers-example-demand-economy>).
- Dillahunt, T.R. and A.R. Malone (2015), *The Promise of the Sharing Economy Among Disadvantaged Communities* in Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems, New York, NY: ACM, pp. 2285–2294 (<http://doi.acm.org/10.1145/2702123.2702189>).
- Drahokoupil, J. and B. Fabo (2016), *The platform economy and the disruption of the employment relationship*, ETUI Policy Brief No. 5/2016, European Trade Union Institute (<http://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>).
- European Commission (2015), *A Digital Single Market Strategy for Europe*, COM(2015) 192 final (<https://ec.europa.eu/digital-single-market/news/digital-single-market-strategy-europe-com2015-192-final>).
- European Commission (2016), *A European agenda for the collaborative economy*, COM(2016) 356 final (<http://ec.europa.eu/DocsRoom/documents/16881/attachments/2/translations>).
- Fabo, B., J. Karanović and K. Dukova (2017), *In search of an adequate European policy response to the platform economy*, Transfer: European Review of Labour and Research, Vol. 23, No. 2, pp. 163-175.

- Gillespie, T. (2010), *The politics of 'platforms'*, *New Media & Society*, Vol. 12, No. 3, pp. 347-364.
- Heinrichs, H. (2013), *Sharing Economy: A Potential New Pathway to Sustainability*, *GAIA - Ecological Perspectives for Science and Society*, Vol. 22, No. 4, pp. 228-231.
- Huws, U. (2014), *Labor in the global digital economy: The cybertariat comes of age*, New York, NY: New York University Press.
- Huws, U. (2016), *Platform labour: Sharing Economy or Virtual Wild West?*, *Journal for a Progressive Economy* (<http://www.progressiveeconomy.eu/content/platform-labour-sharing-economy-or-virtual-wild>).
- Koopman, C., M.D. Mitchell and A.D. Thierer (2014), *The Sharing Economy and Consumer Protection Regulation: The Case for Policy Change*, Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, December 2014 (<https://www.mercatus.org/system/files/Koopman-Sharing-Economy.pdf>).
- Liu, J., L. Yang and Z. Wang (2015), *Winner Takes All? The 'Blockbuster Effect' in Crowdfunding Platforms*, ICIS 2015 Proceedings (<http://aisel.aisnet.org/icis2015/proceedings/EconofIS/9>).
- Malhotra, A. and M. Van Alstyne (2014), *The Dark Side of the Sharing Economy ... and How to Lighten It*, *Communications of the ACM* Vol. 57, No.11, pp. 24-27.
- Martin, C.J. (2016), *The sharing economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism?*, *Ecological Economics* Vol. 121, pp. 149-159.
- Mäschle, O. (2012), *Which information should entrepreneurs on German crowdinvesting-platforms disclose?*, University of Rostock, Institute of Economics Working Paper No. 127. (<https://www.wiwi.uni-rostock.de/fileadmin/Institute/VWL/VWL-Institut/RePEc/pdf/wp127thuenen.pdf>).
- Maselli, I., K. Lenaerts K and M. Beblavý (2016), *Five things we need to know about the on-demand economy*, CEPS Essay No. 21, CEPS, Brussels (<https://www.ceps.eu/publications/five-things-we-need-know-about-demand-economy>).
- Prassl, J. and M. Risak (2016), *Uber, Taskrabbit, & Co: Platforms as Employers? Rethinking the Legal Analysis of Crowdwork*, *Comparative Labor Law & Policy Journal* 2015-2016, pp. 619-622.
- Puschmann, T. and R. Alt (2016), *Sharing Economy*, *Business & Information Systems Engineering*, Vol. 58, No. 1, pp. 93-99.
- Schor, J. (2014), *Debating the Sharing Economy*, Great Transition Initiative (http://www.tellus.org/pub/Schor_Debating_the_Sharing_Economy.pdf).
- Teubner, T. (2014), *Thoughts on the sharing economy*. Proceedings of the International Conference on e-Commerce (https://im.iism.kit.edu/downloads/EC_2014_Sharing.pdf).
- Tijdens, K. (2014), *Dropout Rates and Response Times of an Occupation Search Tree in a Web Survey*, *Journal of Official Statistics*, Vol. 30, No. 1, pp. 23-43.
- Vaughan, R. and R. Daverio (2016), *Assessing the size and presence of the collaborative economy in Europe*, PwC report for the European Commission (<http://ec.europa.eu/DocsRoom/documents/16952/attachments/1/translations/en/renditions/native>).

