Five things we need to know about the on-demand economy
Ilaria Maselli, Karolien Lenaerts and Miroslav Beblavý
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Uber, the world’s largest taxi company, owns no vehicles. Facebook, the world’s most popular media owner, creates no content. (...) And Airbnb, the world’s largest accommodation provider, owns no real estate. Something interesting is happening.

Tom Goodwin

That’s what makes it a metaphor for the new economy, a dystopia where regular careers are vanishing, every worker is a freelancer, every labour transaction is a one-night stand, and we collude with one another to cut our wages.

Robert Kuttner

The last few years have witnessed the exponential growth of platforms like Uber and Airbnb and the creation of countless other less well-known examples. The expansion of the on-demand economy puts huge pressure on regulators to adapt it to the existing frameworks for labour and taxation. The rapid growth of the sector also divides experts: it is seen by many as threat for working conditions, and by others as an incredible opportunity.

The purpose of this essay is to take a balanced perspective on what we know about the on-demand economy and what needs further investigation. More research is needed on the individual cases before one can draw conclusions on how this new sector works. The political economy of the sector is made even more interesting by the fact that the technology is developing faster than the regulation. Yet, our plea to policy-makers is to refrain from legislating too early and to take the time to understand how the supply and the demand of these services behave and their equilibrium.

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1. What is the on-demand economy?

The multitude of names used to refer to this phenomenon is suggestive of the confusion that surrounds this concept, but also of the subtle yet important distinctions that are often overlooked in the political and public debate. Besides the “on-demand economy”, terms such as the “sharing economy”, the “gig-economy” and the “Uber-economy” have been employed (among a variety of others). Our preferred starting point is the conceptualisation proposed by Frenken et al. (2015), reproduced in the left-hand panel of Figure 1, who describe the phenomenon as one in which consumers grant other consumers temporary access to underutilised assets (possibly for money).

This definition of the sharing economy is precise, but somewhat restrictive. Frenken et al. therefore relax these three main elements in their figure – namely consumers, temporary access and underutilised assets – to allow us to distinguish the concept from other types of services that are platform-based. If one discards the idea of temporary access, the second-hand economy emerges in which goods are sold between consumers. An example of such a platform is Ebay. The notion of underutilised assets can also be expanded to include the provision of services from one consumer to another via contests or auctions. Frenken et al. (2015) label this phenomenon the on-demand economy. The on-demand economy covers platforms such as Task Rabbit, where one can find someone to help to clean one’s house or deliver a product, and 99Designs, the so-called “Uber of graphic designers”. It is this part of the digital economy that we are particularly interested in in this essay, especially in light of the potentially disruptive consequences for the labour market, which appear to affect workers of all skill levels. Finally, according to Frenken et al. (2015), the sharing economy only involves consumer-to-consumer platforms; business-to-consumer platforms are excluded. By relaxing this last constraint, one arrives at the product-service economy which comprises services such as car rental (organised through an online platform, e.g. Cambio).

We reverse the perspective and use the on-demand economy as the overarching framework (right-hand panel of Figure 1), which, in our view, is composed of three subgroups. The first is the true sharing economy, what Frenken et al. (2015) define as temporary access to underutilised assets between consumers. The second is the set of platforms where one can conduct an auction or a contest in order to receive a service. The third group is the product-service economy, which is a business-to-consumer relationship. In this essay we primarily address the implications of the on-demand economy for the labour market.

Figure 1. The sharing economy: Definition and other related economic forms

2. How important will the on-demand economy be?

PWC (2015) estimates that the five key sharing sectors – travel, car-sharing, finance, staffing and entertainment – have the potential to increase global revenues from roughly $15 billion today to around $335 billion by 2025. Horlacher & Feubli (2015) rightly observe that no one has systematically measured the value added of GDP-relevant sharing activities. This implies that defining a measure will become increasingly urgent as sharing activities replace or add to existing economic activities. In their paper, Horlacher & Feubli (2015) rely on an estimation, using in parallel a top-down and bottom-up approach, and calculate that the value added generated by the sharing economy is currently in the range of 0.1% to 0.95% of Switzerland’s GDP.

In looking at individual companies in the sector, one cannot avoid mentioning the two giants: Uber (a platform for transport services) and Airbnb (a website on which people can rent and find accommodation), valued at $50 and $25 billion, respectively. One must acknowledge, however, that for every Uber or Airbnb there are thousands of small platforms and initiatives that do not reach a size that is sufficient to provide a full-time income to their workers. Even more platforms never reach this stage or cease to exist after a short period of time. This makes it extremely difficult to determine whether the sector deserves the attention it has attracted or whether it is just a fad.

