

Impact of shared economy on a position of employees and proposed changes in legislation

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Introduction

Shared economy has been going through enormous development in the last decade, which was stimulated especially by using information and communication technologies that enable the fast and effective interconnection of a diverse demand for services or products and an adequate supply. At the same time, digital technologies make it possible to access a specific market for a very large number of interested people, who are willing to provide specific services, from professionals to amateurs. For a long time, it is not only about sharing some unused capacities of personal assets, subjects of long-term consumption (for example cars or flats) or short-term consumption (for example tools) or a free time capacity. Commercial goals and business have been more and more dominant in the so-called shared economy. The term 'shared economy' is therefore not absolutely precise, nevertheless, it is still used.

Its content has not been large so far but in some areas like for example accommodation and transport, it plays a significant part on market and it enters other areas very quickly. It is especially about services that require lower qualifications, such as personal services or services for households, but also more demanding services like ICT, advisory services, education, services of designers, architects and similar.

In the Czech Republic, a proportion of shared economy is still less developed compared to the advanced countries. The offer of services is too wide, and especially accommodation and transport are dominant, services for households of a craft character and some other professional services are developing. However, they do not cover the area of the Czech Republic equally but they rather concentrate in big cities. Moreover, the biggest platforms that arrange services of shared economy come from abroad. It is possible to expect in the future that in the Czech Republic, development will be as fast as in other countries and shared economy will expand to more and more fields and will bigger and bigger segment of our labour market. The presented study has been processed after being ordered by the Association of Independent Trade Unions, and their goal was to map the information available so far and to investigate a degree of recognition of the new phenomena of shared economy and to explain possible impacts of its development on labour market. The study is therefore based on detailed researches of local and international materials, results of carried investigations and it also monitors the considerations and reflections about the topic which take place in the Czech Republic and abroad.

The first chapter contains a specification of the term and main elements of shared economy. It takes a closer look into a function of digital platforms, their spectrum of work and the types of business modules they use. It pays a special attention to the platforms that mediate work / services and therefore they directly influence the labour market in specific segments. **The second chapter** describes how shared economy impacts labour market. Besides clarifying some basic connections on general level including a description of benefits and opportunities which the online platforms create in terms of an increase in employment as well as potential risks for workers, it also takes a close look at the individual characteristics of online labour market. First of all, engagement of online market interfering into individual segments of economy is monitored as far as the scope and frequency of using online labour platforms is concerned. There is also an overview of the categories and characteristics of people which the platforms join in on the side of providers as well as receivers. Platforms are classified according to a character of work they arrange, localization of the work and demands of qualification. Similar attention is paid to the conditions that online labour market offers to the workers who join in concerning incomes, working conditions, opportunities to

education and development of skills, their negotiation force, and a position in social dialogue and also from a viewpoint of a threat of the precarization of work.

Chapter three is dedicated to legislative aspects and conditions of good functioning of shared economy. There are segments in the wide spectrum of activities of shared economy that should not be left without any regulation, as well as segments in which it is rational to set up some regulation frames. Regulation possibilities are discussed from a viewpoint of finding fair conditions on market, tax problematics, status and protection of workers' rights including social security and working conditions. The problematics of consumer protection is discussed separately. There are some examples added into the text in appropriate places of how to solve problems in some European or overseas countries, which can be an inspiration for the Czech Republic. There are more detailed examples of more complete regulation concepts and legislative framework of shared economy in three selected EU countries (Estonia, Belgium and Italy).

Last chapter is dedicated to a summary of provided information and some basic conclusions.

I. Specification of the term shared economy

I.1 Definition and main features of shared economy

The authors use various expressions for new economic models based on massive expansion of ICT, for using the Internet (web platforms, applications), and involving the sharing elements in a smaller or greater extent, but not many provide a precise definition of the term. In the official EU documents, the terms 'shared economy' or 'collaborative economy' are used and they have about the same meaning. There are also different terms like e.g. economy of access (access economy), economy of platforms, economy based on demand (on-demand economy), „gig economy“¹ etc. One common feature of the definitions is a characteristic that the links between the providers and users are carried out through digital platforms. Not all digital platforms that work in the area of economic activities can be put into the category though. According to the European Commission (2016), collaborative economy involves activity/transactions that enable sharing / rentals, loans or providing services on request, in general, however, it does not involve transactions based on a change of ownership. This emphasizes the difference between common online selling webs and shared economy online platforms.

In a fast process of shared economy development, there is differentiation and profilation of separate segments with different cores. Definitions processed in available studies can be described using some characteristic features.

Some definitions emphasize the feature of sharing consumption (individuals enable an access to their items of long-term consumption for another individuals). 'Collaborative consumption' is defined as an ability to access a thing (item of long-term consumption), which is not done on market basis. Similarly, it can be described as a temporary ability to access the unused physical capacities, which can be paid. Another definition emphasizes the aspect of sharing as an addition to public services: it is about direct connections between people (Peer to Peer - P2P) which make it possible to receive, provide or share access to the subjects of long-term consumption or services, which are coordinated through communal online services.

Most of the platforms like Peer-to-Peer (P2P), tj. arrange relationships between individuals on a side of supply as well as a demand, but there are also the Business-to-Business (B2B) ones, where it is an offer of using excess production / transportation capacities, or the Government-to-Government ones (G2G), in which case it is the unused equipment/buildings offered in public administration. Shared economy sometimes includes also the platforms the function of which is based on the Business-to-Customer (B2C), where it is more about the realization of classical economy commercial model with a help of innovative tools of modern information and communication technologies.

P2P platforms are succesfull especially on the markets with fluctuating demand (e.g. taxi services, touristic accommodation) or the labour market segment where the short-term tasks dominate. For classical players, it does not pay off to invest into settleing such demands, which are then covered by new platforms.

¹ Gig = štace, vystoupení

Codagnone et al 2016² generalized the approaches described in literature into 3 categories:

- (a) recirculation of goods / items (second hand shops, selling leftovers),
- (b) increasing a level of using capacity / property (unused items of long-term consumption, extra production capacities etc.),
- (c) exchanging services, services in return.

The segment diversity is declared by the fact that all three categories include some important commercial platforms (among them also those with market value exceeding one milliard dollars, together with the community initiatives of 'true' small-scale sharing. Especially the second category (increasing the extent to which capacities / property are used) may involve very diverse spectrum of platforms. These include e.g. the classic P2P platforms (Uber, Airbnb, TaskRabbit...) as well as the B2C platforms (for example Zipcar) or the B2B (Cargomatic) or G2G (e.g. MuniRent). Besides that there are big differences within the P2P platforms related to a level of control, possibilities of 'multi-horning'³ or a character of object that is shared. The authors come into conclusion that the most important common aspect of all shared economy platforms is probably their innovation.⁴

De Groen and col.⁵ choose among many synonyms there are for shared economy and related (coinciding) concepts the term called „on-demand economy“ (economy of demand), which is defined as „a new phenomena of digital peer-to-peer arrangements through the online platform, which provides a temporary access to the goods and/or services of another person without him/her owning it.“ Online platforms are defined by the authors as „digital providers of the peer-to-peer arrangements – usually existing in a form of web site or software application for smart phones and tablets.

Drahokoupil and Fabo⁶ use a term economy of platform (platform economy), as they see the main basic common factor of the new segment in the use of online platforms, which enables to decrease the costs of transaction, during which work is „outsourced“ as a temporary access to goods or services. This decrease of expenses is viewed as a key distinguishing feature of the shared economy phenomenon. Online platforms provide a service of pairing (matching) the supply and demand. In relation to the labour market, such fast pairing enables an access to work and its market organisation also in the contexts where interconnecting supply and demand would be otherwise too expensive or where the risk of market failure required to rely on institutions like for example employment. There are three important functions of the platforms in the phenomenon:

- (d) platforms provide algorithm, which enables effective pairing of the supply of work and demand for work;

² Codagnone, C., Abadie, F., Biagi, F. (2016): The Future of Work in the Sharing Economy. JRC Science for policy report. European Commission. Available online:

<http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101280/jrc101280.pdf>

³ Multi-homing is a term (originally from information technology), which is used for a registration of one user at more platforms.

⁴ Codagnone, C., Martens, B. (2016): Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues. Institute for Prospective Technological Studies Digital Economy Working Paper 2016/01. JRC. Available online <https://ec.europa.eu/jrc/sites/jrcsh/files/JRC100369.pdf>.