List of boxes

Box 1. The life trajectories of failed platforms..... 6

List of figures

Figure 1. Share of transportation platforms per country 9
Figure 2. Number of platforms operating in the EU per country of origin10
Figure 3. Number of platforms active in the EU per country10
Figure 4. Share of platforms of domestic origin11
Figure 5. Work assignment method 12

Figure 6. Apparent business models of the platforms 14
Figure 7. Breakdown of platforms per required skill level of workers 15

Figure 8. Platform breakdown based on size 16

Figure 9. Number of employees (not service providers) per platform 17

Figure 10. Examples of socially beneficial activities conducted through platforms 18

Annexes

Annex 1. Database values defections

Variable	Explanation
Platform name	Platform's name
URL	The web address of the platform
Short description	A short characteristic of the platform
Services traded	Which services are traded on the platform
Sector	Broad categorisation of traded services
Skill Level	Which skill level appears to be required for performing services on the platform
Country of Origin	Country where the platform was originally conveyed
Online delivery (Y/N)	Is the service delivered online (i.e. without physical contact)
Languages of the platform	In which languages platform content is available
For profit platform (Y/N)	Does the platform appear to have a money-making business model?
Social aim (Y/N)	Does the platform list an explicit social aim as its goal?
Paid work (Y/N)	Are service providers allowed to generate income beyond expenses coverage?
How is work assigned?	How are tasks and service providers matched?
Explanation of work assignment model	Detailed explanation of the method of how service providers are matched with tasks
Primary apparent profit source	How does the platform generate revenue?
Details of profit model	Detailed explanation of how revenue is generated on the platform
Start date of platform operation	Year the platform started to operate
Annual turnover/revenue	Approximate annual turnover or revenue (based on availability of data) in Euros

(est)	
Turnover source	Source of information about the turnover revenue
Number employees of	Approximate number of employees (other than service providers) working for the platform
Number customers of	Approximate number of customers served by the platform
Source of customers info	Data source for the number
Number of service providers	Approximate number of service providers served by the platform
Source of providers info	Data source for the number
Data for	Is the number of service providers valid for the EU specifically or for the entire world?
Profit model	Apparent source of income of the platform
Received Public Funding	Does the platform report receiving funding from the EU on its website?
LinkedIn page	Link to platform's LinkedIn page, which is normally a source of information about the year it started operating and the number of employees
EU Countries of Operation	In which EU countries the platform operates

Annex 2. List of included platforms

Platform Name	Sector	Country of Origin	EU Countries of Operation
99 Designs	Online services	USA	worldwide
99freelas	Online services	Brazil	worldwide
Abel	Transportation services	Netherlands	Netherlands
Aha!Car	Transportation services	Bulgaria	Bulgaria
AlloVoisins	Offline services	France	France, Belgium
AppJobber	Offline services	Germany	Germany
Aventurio	Offline services	Romania	Romania
Axiom	Online services	USA	UK, Germany, Poland
BananaCar	Transportation services	Lithuania	Lithuania, Latvia, Estonia, Poland
Barqo	Offline services	Netherlands	Netherlands, Croatia, Italy, Spain
Be My Eye	Offline services	Italy	UK, Italy, France, Spain
Be My Eyes	Other	Denmark	worldwide
Besser Mitfahren	Transportation services	Germany	Germany
Bizzby	Offline services	UK	UK
Bla Bla Car	Transportation services	France	France, Spain, Netherlands, Luxembourg, Belgium, Poland, Portugal, Germany, Hungary, Croatia, Romania, Czech Republic, Slovakia
Blacklane	Transportation services	Germany	Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden, UK
Boleia	Transportation services	Portugal	Portugal, Hungary