JustPark, a platform that connects drivers with spare parking spaces has recently completed a mapping exercise showing existing sharing economy initiatives. The authors examine a large number of various platforms and divide them into five categories: ‘borrow’ (339), ‘buy’ (124), ‘hire someone’ (307), ‘share’ (67) and ‘swap’ (37). Each of these categories includes sub-categories and can be further explored by country. Through the platform, one can discover when it might be possible to share a green scooter in Italy on MiMoto, or to ask an unknown traveller to deliver or bring something via PiggyBee.

Another way to get some more insight into the potential of the sharing economy is to reflect on the future of local transport. Here the abrupt arrival of Uber obliged many consumers as well as policy-makers to reflect on the future of mobility in towns – a future characterised by the arrival of new technologies that could substantially transform the way we use cars today. Uber is not the only player in this market, as there are also car-sharing services such as Car2Go and Cambio, and ride-sharing services like BlaBlaCar. The combination of these new technologies can potentially increase the efficiency of cars, which today spend most of their time ‘sleeping’ rather than circulating. It has been estimated that cars circulate for only 4% of the time, half of which is spent in traffic (Heyndrickx, 2015).

If these transport systems spread on a large scale in cities, one could imagine switching from owning one’s own car to only using a car owned by someone else. In a more distant future, which could be not so distant in fact, these services might operate on self-driven cars (ibid.). Such a dramatic shift might not necessarily have as negative an impact on jobs as many currently fear. Less drivers would be needed, but at the same time, new jobs could be created in the manufacturing sector where more cars would have to be produced to accommodate the fact that every car will have a shorter lifespan due to a more intensive use.

Another important issue – which we will explore further in the remainder of this document – are the implications of the on-demand economy for labour. In this regard, a first question to

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1 As reported on 15 December 2015. It is not possible to produce a total simply by summing up these numbers, as certain platforms fall into more than one category. Therefore we know that the total is less than 874. The index can be found at www.justpark.com/creative/sharing-economy-index/.
investigate is the number of jobs being created by the sharing economy. In connection with their work on the National Employment Law Project, Smith & Leberstein (2015) cite specific cases. Globally, they count as many as 6.6 million care workers on care.com, about 8 million freelancers on Crowdsource and 5 million freelancers on Crowdflower. In the following section, we look at who these on-demand workers are and how their activities differ from those in more traditional jobs.

3. Who are the on-demand workers and how does their work differ from others?

The answer to these questions are not yet known, as studies on specific platforms have only recently started to appear. Interestingly, Huws (2015) reports that no single model has yet emerged (see Error! Reference source not found. 1). It is clear that the seven platforms that Huws studies are fairly different from each other in terms of the professional status and the employment status of the workers, the work mode, the place of work and the final client. Crowd work can be performed for an individual (as is the case on Mturk, a crowdsourcing marketplace for micro tasks) or for a company (like Wonolo, where businesses can find help to perform tasks). Another interesting dimension is the professional status of the workers: crowd-sourcing can involve high-skilled tasks (as in the case of UpWork\(^2\)) but also low-skilled ones (like on Task Rabbit and ListMinut, which is the Belgian version of the better-known American website).

Table 1. Different employment models for labour in the on-demand economy

<table>
<thead>
<tr>
<th>Professional status</th>
<th>O’Desk – Upwork</th>
<th>Click Worker</th>
<th>Task Rabbit</th>
<th>Wonolo</th>
<th>Starbucks</th>
<th>Mila</th>
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\(^2\) A platform to connect businesses and independent professionals, formerly known as oDesk.

Another example of a platform on which high-skilled workers offer their services is CoContest, which is known as the Uber of interior designers. The case of CoContest is interesting, because it illustrates that crowd-sourcing for some workers, especially in developing economies, can be an important source of income (provided that the platform reaches a decent size) (Maselli & Fabo, 2015). Yet, two-thirds of the designers who participate in the contests on the website are Italian. Similarly, half of the MTurkers are US residents (Ipeirotis, 2010). These findings are particularly valuable, because they challenge some of the assumptions that many researchers have traditionally held about production and value chains, outsourcing and globalisation. The case of CoContest challenges the idea that production takes place in the South for clients located in the North (Maselli & Fabo, 2015), and sheds new light on this novel form of globalised work which involves high-skilled tasks. For example, one can find requests on the UpWork website for analyses of business data using a statistical software programme called Stata, in exchange for payments of $100 or more, while at the same time, the financial reward for many tasks on the MTurk platform is less than one dollar.