⁵ De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>

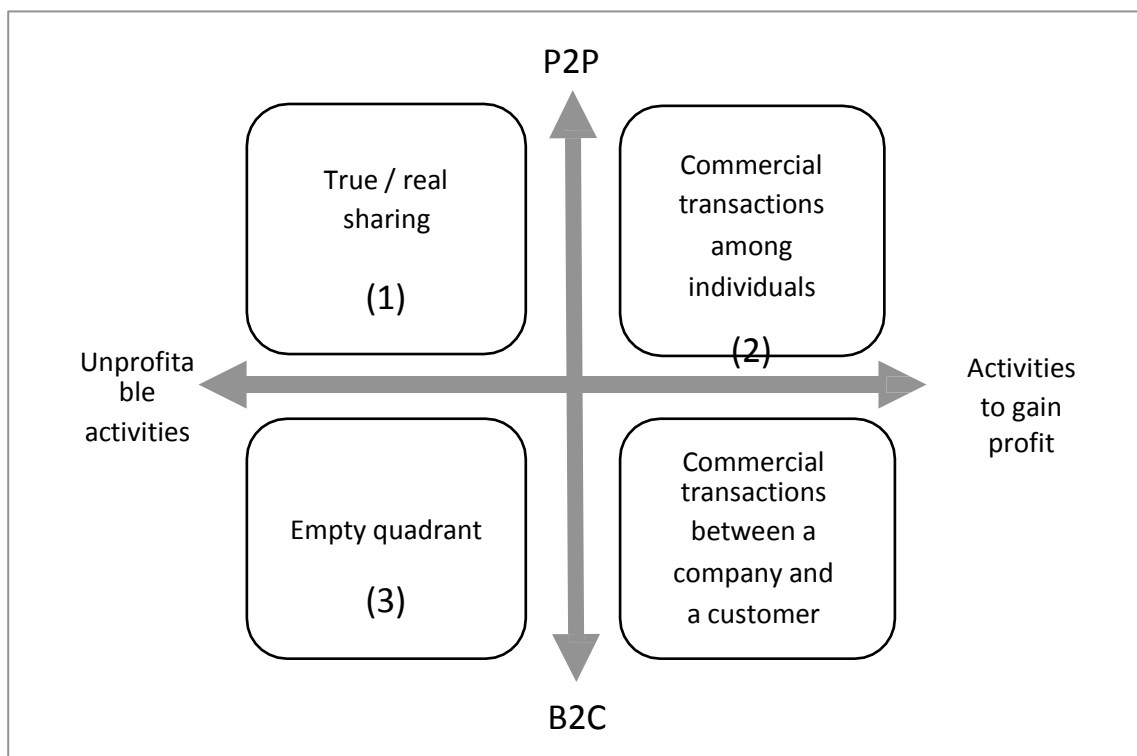
⁶ Drahokoupil, J., Fabo, B. (2016): The platform economy and the disruption of the employment relationship. ETUI Policy Brief. European Economic, Employment and Social Policy, N° 5/2016. Available online: <https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>.

- (e) technology makes it possible to decrease the costs of a transaction into such extent that they are able to support even the micro-transactions (that means minor services / low price sales);
- (f) platforms provide services that decrease or regulate the risks arising from market transactions, that means that they solve market failure like e.g. incomplete information about a work provider or a risk of deceitful activities; these services may involve monitoring systems and feedbacks, insurance and legal protection.

The authors believe that due to the above reasons, abstract terms like for example shared economy or collaborative economy are a bit misleading. The greatest potential of the new segment is considered to be an easier approach to workers, goods and services ad hoc exactly at the moment when they are needed, at very low costs per carried-out transaction. As a result of the decrease of the initial barriers, it is possible for the platform economy to expand to the previously informal or non-market spheres. As an example could be mentioned the situation where a previously rather informal activity, such as babysitting for animals, is now being transformed into a paid service.

Codagnone and Martens⁷ present a two-dimensional general classification of the shared economy platforms, which provides a suitable framework for evaluating different needs of regulations in different parts of the segment – see picture 1.

Picture 1: General classification of the shared economy platforms according to their need of regulation



Explanations: P2P = peer-to-peer (relations between individuals), B2C = business-to-customer (relations between a company and a customer) Source: Codagnone, C., Martens, B. (2016): Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues. Institute for Prospective Technological Studies Digital Economy Working Paper 2016/01. JRC. Available online <https://ec.europa.eu/jrc/sites/jrcsh/files/JRC100369.pdf>.

⁷ Codagnone, C., Martens, B. (2016): Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues. Institute for Prospective Technological Studies Digital Economy Working Paper 2016/01. JRC. Available online <https://ec.europa.eu/jrc/sites/jrcsh/files/JRC100369.pdf>.

The first quadrant involves the so-called „true“ sharing, which is not carried out for a financial profit and it is carried out between natural persons. This area does not bring any controversions or a need of regulation.

The second quadrant involves commercial activities provided in order to gain a profit on P2P principle. That involves platforms like Uber, Airbnb and platforms offering jobs. The main goal here should be new regulation procedures.

The third quadrant is empty – the B2C principle excludes the non-profit activities.

The fourth quadrant involves commercial B2C platforms. Their basic idea is that they use innovative approach to carry out the already existing B2C business modules and they also use modern communication technologies and the Internet. Some of them are presented among the shared economy platforms (e.g. Zipcar) but in practise, they do not differ from the classical B2C models and they are regulated as such.

Also in the second quadrant (commercial transactions among individuals), which is identified as a main goal of desirable regulations, however, exists a great diversity of different platforms, which may imply a necessity of differentiated approach. The authors⁸ think that many objections concerning the unequal conditions of competition and regulation, which were raised against operating of Uber or Airbnb, will not be relevant for other segments of the P2P platforms. Matters of protection of intellectual property or similar could be much more important for collaborative production and innovation platforms.

1.2 The aim and arrangement activities provided by the platforms

A range of services provided by online platforms may be quite wide. It may involve a wide scale from providing initial or pre-contract information, or contract terms and conditions, sending payments, dealing with complaints or access to corrective mechanisms, which are considered to be relevant when taking consumer protection into account⁹, just like tools to build trust, such as the reputation systems of evaluation, verifying identity and insurance.

Platform services in the pre-transaction phase create conditions for the participants to be able to use the platform environment easily and effectively. That involves support when registering on the platforms, creating trustworthy environment through for example a system of mutual assessment, verifying identity of the users or information concerning the rules or transaction safety. From the viewpoint of consumer protection, activities of the platform should help to improve the transparency in this phase of transaction and enable decision making based on reliable information.

Services in the transaction phase include determination of a way and conditions under which the transaction itself takes place. This may include the rules relating to transactions (that is terms and conditions), systems for setting the prices and easier payments. From a viewpoint of consumer protection, the platforms should ensure secure payments and having a clear and understandable set of rules for the transactions. Concerning the posttransactional services, the platforms focus on the assessment of users (e.g, identification of professional businessmen or cheats), on dealing with complaints, easier

⁸Codagnone, C., Martens, B. (2016): Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues. Institute for Prospective Technological Studies Digital Economy Working Paper 2016/01. JRC. Available online <https://ec.europa.eu/jrc/sites/jrcsh/files/JRC100369.pdf>.

contacts between participants in case of complaints and looking for or arranging to solve disputes and remedies. That may include services of collecting taxes on behalf of partner providers or assistance when filling in tax declarations. Considering the consumer protection, it is essential to have clear information about all conditions and possibilities available, which are set for the phase even after carrying out a transaction, including the rules related to responsibility and the process of solving in case of any existing problems with transaction between participants related to the participants or a platforms (including for example repeated use of data by a platform).

When covering their expenses and gaining profit for their services, online services use various ways depending on the width of provided services and how demanding and difficult they are. The following ways are the most common:

- transaction charges: charges for transactions arranged by platform that are charged to one or both transaction parties (consumers or providers);
- charges for subscriptions: payments charged periodically by platform to participants for an access to their services;
- charges for additional services: charges paid for optional services charged by platforms besides transactions or as additional charges to those for transactions, for example highlighting advertisement / information, professional photograph, verification of identity, delivery, insurance etc.;
- advertising: profits from advertising content of the third parties on a platform through banners, natural advertisement etc.;
- subsequent use of data: incomes from sharing or selling data of clients / participants of transactions to the third parties. Platforms very often require an agreement of the clients with sharing their data with the third parties in their terms and conditions, most often for marketing reasons;
- other: a source of another income may also be for example the storage charges, customers' hotline charges, B2B services etc.