Book a Tiger	Offline services	Germany	Germany, Austria, Netherlands
Brenger	Transportation services	Netherlands	Netherlands, Belgium
Bsit	Offline services	Belgium	France, Belgium, Luxembourg, Netherlands
Buymie	Transportation services	Ireland	Ireland
Cabify	Transportation services	Spain	Spain
Cammeo	Transportation services	Croatia	Croatia
Care.com	Offline services	USA	Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Netherlands, Spain, Sweden, UK
Chauffeur-Privé	Transportation services	France	France
Clarity.fm	Online services	USA	worldwide
Cleanio	Offline services	France	France
Clickworker	Online services	Germany	worldwide
CoContest	Online services	Italy	worldwide
CoinWorker	Online services	USA	worldwide
ColisWeb	Transportation services	France	France
Comborides.com	Transportation services	Bulgaria	Bulgaria
Cookisto	Offline services	Greece	Greece, UK
Creads	Online services	France	France, Spain, Germany, Belgium, UK
Crew	Online services	Canada	worldwide
Croqquer	Offline services	Netherlands	Belgium, Netherlands, Italy
CrowdFlower	Online services	USA	worldwide
CrowdSource	Online services	USA	worldwide
crowdSPRING	Online services	USA	worldwide
Deliveree	Transportation services	France	Spain, France, UK, Belgium, Germany, Austria, Italy

Deliveroo	Transportation services	UK	Australia, Belgium, France, Germany, Italy, Ireland, Netherlands, Spain, UK
Den Lille Tjenste	Offline services	Denmark	Denmark
Design Crowd	Online services	Australia	UK
Diagnose.me	Online services	Slovakia	worldwide
Doido	Offline services	Germany	Germany
Domytask	Offline services	Sweden	Sweden
Dopios	Offline services	Greece	Austria, Belgium, Cyprus, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Portugal, Spain, UK
Drive.gt	Transportation services	France	France
DryRepublic	Offline services	UK	UK
Dweho	Offline services	France	France
Easytask	Online services	Czech Republic	Czech Republic
Eatwith	Offline and transportation services	Israel	Netherlands, Spain, Portugal, UK, Italy, France
Envato	Online services	Australia	worldwide
Etaksi	Transportation services	Lithuania	Lithuania
ETECE	Offline services	Spain	Spain
Eurosender	Transportation services	Slovenia	worldwide
E-Work	Online services	Sweden	Sweden, Denmark, Norway, Finland and Poland
eYeka	Online services	France	worldwide
Fahrgemeinschaft	Transportation services	Germany	Germany
FamilicaFacil	Offline services	Spain	Spain
Favourful	Offline services	UK	UK
Fiverr	Online services	Israel	worldwide
FiveSquid	Online services	UK	worldwide

Flavr	Offline and transportation services	Belgium	Belgium
Fobo	Online services	Czech Republic	Czech Republic
Foodchéri	Offline and transportation services	France	France
Foodora	Transportation services	Germany	Austria, Finland, France, Germany, Italy, Netherlands, Sweden
Free Cab	Transportation services	France	France
Free tours	Offline services	unknown	Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, UK, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden
Freelanceria	Online services	Poland	Poland
Freelancer	Online services	Australia	worldwide
Freska	Offline services	Finland	Finland
Frizbiz	Offline services	France	UK, France
Geniuzz	Online services	Spain	Spain
Get Your Hero	Offline services	Spain	Spain
Glissed	Offline services	Ireland	Ireland
GloVo	Local and online services	Greece	worldwide
Glovo!	Transportation services	Spain	Spain, Italy, France
Go More	Transportation services	Denmark	Denmark, Sweden, Finland, France, Spain
Go Work a Bit	Offline services	Estonia	Estonia, Finland
GoCarshare	Transportation services	unknown	worldwide
Good Spot	Offline services	France	France, Spain, Croatia, Portugal, Italy, Poland, Germany, Cyprus,