Why do some participants supply their time despite these low wages? Several hypotheses can be put forward. A first hypothesis is a cognition flaw: given the new format, it can take time before workers are able to estimate their returns on the tasks performed via the platform. Indeed, there is a learning curve to be followed before one can learn how to optimise one’s time supplied on Uber, for example, before drivers are able to calculate when or how long they have to work to increase their revenues. Maselli & Fabo (2015) point to a complementary hypothesis and argue that supplying time on CoContest makes sense even in a developed economy for workers who have no alternative, for instance because there is insufficient demand for design work in the region, or who have little experience and need to build up a portfolio. The globalisation of tasks, fortunately, works in two directions: not only for a contractor to find someone to perform a task in another country, but also for a worker to capture the demand outside his/her region.

Apart from wages, what are the working conditions for tasks outsourced via platforms? The organisational principle behind working on a platform is that it is purely on-demand (client-driven). The facility to use platforms combined with the availability of a large pool of workers makes the timing of this type of outsourcing extremely compressed. The consequence is that the system transfers the stress and pressure to the freelance workers on the other side of the screen.

Such stress arises not only from the high competition and the short-term deadlines, but also from the unpredictability of the demand, the need to keep skills extremely up-to-date, the need to constantly engage in self-promotion and the uncertainty of the remuneration. The latter is particularly problematic on the contest-based platforms, as they are based on the idea that only those who win (often the top participant or the top 3) receive a payment. For those who participate but do not win, there is no pecuniary remuneration. In some cases, points are awarded to the losing participants to enhance their profile. Moreover, it is possible that no one will be rewarded for the work done if the client does not like any of the submissions and does not select a winner. Because it is difficult to enforce a transnational contract, especially when the sum involved is very small, the survival of crowdsourcing crucially depends on the rating system. Reputations and rating systems, however, are not organised in the same way across different platforms. On MTurk, for example, it is organised only for the Turkers, while on UpWork both the worker and the contractor are subject to rating. On a number of websites,
such as Reddit, there are reports of cases of scams and abuse where a contractor does not pay for the ‘hits’ outsourced.

4. Will the on-demand economy turn us all into self-employed workers?

Kuttner (2013) speaks of “a dystopia where regular careers are vanishing, every worker is a freelancer, every labour transaction is a one-night stand, and we collude with one another to cut our wages”. The fear of many that every job will be turned into a freelance activity is legitimate when technology decreases the transaction costs and makes outsourcing more convenient than insourcing. This fear is also validated by the data: in the EU, the share of contingent workers increased from 27.4% in 2002 to 32% in 2014, which, over the 12-year period experienced a boom in half of the time and a downturn in the other half (Figure 1). This increase is slow but continuous and it was not affected by the recession, signalling that these employment shifts are of a structural rather than a cyclical nature.

Figure 2. Contingent workers in the EU as share of total employment

The trend in Figure 1 is likely to continue increasing due to technological and organisational change. The on-demand economy might have contributed to this trend, but it certainly did not ‘invent’ precariousness. It is reasonable to expect that it will not stimulate an abrupt rise.

Moreover, one should keep in mind that permanent contracts exist for a variety of reasons. A simple explanation is that hiring someone only when needed entails high transaction costs due to the selection process and the risk that comes with it. Whenever there is the expectation that the demand for a good or service will be stable, it is more convenient to avoid the costs and risks associated with the search. Even when these transaction costs and risks are reduced by the platform technology and the reputation system, they might still be too high to shift the organisation of labour entirely towards this system. In addition, it should be noted that of the

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3 This is what a task is called on MTurk.

4 We include in the count of ‘contingent workers’ self-employed, temporary and involuntary part-time workers. These statistics have been collected by Eurostat in the European Labour Force Survey (LFS) since 1995.
seven platforms discussed by Huws (2015), three list “employee” as the employment status of the worker.

On the positive side, there is the fact that the on-demand economy has a lot of potential. First of all, it transfers transactions that were probably conducted in the shadow economy to the formal sector. One example could be cleaning or delivery services. Platforms can significantly contribute to the combat of the informal sector by sharing their data with tax administrations.

Another opportunity created by the on-demand economy is the possibility to complement one’s income, especially in times of crisis and high unemployment. It might not be a coincidence that on-demand platforms ‘exploded’ in the middle of the Great Recession.

5. How should policy-makers approach the on-demand economy?

Although the sharing economy has been extensively treated in journalistic literature, the academic literature is rather limited. This is largely due to the lack of available data to analyse this new phenomenon. The few academic contributions that do exist are mostly of a descriptive or qualitative nature and often provide only anecdotal evidence. As a result, it is difficult to offer policy recommendations, especially in the field of the labour market. Nevertheless, it is possible to understand and explain the possible axes along which regulation could develop would be best for society and not a specific group.