According to the European Commission,¹⁰ platforms most often use advertisement as a source of their incomes (53 %), almost half of the platforms has incomes from selling data, one third of platforms (34%) use transaction charges, 21% participant charges and 12% additional services. Most platforms use a combination of the sources.

I.3 Types of business modules practised on the platforms

Depending on the width of provided services, there is a large amount of various business models carried out in shared economy and new ones still appear. The following division can serve as an orientational general classification, which evaluates a level of intervention and control the platforms have over the transactions that are carried out through them. According to a study of the European Commission,¹¹ it is possible to distinguish the following three types of platforms according to whether: (a) they provide only hosting offers, (b) actively administer transactions and (c) conduct payment transactions.

¹⁰ European Commission (2017): Exploratory study of consumer issues in online peer-to-peer platform markets. Brussels. Dostupné online: http://ec.europa.eu/newsroom/just/item-detail.cfm?&item_id=77704.

¹¹ European Commission (2017): Exploratory study of consumer issues in online peer-to-peer platform markets. Brussels. Dostupné online: http://ec.europa.eu/newsroom/just/item-detail.cfm?&item_id=77704.

Module 1: Hosting of offers

The first model concerns the platforms that are only restricted to passive interconnection of supply and demand. They make it possible to enter and publish information about supply and demand, arrange contacts between those who offer and who demand and usually also publish feedback and reviews from customers. Most of those platforms also offer some simple searching functions based on key words, which make it easier to connect a demand with suitable offer. They cover their costs and profit by incomes from advertising or charged additional services like a preferential viewing of an offer or highlighting its visualisation, or they have a profit from repeated using of data, or they get paid for user data shared with platform. Some examples of such platforms are: Gumtree (UK) or an international platform OLX.

An important characteristic of this model is that the platforms of this category do not join in the peer to peer transactions. They are only limited to a very narrow content of basic services and therefore they have no influence of a performance or a quality of transactions between participants.

Module 2: Actively administered transactions

The second model is characteristic by an active support and management of pairing a demand with a supply. Those platforms provide much more than simply an information of the demand and supply. They create good value by means of strengthening trust between the transaction participants and they actively manage and make easier the pairing, aiming to increase a number of transactions and their value. As the trust belongs to one of the most important factors of being succesful in the platform business, the platforms actively create the tools and processes to strenghtening the trust between the participants of transactions. That evokes positive expectations of the users regarding reliability and quality of performance of provided services and therefore a higher number of transactions, which then makes the platform more trustworthy.

The tools used by that type of platforms include:

- advanced tools to compare things like geolocation, filters for multicriteria searching systems, evaluation of the searching results etc;
- active administration of the system of sending messages and information among the transaction participants as well as among the participants and the platform;
- verifying information from the users and preliminary control or verifying the proofs of identity;
- monitoring users activities (about a quarter of the platforms);
- instructions and recommendations concerning price creation (about one quarter of platforms);
- instructions concerning mutual communication and contact among the participants;
- managing a system of mutual evaluation and reviews (more than a half of the platforms);
- verifying mutual evaluation and reputation of participants (about one fifth);
- providing additional services, such as voluntary additional insurance (about one quarter).

Platforms of that category cover the value they create in this type of transactions through the prescription charges or transaction charges and by the means of repeated use of data shared by the platform. They may also charge payments for additional services like insurance or highlighting and visualisation of an offer. One of the principal characteristics of the model is that the platforms influence the transactions among participants, however, they do not control the conditions under which the transaction takes place (that is contractual terms and conditions among the participants).

Module 3: Payment transactions managed by a platform

The third model concerns the platforms that specifically determine one or more contractual terms and conditions for the transactions among the participants and control how the transactions are carried out. A key feature of the model is that the platforms regulate the participants in their decision making concerning the terms and conditions of their mutual relationships, and they imply explicitly or implicitly that they take over (partial) responsibility for performance and quality of transactions. Control of the platform over the transaction process is therefore a core of these business models.

In practise, this type of model usually limits the large platforms that have some personnel, economic and technological resources for development, monitoring and carrying contracts that are entered into by equal subjects. Platforms of this category usually carry out the following activities:

- setting contractual terms and conditions for P2P transactions (about 90 % platforms): setting the rules for the interaction between the participants including the rules and charges for cancellation of a transaction and rules for having money back;
- setting prices (about one quarter of platforms): (voluntary) automatic setting of the recommended price or setting maximum price.
- managing payments (about 60 % platforms): these platforms accept and store payments from participants and verify if the P2P transactions are successful before the payment itself;
- dealing with complaints and giving money back (more than half of the platforms): platforms actively interfere in case of complaints, help to resolve disputes between participants or solve disputes themselves via returning or withholding payments
- insurance provided as a part of a payment for a transaction (about one quarter of platforms): these platforms provide some form of insurance of damage, especially as an additional coverage of pro peer provider.

Platforms of this type cover their costs and profit by the means of payments for transactions and repeated use of data.

I.4 Platforms on labour market

Labour market built by shared economy (or also digital or collaborative labour market) is quite heterogeneous and it is an area which is mapped very little.

Not all elements / segments of shared economy have the same importance in relation to the labour market. It is those that enable to arrange work directly that play the most important role. Nevertheless, even platforms, a primary goal of which is not to arrange work, may have a great impact on labour market, especially in cases of professionalization for the providers who do their activities there. An example can be the platform Airbnb which makes it possible for the users to rent their private properties or their parts. First it may seem like the platform has a low influence on the labour market, however, the Airbnb itself admits that many of its hosts do not use the platform only as an additional occasional source of incomes from renting an own flat/house but they rent a scale of uninhabited real estates in a form of 'mini'

hotel". Such arrangement requires various types of work (cleaning, maintenance, accounting...), which can be settled by a rentier himself, but in practise, it is more often by another person / people.¹²

There are other platforms that can have additional influence on labour market, a real picture of the influence is hard to predict in many cases. As an example, there are e.g. the platforms, which make it possible to share resources and infrastructures to do work, support co-working etc. (for example ShareDesk¹³, which makes it possible to interconnect unused office premises with those who need temporary office space or a room for a meeting or workshop). The main aspect according to which the shared economy platforms may be classified in relation to work is a type of activity which is carried out / shared - shared economy concerns an arrangement of goods, services or a combination of both. The higher the component of the goods is the lower is the proportion of work.¹⁴ Digital platforms arrange connections between providers / workers and users / orderers always have virtual character but the work they arrange may be of different types. There are two most frequently presented aspects according to which it is possible to classify the work provided by the platforms. It is about (i) a location of activity and also (ii) a level of skills that are used.

- (1) **Activity location.** There are significant differences related to whether the services or results of work are transferable electronically and if they can be carried out from a distance, or whether they require physical or localized delivery. Virtually arranged goods and services generate larger and more competitive market. The location aspect also implies a separation of cognitive tasks (transferable electronically) and manual jobs / interactive tasks with local presence. The first type is described as **online labour market (OLM)**, the second is called **mobile labour market (MLM)**¹⁵. An example of OLM is Amazon Mechanical Turk, the second group includes e.g. Uber. Such differentiation has the first very clear results because in the first case, it is a global market, while it is localized work on local markets in the second case. That means, for example, that certain hypotheses (that is convergence of a flat world of work and salaries) concern only to the first type of platforms. Other consequences concern the regulation, as a global type of the first type of platforms is not bound by a local regulation of labour market, whereas the platforms providing local services could potentially be a subject of national and local laws and regulations. This is partly reflected in the fact that majority of court disputes in the USA are related to the second type of platforms, although in case of the first type, there have been a few court disputes related to minimum wages.
- (2) **Qualification difficulty.** There are services requiring a high qualification as well as those with low qualification. On one hand, there is a demand for more less general skills of a medium to low level, on the other hand, there is also demand for more specialized services. However, it is important to take into account the fact that this dimension constitutes a consistent continuum. A level of skills is closely connected to market position

¹² Drahokoupil, J., Fabo, B. (2016): The platform economy and the disruption of the employment relationship. ETUI Policy Brief. European Economic, Employment and Social Policy, N° 5/2016. Available online: <https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>.