			Netherlands, UK, Greece, Malta, Slovenia, Bulgaria, Belgium, Romania, Hungary, Denmark, Austria, Estonia, Ireland, Finland
Hajtás Pajtás	Transportation services	Hungary	Hungary
Handy	Offline services	USA	UK
Hassle	Offline services	UK	UK, Ireland
Haxi	Transportation services	UK	UK, Sweden, Denmark, Spain
Hello Mums	Offline services	Hungary	Hungary, UK
Helping	Offline services	UK	Germany, Italy, Netherlands, France
Helpy	Offline services	France	France
Hi Cabs	Transportation services	Malta	Malta
Hinner Du?	Offline services	Sweden	Sweden
HogarSoluciones	Offline services	Spain	Spain
Hop In	Transportation services	Slovakia	Czech Republic, Slovakia, Slovenia
Hopwork	Online services	France	France
Housekeep	Offline services	UK	UK
Iamfree.pro	Local and online services	Bulgaria	Bulgaria
IHateIroning	Offline services	UK	UK
Image Rights	Online services	USA	worldwide
ItTaxi	Transportation services	Italy	Italy
Ja spravím	Local and online services	Slovakia	Slovakia, Czech Republic, Austria
Jadezabiore	Transportation services	Poland	Poland
Jobado	Offline services	Netherlands	Netherlands
Jovoto	Online services	Germany	worldwide
Kabbee	Transportation services	UK	UK
Klusup	Offline services	Netherlands	Netherlands

Kreanod	Online services	Hungary	Hungary
Lancetalent	Online services	Spain	Spain
Lass-andere-schreiben	Online services	Germany	Germany
Laundrapp	Offline services	UK	UK
Laundryheap	Offline services	UK	UK, Ireland
LeCab	Transportation services	France	France
Lidská Síla	Offline services	Czech Republic	Czech Republic
Liftago	Transportation services	Czech Republic	Czech Republic
Liftshare	Transportation services	UK	UK
Lionbridge	Online services	USA	worldwide
Listminut	Offline services	Belgium	Belgium, France
Local solo	Online services	Canada	Netherlands, UK, Denmark, Germany, Norway, Sweden, Finland, Ireland, Estonia
MenuNextdoor	Offline services	Belgium	Belgium
Meo	Transportation services	Portugal	Portugal
Meploy	Offline services	Denmark	Denmark
Merkatus	Offline services	Netherlands	Netherlands
Mib Clean	Offline services	France	France
Microjob	Local and online services	Slovakia	Slovakia, Czech Republic
Microtask	Online services	Finland	worldwide
Mila	Online services	Switzerland	Germany
Mobilsamakning	Transportation services	Sweden	Sweden
Motar	Transportation services	Hungary	Hungary
Mrfix	Offline services	Netherlands	Netherlands
My Builder	Offline services	UK	UK
My little job	Online services	Germany	worldwide
MyTaxi	Transportation services	Germany	Germany, Austria, Italy, Spain, Portugal, Poland, Sweden, UK, Ireland

Napisze prace	Online services	Poland	Poland
Nomador	Offline services	Australia	Australia, France
Oferia	Local and online services	Poland	Poland
Onsite	Online services	UK	UK
Pass brains	Online services	Switzerland	Worldwide
Pawshake	Offline services	Netherlands	Netherlands
Peopleperhour	Online services	UK	Worldwide
Petbnb	Offline services	Netherlands	Netherlands
Pick This Up	Transportation services	Netherlands	Netherlands
Priv	Offline services	USA	UK
Rendi	Offline services	Hungary	Hungary
Resto-in	Transportation services	France	France, Spain, Belgium, Germany, UK
SANDEMANs New Europe	Offline services	USA	Netherlands, Spain, Germany, Belgium, Denmark, Ireland, UK, France, Czech Republic, Portugal
SEdnaKola.com	Transportation services	Bulgaria	Bulgaria
ShareYourMeal	Offline services	Netherlands	Portugal, Spain, Netherlands, Germany, Poland, Czech Republic, Romania, Bulgaria, Austria, Croatia, France, Belgium, France, UK, Italy, Denmark, Norway, Finland, Austria, Greece, Sweden
Shipeer	Transportation services	Spain	Spain
Shiplly	Transportation services	UK	UK, France, Germany, Italy, Netherlands, Spain
Shopist	Transportation services	Hungary	Hungary
Sir Local	Offline services	Poland	Poland
Skjutsgruppen	Transportation services	Sweden	Sweden