One approach would be to let the market try first: leaving aside the giants of the sector, such as Uber and Airbnb, many platforms are both young and small. The initial policy approach could be to simply let them grow. For a platform to become capable of generating income for its workforce, a certain size in the demand and supply of its services is necessary. Once a platform has passed through the ‘start-up phase’, a regulator could invite its founders to take certain responsibilities vis-à-vis the individuals who supply their work (and society).

In the same liberal spirit, one could prohibit “exclusivity clauses”, which prevent a worker from working simultaneously on two different platforms offering the same service, such as Uber and Lyft. The possibility to choose the platform(s) on which a worker supplies his/her services can stimulate competition, which can be beneficial for workers. A related idea is to remove anti-cartel protections from individuals participating in the on-demand economy, so that these workers can organise along union lines.

Some cities are considering placing a cap on the income any single worker can earn from the sector. This approach relies on the assumption – which has yet to be verified empirically – that work on on-demand platforms produces a supplementary income that could remain under the radar as long as it stayed below a certain level. The rationale for this approach is to detect false-workers and abuses. In a recent article, Kessler (2015) points out that several hotels and hostels have started to list rooms on Airbnb (e.g. the Box House Hotel and the Union Hotel in Brooklyn, NY), which clearly departs from the idea of making unutilised space available. Similarly, Lehdonvirta et al. (2015) observe that it is not unusual to come across advanced forms of re-intermediation on UpWork. Despite the genuine intentions, capping will have little appeal to experts who argue that it is extremely difficult to enforce, especially in light of the fact that the same digital worker may be active on multiple platforms.

Another question that interests many lawyers and policy-makers is: What would be a proper labour law for the on-demand economy? Should crowd-workers be categorised as freelancers or as employees? For some of the services outsourced through a platform, it is very difficult to provide a clear-cut definition. For example, if one rents out a spare room via Airbnb, does that make that individual an entrepreneur? And if that individual manages three listings, is he/she any different from a hotel manager? These questions can hardly be
answered by digital workers themselves. Ravanelle (2015) conducted interviews with crowd-workers using Uber, Task Rabbit, Airbnb and Kitchensurfing. It is interesting to note that no clear answer emerges when digital workers are asked directly if they see themselves as entrepreneurs or employees. A similar survey by Zhou (2015) posed these same questions to 201 crowd workers in the transport sector. The replies indicate that two-thirds of the respondents see themselves as independent contractors.

Some scholars (e.g. Todolí Signes, 2015) claim that a possible solution could be the creation of a special status for the workers of the on-demand economy. Their characteristics indeed do not fully comply with either the definition of employees or the self-employed. This confusion is confirmed by the different rulings of different courts on the same issue. The California Labor Commission declared that Uber is far more than a logistics software company that matches supply with demand. At the same time, other US agencies have confirmed that Uber drivers are independent contractors, as argued by Uber itself. Moreover, many of the issues go beyond the scope of conventional labour law.

However, looking for an appropriate categorisation can become a trap. For this reason, a completely different solution is suggested by Dagnino (2015), who calls for decoupling benefits and rights from the employment relationship. In other words, to break the link between welfare benefits and labour market status and move to universalism.

A further issue that complicates policy-making is that the on-demand economy operates on different levels. Many platforms have a local dimension. But the sector also includes a few giants with a presence in many countries. In this case, a European approach might be recommended for the sake of the single market. This would also be advantageous for the business sector as it then would not have to comply with multitude of different rules. A clear example is the experience of Uber, which had to adapt its range of services city by city. A European approach could similarly be valuable from the side of the users, workers and society. This multi-level dimension has also been stressed in a recent opinion issued by the Committee of Regions (2015). It emphasised that while a sound European framework is crucial in cases of cross-border interest or Single Market relevance, cities should be allowed to promote initiatives that target the specific needs of local communities in strategic fields, such as sustainable mobility and tourism, health and social services.

Admittedly, this does not give much guidance to policy-makers. The problem is that without access to the data of the different platforms it is difficult to study and understand how the supply and the demand of these services behave and what the equilibrium is. More research is needed on the individual cases before one can draw conclusions on how this new sector works. At the same time, some interest groups are putting huge pressure on the policy world to propose legislation, in order to avoid unfair competition from new businesses. The political economy of the sector is made even more interesting by the fact that the technology is developing faster than the regulation. This calls for a close collaboration between researchers and policy-makers, who should combine forces to obtain access to data and other information that can then be used to further our understanding of the many, many advantages and challenges posed by the on-demand economy.5

5 Researchers of three units at CEPS (notably, the Jobs and Skills Unit, the Financial Institutions and Prudential Policy Unit and the Regulatory Policy Unit) have drafted a research proposal to investigate many of the issues raised in this paper and are currently seeking funds to support the project. For further information, please contact Ilaria Maselli (Ilaria.Maselli@ceps.eu).
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References


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