¹³ In Prague in September 2017, the platform offers three places (coworking centers), and several types of space in each. In the centers of more developed cities (London, New York), there are tens of offers.

¹⁴ De Groen a kol. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>

¹⁵ See Codagnone, C., Abadie, F., Biagi, F. (2016): The Future of Work in the Sharing Economy. JRC Science for policy report. European Commission. Available online <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101280/jrc101280.pdf>.

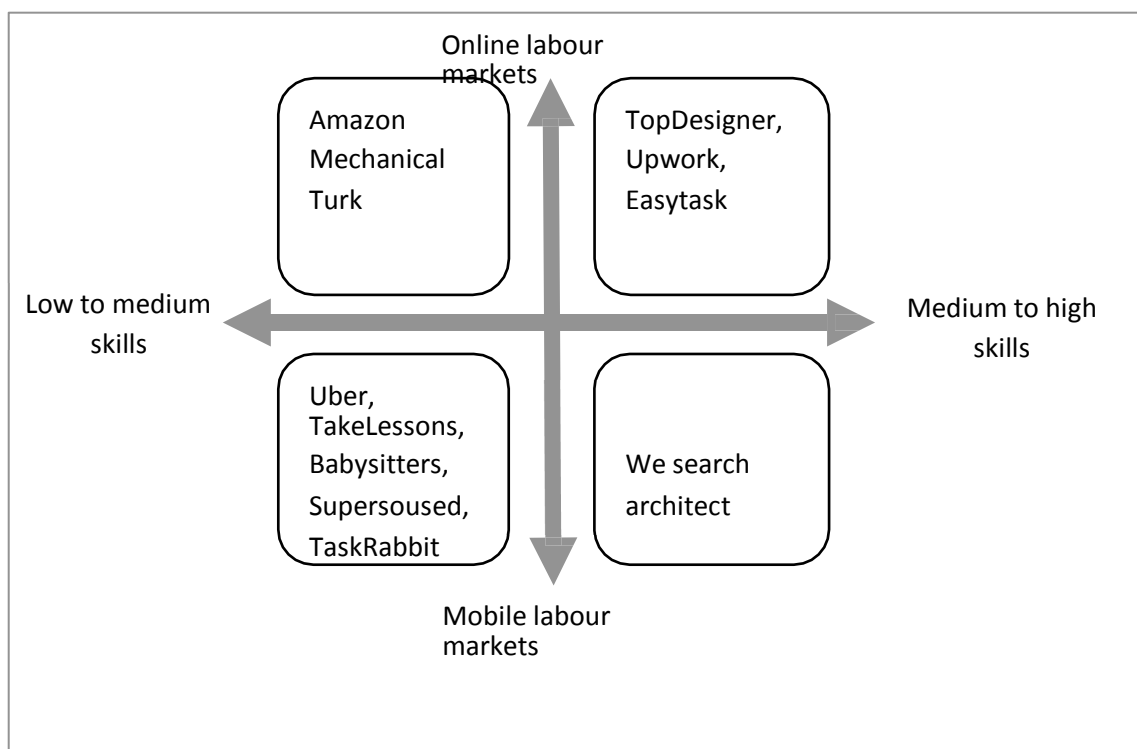
worker. The more specialized skills a platform worker possesses the stronger is his/her market position. ¹⁶ This characteristic is to do with business activities and not necessarily any real skills the people who carry them out possess (that means it not unusual for the highly educated individuals to do the low-qualified tasks in TaskRabbit and other similar MLM).

This differentiation is relevant in terms of regulation, as it is important when deciding whether an individual is really a self-employed supplier or whether s/he is a worker wrongly qualified as a self-employed person. Low-qualified work may indicate that a service provider is more an employee rather than a self-employed person, whereas highly qualified work is likely to be done by an independent supplier.

Another additional aspect for a classification of labour market is **resources needed for carrying out a service**. Those are used by for example Huws and Joyce¹⁷, when they make a difference between (i) work which is done from home, (ii) work which is done outside home and (iii) driving a car as the third separate category. Nevertheless, De Groen and col.¹⁸ assume that in practise, the need of having access to some resource can be overcome quite easily, and give an example of a possibility of renting a car which is then used to provide a service.

De Groen and col. use the two above mentioned dimensions - location dimension and skills dimension to create a two-dimensional typology of labour market created by shared economy - see picture 2.

Picture 2: Typology of digital labour market according to a type of service and qualification difficulty



Source: Own modifications according to Codagnone, C., Abadie, F., Biagi, F. (2016): The Future of Work in the Sharing Economy. JRC Science for policy report. European Commission.

¹⁶ De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

¹⁷ Citation according to De Groen and col. (2017).

¹⁸ De Groen and col. (2017)

Box 1: Crowdfunding, crowdsourcing and crowdworking

In relation to different types of activities carried out through the online platforms, there are also other terms used, such as crowdsourcing, crowdfunding and crowdworking. Crowdsourcing is originally a more general term describing a use of a great amount of individuals who are active online as a sources of their own work (e.g. as respondents in research or as observers etc.), whereas today there is another form of crowdfunding where the finances for a specific project are obtained from smaller contributions of a large amount of private subjects.

From the viewpoint of online labour market, crowdworking is the most important term. This is a term for work where a large number of workers who are available online are used to complete a task or more tasks. The meaning of the word is still not stabilized and in some cases it is used to describe total amount of work carried out through the shared economy platforms.¹⁹ Crowdworking is carried through online platforms that enable an access to a large amount of independent individuals or institutions that work to complete specific tasks or provide specific services. Those most often involve programming work, design, development and web administration, translations, processing videos etc. Forms of the work move somewhere between paid work and self-employment, and they are

more and more common in some branches like IT, design, transportation, tourism, babysitting, services for households. There is a wide range of professions and workers that get hired that way, from the highly qualified professions (IT specialists, designers) to unqualified professions or amateurs.

For this type of work, no certificates are important, therefore there is no difference between professionals and amateurs. In some cases where the work is offered in a form of competition (orders of design, marketing etc.), it is only a winner who gets a reward, the preparation work is therefore not paid for or sometimes even the whole work on a project in case of other participants. On platforms based on competition, there is obviously decreasing tendency of remuneration for a task. Some negative feature of the work include, besides low wages, also a risk of repeating the same partial tasks, social isolation, absence of rules concerning work conditions and social protection. Some positive features include great autonomy, possibility to adjust work with other duties in a family, studies or elsewhere. A positive feature is also the fact that also work and related financial flows that were not recorded previously and fell into the grey economy become legal this way.

The work of crowdworking platforms is liable to some general business and civil laws, but the work itself that is provided through the platforms is not protected at all (salaries, working conditions, intellectual property, social protection). This is the reason why there should be some legislative rules organising a status of the work, liability of the parties that participate, rules of fair remuneration, right of social and medical insurance of the workers, consumer protection. Social protection system including the employment services should be modernized in a way to ensure adequate support to workers in the critical moments of their working life and to decrease a risk of their uncertainties - when their incomes stop, in time of illness, and to support a development of their career using financial or other tools that enable continuous education and certification of gained experience. For example some tax tools could be used for that purpose (tax reliefs, negative taxes etc.).

¹⁹ For example Huws, U., Joyce, S. (2016): Crowd working survey. University of Hertfordshire. Dostupné online: <http://www.feps-europe.eu/assets/a82bcd12-fb97-43a6-9346-24242695a183/crowd-working-survey.pdf>.

II. Impacts of shared economy on labour market

Much attention is now paid to the speculations about how and into what extent can shared economy change the economic processes, labour market and the society in general. Some of the effects are already visible in practise, however, it is not certain whether they will last and how they will develop in the future. Opinions of professionals vary a lot, especially in how much they are optimistic or pessimistic or in how they look at future development. It is certain that shared economy is a phenomena which influences future labour market significantly and which has a great positive potential and resources as well as great risks and it is likely that all those effects will mix and come together. The following chapter attempts to map the current most frequent professional approaches to the problematics.