SnapCar	Transportation services	France	France
Spodeleno-patuvane.com	Transportation services	Bulgaria	Bulgaria
Spyn	Offline services	UK	UK
Star of Service	Local and online services	France	France
Starbytes	Online services	Italy	Italy
Stomanie	Offline and online services	Czech Republic	Czech Republic
Stootie	Offline services	France	France
Stovkomat	Offline and online services	Czech Republic	Czech Republic
Streetspotr	Offline services	Germany	Germany, UK, Greece, Spain, Bulgaria, Austria, Netherlands, Ireland, Croatia, Cyprus, Sweden, Czech Republic, Poland, France, Hungary, Lithuania, Finland, Denmark, Portugal, Estonia
Stuart	Transportation services	France	UK, Spain, France
Super Soused	Offline services	Czech Republic	Czech Republic
SupperShare	Offline services	Italy	Italy
Svihaj Suhaj	Transportation services	Slovakia	Slovakia
Talixo	Transportation services	Germany	Germany, Italy, UK
Task Farm	Online services	Austria	Austria
TaskRabbit	Offline services	USA	UK
Taskrunner	Offline services	Sweden	Sweden
Taxibeat	Transportation services	Greece	Greece
Taxify	Transportation services	Estonia	Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland, Romania, Slovakia
TidyApp	Offline services	Sweden	Sweden
Toptal	Online services	USA	Worldwide

Treatwell	Offline services	UK	Austria, Belgium, France, Germany, Ireland, Italy, Lithuania, Netherlands, Spain
Trusted housesitters	Offline services	UK	UK, France
Tumanitas	Offline services	Spain	Spain
Twago	Online services	Germany	worldwide
Uber	Transportation services	USA	Austria, Belgium, Croatia, Czech Republic, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden, UK
Uber Eats	Transportation services	USA	Netherlands, France, UK, Spain, Sweden, Austria, Italy, Poland
Ukululu	Online services	Poland	Poland
Umno.bg	Transportation services	Bulgaria	Bulgaria
Upwork	Online services	USA	UK
Urban Massage	Offline services	UK	UK, France, Austria
Urb-it	Transportation services	Sweden	Sweden, France, UK
Vayable	Offline services	UK	France, Spain, Netherlands, Italy, Portugal, Greece, Germany, Ireland, Austria
VEdnaPosoka.com	Transportation services	Bulgaria	Bulgaria
Viedit	Online services	Netherlands	worldwide
Vizeat	Offline services	France	France, Portugal, Hungary, Austria, Netherlands, UK, Greece, Italy, Germany
Voices	Online services	UK	worldwide
Vsprace.cz	Online services	Czech Republic	Czech Republic
Vsprace.sk	Online services	Slovakia	Slovakia

Wayook	Offline services	Spain	Spain
wehelpen	Offline services	Netherlands	Netherlands
With Locals	Offline services	Netherlands	Czech Republic, Germany, France, Greece, Hungary, Italy, Portugal, Spain, Netherlands
You2You	Transportation services	France	France
Youpijob	Offline services	France	France, Belgium
Yumber	Offline services	Hungary	Hungary
ZaednoNaPat.com	Transportation services	Bulgaria	Austria, UK, Belgium, Bulgaria, Germany, Greece, Spain, Italy, Luxembourg, Poland, Portugal, Romania, Hungary, France
Zask	Offline and online services	Portugal	Portugal, Spain
Zaslat.cz	Transportation services	Czech Republic	Czech Republic
ZipJet	Offline services	UK	UK, Germany, France

GETTING IN TOUCH WITH THE EU

In person

All over the European Union there are hundreds of Europe Direct information centres. You can find the address of the centre nearest you at: <http://europa.eu/contact>

On the phone or by email

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696, or
- by electronic mail via: <http://europa.eu/contact>

FINDING INFORMATION ABOUT THE EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website at: <http://europa.eu>

EU publications

You can download or order free and priced EU publications from EU Bookshop at: <http://bookshop.europa.eu>. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see <http://europa.eu/contact>).

JRC Mission

As the science and knowledge service of the European Commission, the Joint Research Centre's mission is to support EU policies with independent evidence throughout the whole policy cycle.



EU Science Hub
ec.europa.eu/jrc



@EU_ScienceHub



EU Science Hub - Joint Research Centre



Joint Research Centre



EU Science Hub



Publications Office

doi:10.2760/762447

ISBN 978-92-79-77251-1