II.1 General impacts on labour market

The area of fast development of online work platforms and its impacts on traditional labour market has still not been mapped and described very well. Although there is an increasing attention paid to the phenomena by professionals, solid and consistent conclusions based on proper research are still missing. There are only investigations and studies with different aims and difficult to unify, often of small scope, and some specific experience from local labour markets. Based on those foundations, it is possible to state that new online platforms reshape traditional labour market especially as a result of the following two processes:

- Platforms make it possible for the traditional forms of employment to change into self-employment. This is probably the greatest transformative impact and it deserves attention of the creators of politics. Based on the results of the investigation, it is possible to state that so far, the succesfull platforms organised the fields that greatly relied on some forms of the self-employment (an example may be especially Uber, alternatively the Italian platform CoContest for interior designers)²⁰.
- Platforms make it easier to provide work and services from distance, which may potentially lead to a transfer of work from local markets to the ones that have cheaper workforce available. Examples of the effects are already apparent for example at platform Amazon Mechanical Turk or CoContest, which connect a demand (users/customers/orderers) usually from economically advanced countries with an offer (workers providing services) from all over the world, so having many workers of the same quality, those from the countries with lower costs and level of earnings will have a better chance. On the other hand, it is more often the local services (as transport, accommodation and catering, art and entertainment) where the greatest development of shared economy is assumed, which would imply that total volume of shared economy transaction transmission to cheaper locations would not have to be so dramatic in the next years²¹.

²⁰ Drahokoupil, J., Fabo, B. (2016): The platform economy and the disruption of the employment relationship. ETUI Policy Brief. European Economic, Employment and Social Policy, N° 5/2016. Available online: <https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>.

²¹ PricewaterhouseCoopers (2015): The Sharing Economy. 2015. Available online: <https://www.pwc.com/us/en/technology/publications/assets/pwc-consumer-intelligence-series-the-sharing-economy.pdf>.

In other words, some platforms focus on the reorganisation of interconnection of a demand with a supply of activities that are organised on the basis of self-employment while they remain local (especially Uber), as their carrying out is bound to a personal contact when the services are provided, whereas other services without personal character can be easily done from distance by the workers in the low-cost countries, although they are usually done by local workers. In this case, it is especially about providing information, advisory and other services.

Besides these direct impacts, shared economy can also have some indirect consequences for current employment relations. Traditional businesses may be more careful in their offers for employees and may begin to use the platforms themselves to 'outsource' some activities, respectively to begin organising similar schemes as the platforms apply to ensure they have enough work and better organisation of the work.²²

It can also be said that there are no initial entrance barriers in online labour market as we know them from traditional labour market. For example formal qualifications or other requirements, such as certain level of experience, play a much smaller role. In economy, it is easy to enter the labour market and apply to complete a certain task independently on whether an applicant can offer a qualification which is often required by the traditional labour market. The necessity to go through several years of initial or further education disappears here, sometimes also the necessity to have a formal examination or recognition of qualifications. An example could be the traditional black taxi drivers in London, who study several years to learn the city transportation system by heart, in contrast to the Uber drivers, who become members of the platform within a few days without any necessity of such knowledge. Quality of work in shared economy is then ensured by different mechanisms than in traditional labour market, especially via online feedback and evaluation (e.g. Uber drivers are continuously assessed in real time, and their assessment from customers is published during their work). Platforms therefore increase the competition on labour market by decreasing the entrance requirements of workers, and it is so also in case of the reorganisation of self-employment, which was quite frequent in a sector. Due to that, there is a higher pressure for incomes and working conditions. This is the situation in case of Uber, which puts professional drivers to a position where they have to compete with students or people on parental leave, who look for occasional income.

Potential risks for labour market

The following risks may arise from the development of labour market platforms for the labour market and for society in general:

- **Precarization of work.** Precarization belongs to the most often mentioned risks of developing labour platforms and modern labour market in the time of digitalization and automatization in general. Analyses carried out in the countries with advanced economies showed that increasing amount of work carried out as the new forms of employment (term-based work, part-time work, self-employment etc.) is connected with decreasing quality of employment. In the USA in 2015, the percentage of the so-called

²² De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

²³ Farronato, C., Levin, J., Brusson, J.N., Abele, M., Iacangelo, S., Schmid, Ch. (2015) The sharing economy. New opportunities, new questions. Investment strategy and research. Credit Suisse, Global Investor 2.15. Available online http://www.oxfordmartin.ox.ac.uk/downloads/GI_215_e_GesamtPDF_01_high.pdf.

„contingent workforce“ (short-term workers, casual work) estimated to be 30-40%²⁴, and it was assumed that this proportion would grow further, also in connection with shared economy development.

Shared economy provides space for some new and innovative business, significant profits, financial stability is, however, offered only to a minimum number of workers, especially the founders of new and successful platforms or their investors. Major part of shared economy is formed by cheap casual work, where workers do not possess any professional skills and there is no support in legislation which exists and applies to workers in traditional segments of economy.

The OECD study²⁵ has identified three main areas with the most apparent disadvantage of workers in these forms of employment compared to other forms. That involves especially a) much lower opportunities of professional development as a result of lower access to education opportunities; b) little stability of employment and a threat of excessive overload; c) low and less stable incomes, slow growth of wages and a danger of high losses of wages.

- **Further opening of social scissors.** The above mentioned information implies a risk for the whole society that development of shared labour markets may evoke a further opening of social scissors between people with high and low incomes related to continuously disappearing middle class, respectively its fall into the lower class.
- **Social exclusion.** Rapid development of the possibilities to work connected with modern technologies may bring a risk of deeper social exclusion for a group of people who do not have access to modern technologies or do not have required skills. Here we speak about the so-called „digital gap“. Although on one hand, shared economy labour platforms may bring a theoretical opportunity of becoming successful even for the people who were excluded from traditional labour market for some reasons (e.g. due to insufficient qualification, social status or ethnic origin...), it is also true that the groups that do not possess sufficient skills or tools (a computer or a smartphone with Internet access) to move effectively in the online world will have almost impossible or even zero possibility to access the new labour markets.
- **Transmission of risks related to enterprise from a company to an individual.** As a result of the logic of online platforms functioning, some risks connected with having business on online platforms is transferred from the platform to individuals (service providers / work providers). Many platforms bear none or just a small risk arising from an unsuccessful transaction / arrangement. A classic example of that is company Uber, which, according to their own statement, only arranges a contact between a businessman (taxi service operator) and a customer, which means that reliability for e.g. breaching local licence conditions to operate taxi service is imposed on the individual drivers, not Uber as an organisation ²⁶. Drivers also bear full responsibility (and costs) for prospective damage concerning automobiles etc.

²⁴ see for example Farronato, C., Levin, J., Brusson, J.N., Abele, M., Iacangelo, S., Schmid, Ch. (2015) The sharing economy. New opportunities, new questions. Investment strategy and research. Credit Suisse, Global Investor 2.15. Available online http://www.oxfordmartin.ox.ac.uk/downloads/GI_215_e_GesamtPDF_01_high.pdf.

²⁵ OECD (2015): In it together: Why less inequality benefits all. OECD Publishing, Paris. Available online: <http://www.oecd.org/social/in-it-together-why-less-inequality-benefits-all-9789264235120-en.htm>

²⁶ On the other hand, when trying to remain on market, Uber can offer its drivers to pay the fines for them, charged as a result of failing to oblige with local licence conditions (it happens for example in Prague). That, however, does not mean that it takes over legal responsibility, too.

- **Comming of supranational conglomerates that are hard to regulate.** Although the shared economy platforms are often called to be alternative economic models based on the „bottom- up“ approach²⁷, current empiric experience now indicates that many succesfull platforms tend to transform into the supranational corporations, which use their influence for further expansion and maximalization of profit of their owners, while on the level of the individual national governments, it is difficult for them to find some adequate partners for negotiations (see e.g. Uber again, the work of which is a subject of national as well as international disputes).
- **Potential deepening of the unevennesses.** The supporters of shared economy usually declare its openness and the fact that it supports equal opportunities. The statement is empirically confirmed by the almost non-existing barriers when entering this labour market. There are signs saying it does not always have to be so and than equality at time of entering does not have to mean there is equality in performace, remuneration, opportunities to receive orders and remaining at work. A brand new and subjective choice of people for transactions with other people may support unevenness in society and discrimination of some groups. A qualitative study of J. Schor²⁸ recorded different amount of willingness of sharing according to the social status signs of a person (some people, for examle, would be significantly less willing to share with those, who made grammatical mistakes in online text). Study of authors Ge and col.²⁹ in the USA showed that customers of platforms Uber and Lyft cancelled the rides ordered with drivers, z whose names indicated they could be of black origin, much more often. The phenomenon may seem insignificant now but this is why it is risky, as its result may be that it is usually an interaction of two private persons (P2P) and any discrimination in a process of selection and assessment is hard to prove and punished.
- **Low consumer protection.** There is a question whether the feedback mechanisms used by the platforms like Uber or Airbnb will be sufficient enough to protect consumers on a similar level as the licence terms and conditions and regulations emposed on traditional providers of taxi services and accommodation.
- **Unclear boarder between the private life and work.** Low entrance conditions for the work in the shared economy platforms contribute - besides other things - to the melting of boundaries between private life and work, between home environment and a work life. Non-existence of those boarders can result in an increasing amount of stress and other health and safety risks for workers. On the other hand, this arrangement is often chosen by the people who prefer this aspect because of higher personal flexibility (for example parents on parental leave).
- **„Marketization“ of work.** Due to the mechanisms used by the platforms to assess their workers and based on feedback and reputation, further ‘marketization’ of the world of work appears. The so-called ‘begging and bragging’ (begging and boasting)³⁰ are the key principles of the work for online platforms. Similar things exist for example in the world if independent journalists, artists etc. In some cases, it is possible that the ‘personal marketing’ ability may have for

²⁷ For example the term „swarm economy“ (economy of large group of flies), which is used as an alternative of shared economy, emphasizes the aspect of weakening large subjects and massive decentralization (see for example Veber, J., Krajčík, V., Hruška, L. (2016): Shared economy Prague, VŠPP. Available online: <https://www.vspp.cz/wp-content/uploads/2017/05/zprava.pdf>). ²⁸ Schor, J. (2014): Debating the Sharing Economy: Great Transformation Initiative. Available online: <http://greattransition.org/publication/debating-the-sharing-economy>.

²⁹ Ge and col. (2016) Racial and gender discrimination in transportation network companies. Working paper 22776, National Bureau of Economic Research, Cambridge MA. Available online: <http://www.nber.org/papers/w22776.pdf>.

³⁰ Drahokoupil, J., Fabo, B. (2016): The platform economy and the disruption of the employment relationship. ETUI Policy Brief. European Economic, Employment and Social Policy, N° 5/2016. Available online: <https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>.

being successful and this role is more important for a worker than real quality of his/her work, not forgetting that continuous fight and attempts to be successful among competition may bring a higher amount of stress and personal insecurity. It is the institution of an employer and professional workers s/he appoints who play that role in classical employment.

- **Data safety.** In the context of shared economy, data safety and protection of personal data is an issue only a relatively little attention is paid to on the side of the service providers or their customers.
- **„Fragmentation“ of work.** It is possible to see a risk of breaking work into small pieces in the functioning of the online platforms. Fragmented work is more risky concerning the quality of working life there is a higher threat of precarization. There is also a risk that it will be done by the groups with low incomes (on the level of individual countries as well as internationally if the character of work will make it possible), and there is a risk of getting trapped when doing a low-quality work for minimum remuneration. Especially the less qualified fragmented jobs will be the most threatened by automatization.

Opportunities for labour market

Besides the risks, shared economy undoubtedly provides great opportunities of further development of economy and society as a whole, including the segment of work. In reality, many aspects of online market involve potential risk and at the same time a certain level in which there may be a chance should it be used well. The most commonly presented advantages / opportunities include the following:

- **Support of employment and performance.** Shared economy can support a growth of employment and better performance considering the fact that a brand new sector of services comes to existence - the middlemen and operators developing and improving platforms. This sector can be an employer itself.³¹
- **Development of experience / skills of population.** Participants in shared economy who join in the transactions, especially the services providers, gain new experience, achieve greater flexibility and independence. It may be trying our new roles, searching what work an individual is most suitable for, untraditional use of leisure time, and also entering the model of liberal work lifestyle where s/he can adjust according his/her own needs.³²
- **Recovery and flexibilization of traditional segments of economy.** In some cases, platforms may help to a 'cleaning' and flexibilization of traditional segments of economy. There could be a situation where traditional requirements for performance and services in some field could show to be old-fashioned and unjustified when in confrontation with expanding platforms. It may involve e.g. a cancellation of difficult licence requirements for the taxi service drivers (knowledge of all destinations in a city by heart), while the same task may be done in the same quality even without fulfilling the conditions today (using GPS navigation in a mobile phone).
- **Increasing competitiveness on labour market.** New market players who are not limited by the present regulations may corrupt the conservative conditions in some cases, where a local market (e.g. in a sector of accommodation or taxi service) may involve only one existing monopol or only a very few important players. Those players may be, indirectly or secretly, supported by local administration

³¹ Veber, J., Krajčík, V., Hruška, L. (2016): Shared economy. Prague, VŠPP. Available online: <https://www.vspp.cz/wp-content/uploads/2017/05/zprava.pdf>. ³² Veber, J., Krajčík, V., Hruška, L. (2016): Shared economy. Prague, VŠPP. Available online: <https://www.vspp.cz/wp-content/uploads/2017/05/zprava.pdf>.

determining regulation which could have a tendency to keep the status quo for different reasons. Entrance of the independent peer-to-peer platforms can then renew the competition environment on local market, as a result of which there will be profits for customers, who will receive cheaper services, as well as a whole region.³³

- **Decreasing the barriers of entering the labour market / increasing fair entry.** Online labour market can offer new opportunities especially for the groups that have been disadvantaged until now, considering the fact that there are practically no formal requirements to enter. This opportunity can be used by anyone, which is important especially for the people who have more difficult access to traditional labour market for example due to discrimination reasons (age, gender, ethnicity ...), because of little or no experience in the field or labour market in general (graduates...), because they are trapped in long-term involuntary unemployment or similar. Existing empiric investigations confirm that e.g. by a finding that those who provide work through the shared platforms include the representatives of ethnic minorities more often than their general representation in population³⁴.
- **Better possibilities to balance a private life and work.** The possibility to organise time at work (respectively also a location of work) according to one's own needs and preferences is one of the factors which makes labour market in shared economy platforms so attractive for many people. Although such constitution bears some risks (see above), there is no doubt that it provides many more opportunities of flexible balancing of private life and work compared to traditional employment. Currently, there are some indications that because of some current trends (especially digitalization and automatization of economy and insufficient number of qualified workers), there is also some flexibilization of traditional (offline) labour market, and in many countries people discuss various possibilities of how to free labour market (from the support of part-time work, opportunities to work from home and work from distance, and also possibility to implement unconditional income in the future). It is therefore likely for even the classical employment to provide much bigger opportunities to balance private life and work in the future.

II.2 Inhabitants attitude – a shift in paradigm

Different empiric data and public discussions show that attitude of people to shared economy moves between two general poles. On one hand, they think about the advantages, there is enthusiasm for modern technologies, low prices and high level of flexibility is attractive, on the other hand, there are risks and a lack of trust to the segment due to inadequate or bad regulation. It is apparent for example from the data from an investigation of advisory company PwC, which was done in 2015 in the USA ³⁵. From the respondents who were aware of the shared economy principles, 86 % expressed opinion that shared economy makes life more accessible, 81 % were aware of its economic advantages, 63 % stated that transactions in shared economy are more enjoyable than traditional models. 78 % respondents stated that shared economy decreases wasting, and 76 % thinks that shared economy is more considerate of the

³³ Farronato, C., Levin, J., Brusson, J.N., Abele, M., Iacangelo, S., Schmid, Ch. (2015) The sharing economy. New opportunities, new questions. Investment strategy and research. Credit Suisse, Global Investor 2.15. Dostupné online http://www.oxfordmartin.ox.ac.uk/downloads/GI_215_e_GesamtPDF_01_high.pdf.

³⁴ Viz např. Burston-Marsteller, Aspen Institute, TIME (2015): The Collaborative Economy Survey. Available online: www.burston-marsteller.com/ondemand-survey/.

³⁵ PricewaterhouseCoopers (2015): The Sharing Economy. 2015. Available online: <https://www.pwc.com/us/en/technology/publications/assets/pwc-consumer-intelligence-series-the-sharing-economy.pdf>.

environment. The so-called millennials (young people born in time period 1980-2000) and families with small children expressed the strongest disagreement with those statements. Young people aged 18-24 expressed an opinion that „the access (availability) is new ownership“ twice as often compared to those above 24. Two thirds of the enquired stated that they incline towards the less materialistic lifestyle and four fifths of the respondents believe that renting has more benefits than ownership itself. On the other hand, 59% respondents in the same investigation stated that they will not believe in shared economy until it is regulated properly, and 48% expressed their fears concerning lower quality of shared economy services. It is therefore apparent that American society is not absolutely united in their relationship to shared economy and many people realize both - a great potential of the segment and its risks.

In an international investigation of ING from 2015³⁵, which involved especially the European countries, respondents were choosing factors, which are the most important for using shared economy. The greatest proportion of people mentioned being economical, in other words, that shared economy saves money. Then there were opinions that shared economy is more ecological, and it provides a simple way how to earn some extra money. In the contrast to that, the factor of building communities has not been considered important in most of the investigated countries (except for Poland and Turkey). On the other hand, respondents mentioned some negative factors that put them off from shared economy, first of all that they do not like it when someone uses their property. Fears of the absence of insurance followed. Lack of trust in a quality was not mentioned so often (except for Austria, Poland, Turkey and the United States where about a half of the respondents mentioned it).

It is important to say, regarding the below mentioned online investigation and to this, too, that the investigation look itself (online questionnaire) has probably a slightly exaggerated results in favour of the participation in shared economy, as it involved people who were online. The more a person is active online the more likely it is that s/he will become a respondent in this type of research. People with only limited online access or who do not have required qualifications and therefore have almost no access to digital labour market have only very low or even zero chances to get involved in online research. Nevertheless, it is only a small proportion of the population at present.

It becomes apparent that shared economy corresponds with the new values that rip into the society, which react to the consumer crisis in the western world and which expanded especially among the young generation. The positives of shared economy include especially a minimalistic lifestyle, better process, easier access and greater possibilities of choice.

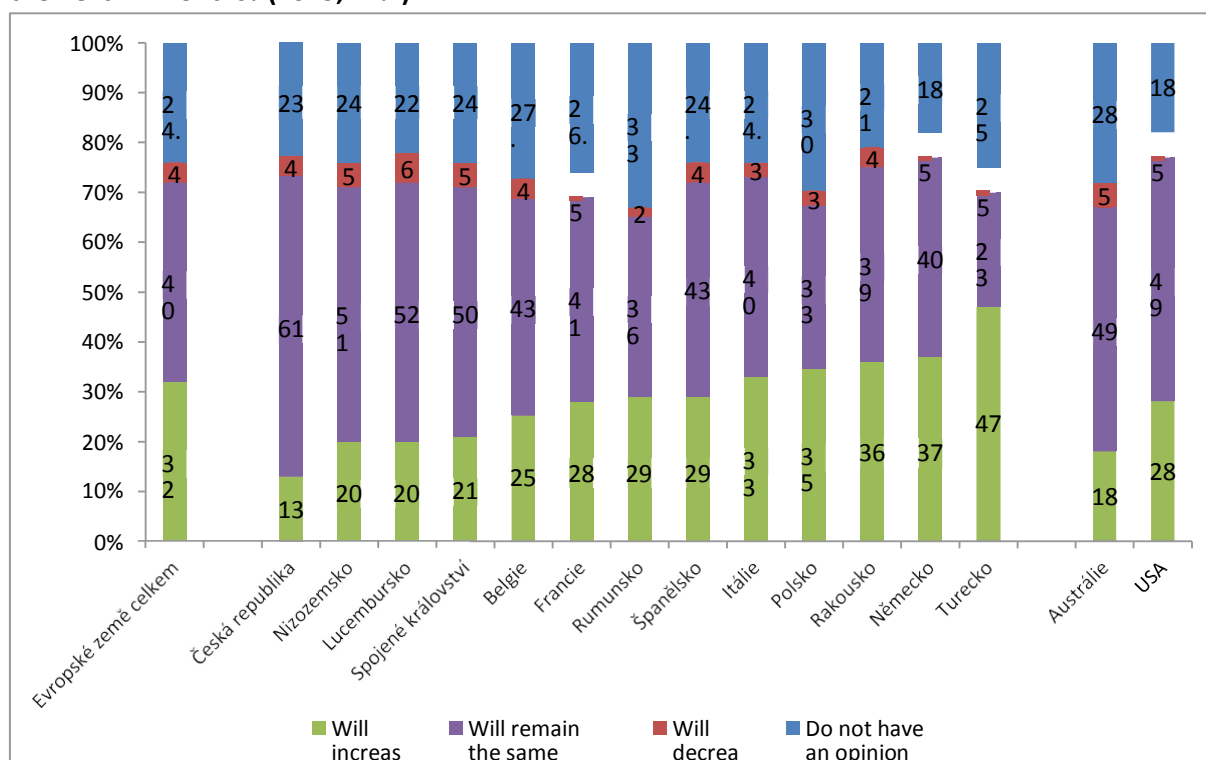
The results of some investigations indicate that a level of mistrust towards shared economy is greater in the Czech Republic compared to most other countries. The investigation Eurobarometr³⁷, carried out in the whole EU in 2016, found out that although the Czech population has an opinion that shared economy can be quite good (54 % respondents heard of it, which corresponds with the EU average-28), only a small part uses its services actively (7%), which is the third lowest result in the EU (see the same chapter II.3.4). Another investigation which indicates a lack of trust of the Czech population, is the above mentioned ING research ³⁸. When asked how they assume their participation in shared economy will change next year, only 13% respondents in the Czech Republic replied that it would increase, which is the lowest proportion among all 15 investigated countries - see graph 1.

³⁶ ING International Survey (2015): What is mine is yours – for a price. Rapid growth tipped for the sharing economy. Available online: https://www.economics.com/ing_international_surveys/sharing_economy_2015/

³⁷ European Commission (2016): Flash Eurobarometer 438: The use of collaborative platforms. Available online: <http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/FLASH/surveyKy/2112>

³⁸ ING International Survey (2015): What is mine is yours – for a price. Rapid growth tipped for the sharing economy. Available online: https://www.economics.com/ing_international_surveys/sharing_economy_2015/

Graph 1: Replies to a question How do you think your participation in shared economy will change in the next 12 months? (2015, in %)



Source: ING International Survey (2015): What is mine is yours – for a price. Rapid growth tipped for the sharing economy. Dostupné online: https://www.economics.com/ing_international_surveys/sharing_economy_2015/

II.3 Characteristics of online labour market

II.3.1 Range

Estimates of total range of shared economy

Although there is no specific information on the extent of shared economy available, it is possible to find various estimates processed by a variety of methods in literature. In many cases, there are differences between the segments and services that are counted into it according to the estimates, which is related to the above mentioned problem of non-existing generally accepted definition of shared economy. For example in 2016, an advising agency PwC did a study for the European Commission³⁹, which dealt with estimating the range of shared economy in Europe besides other things. Especially five key segments are included, and they are: peer-to-peer accommodation, peer-to-peer transport, services for households, professional services and collaborative finances. The study showed a rapid increase of shared economy in the last two years, while the five mentioned key sectors generated - in 2015 - profits of 3,6 bill. Euros and arranged transactions in the amount of 28 billion. Eur – see graph 2.

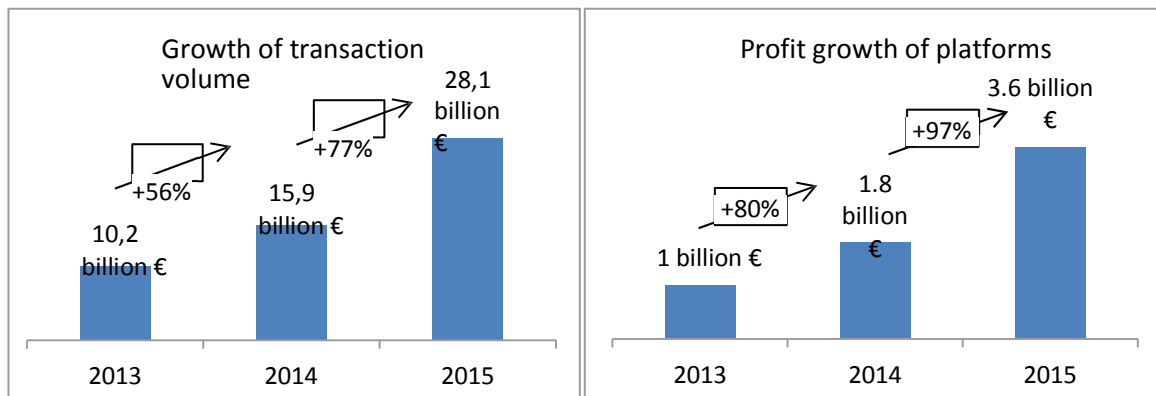
The study also states that the biggest sector of shared economy when considering profits is peer-to-peer transport including sharing rides (ride-sharing), sharing automobiles etc. The biggest sponsor when considering

³⁹ Vaughan, R., Daviero, R. - PwC UK (2016): Assessing the size and presence of the collaborative economy in Europe. Available online: <http://ec.europa.eu/DocsRoom/documents/16952/attachments/1/translations/en/renditions/native>.

the transaction values (transaction value) is peer-to-peer accommodation. The fastest growing sector in 2015 and 2016 were services for households, especially thanks to the growing popularity of platforms for the independent providers (freelancers) and the so-called crowdsourcing network offering meals delivery and minor manual jobs. The authors state that a real growth of shared economy since 2013 has significantly overstepped their previous estimates.

In 2016, the European Commission estimated the amount of profits of the „collaborative economy“ platforms in Europe to be 17 billion. USD⁴⁰.

Graph 2: Profits and volume of transactions on the platforms of shared economy in Europe



Source: Vaughan, R., Daviero, R. - PwC UK (2016): Assessing the size and presence of the collaborative economy in Europe. Available online: <http://ec.europa.eu/DocsRoom/documents/16952/attachments/1/translations/en/renditions/native>.

The already mentioned the study of company PwC from 2014 found out from the respondents from the USA that at the time, not even a half (44 %) of them knew shared economy and 19 % of them had some practical experience with it. These numbers approximately correspond with other investigations in advanced western countries.

According to the investigation results concerning 3000 respondents in the USA, who together realized company Burston-Marsteller, Aspen Institute and magazine TIME in 2015⁴¹, 44% of American population is active on shared economy platforms. 42% of population used shared economy services and 22% provided their services.

Growing importance of the shared economy platforms is more than apparent. Taxi servis Uber grew from a local company to a global corporation in as little as five years, with its market value over (60 mld USD), which made it the fastest growing start-up in history.⁴² Popularity of online platforms is not limited only to the investors that invest their own capital (equity investors). Traditional companies also invested into platforms that could become a threat to their business model – for example company FedEx⁴³ has bought platform

⁴⁰ Drahokoupil, J., Fabo, B. (2016): The platform economy and the disruption of the employment relationship. ETUI Policy Brief. European Economic, Employment and Social Policy, N° 5/2016. Available online: <https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>.

⁴¹ Burston-Marsteller, Aspen Institute, TIME (2015): The Collaborative Economy Survey. Available online: www.burston-marsteller.com/ondemand-survey/.

⁴² Drahokoupil, J., Fabo, B. (2016): The platform economy and the disruption of the employment relationship. ETUI Policy Brief. European Economic, Employment and Social Policy, N° 5/2016. Available online: <https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>.

⁴³ FedEx is an important American company, which works in courier and logistic services.

DoorDash and Daimler has bought car2go. An article of the University of Pennsylvania⁴⁴ cites a report of the AGC Partners, which states that in 2014, investors invested almost 5 billion USD into 71 contracts concerning shared economy, which is five times more than in 2013. Supply of capital of that type intensively supported a massive growth of shared economy.

Estimates of online market range

Shared economy as such has much greater range than online labour market, which is usually generated by online platforms and platforms providing taxi services to a great extent. The most frequently used type of platform in shared economy are the platforms for selling products / second-hand goods (72,9%)⁴⁵. Other platforms are used much less, while the work platforms on request were used by only less than 8 % respondents and the platforms providing sharing / renting transport were used by only 15% - see table 1.

Table 1: Knowing and using different types of online platforms

	Platform category				
	Sale	Sharing / renting items	Sharing / renting	Sharing / renting	Work on request / on order
Never heard	3	44	29	23	47
Knows but has not used	19	37	50	55	38
Used	73	12	14	15	8
Plans to use in the next 12 months	5	7	7	7	7

Source: European Commission (2017): Exploratory study of consumer issues in online peer-to-peer platform markets. Brusel. Dostupné online: http://ec.europa.eu/newsroom/just/item-detail.cfm?&item_id=77704.

Estimating the extent of online labour market (range of labour force) existing within economy is very difficult, also because the real statistic data practically do not exist. This situation is caused especially by three following reasons: (a) there is no relevant official category according to which this type of work could be classified and recorded; (b) for many participants, the work is not a main source of incomes; (c) shared economy in general is not monitored and documented too well so far, many people do not even consider their activities within the online platforms to be work, and it is likely they do not even mention them in selected investigations of labour market.

Authors De Groen and Maselli (2016)⁴⁶ estimated that at the end of 2015, there were about 100 000 workers active on the shared economy platforms in the EU, which corresponds with only 0,05% of all employees in the EU. Most of the workers (the estimate is 65000) are Uber drivers. This implies that shared labour market in Europe was still developed very little last year, except for the taxi service segment in 55 bigger cities. In case of shared economy, it is therefore still considered to be a minor part of economy, however, it will grow significantly. Should the existing speed of growth continue further, shared economy has a potential to fundamentally change the look of the whole economy, not only its individual segments as it has been until now. To be able to assess the full influence of shared economy of the traditional labour market, it is important to take into account not only its range but also a proportion of existing jobs that will be under threat

⁴⁴ Rubicon (2015): The Sharing Economy: A New Way of Doing Business In: Knowledge@Wharton. Available online: <http://knowledge.wharton.upenn.edu/article/the-sharing-economy-a-new-way-of-doing-business/>.

⁴⁵ European Commission (2017): Exploratory study of consumer issues in online peer-to-peer platform markets. Brusel. Dostupné online: http://ec.europa.eu/newsroom/just/item-detail.cfm?&item_id=77704.

⁴⁶ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

ceasing to exist and an extent to which the workers will leave the positions for different ones in traditional economy. Online platform Uber argues, for example, that maybe it competes also with the traditional taxi services but it 'competes' in a greater extent to private owners of vehicles (that means that a choice of a customer is not between a taxi service and Uber but between going in his own car and with Uber). If the first situation outweighs it would mean that drivers of traditional taxi services will be replaced by the Uber drivers, and on the whole, there will be no significant change in employment. If the second situation outweighed, it would mean that the platform contributes to creating new jobs and helps to increase employment.⁴⁷ At present nevertheless, there are no complex and reliable analyses of the proportion of the jobs that come to exist or cease to exist as a result of shared economy.

The characteristics of work for the shared economy platforms in Great Britain were a subject of investigation of the University of Hertfordshire⁴⁸, carried out in 2016. The authors call this type of work by a term crowdworking but it is work for the shared economy platforms as current literature usually understands it – respondents were enquired about their experience „of working for the shared economy platforms like Upwork, Uber or Handy“. It was an online investigation of more than 2200 respondents aged 16-75 years. The investigation found out that 21% inhabitants of the United Kingdom attempted to find work via shared economy platforms last year. 11% respondents state they have been successful in it – see graph 3. Double percentage (42%) stated that sometimes last year s/he used the services of workers on online platforms. This proportion does not include those who used the platforms to rent property for other people (for example Airbnb), so the real proportion of active users of the platforms is even higher.

There were similar investigation carried out also in continental Europe and they reached similar conclusions. For example authors Huws and Joyce from the University of Hertfordshire carried out an online investigation in Austria, Holland, Sweden and Great Britain in 2016⁴⁹. In all countries investigated except for Austria, a percentage of people who found work through the shared economy platforms was around 11 --12%. It was 23% in Austria. It is interesting to find out that there was a higher percentage of those who stated that they do not work via the platforms but would be interested to do so in all countries investigated. It is shown in quite a great potential of development that is manifested by a big general excess of people who are potentially interested in the work on platforms before those who really do the work. If all people who are interested in the work found it, then in Austria and Holland, their participation would be 50% higher and in Sweden and Great Britain it would even double compared to what it is today.

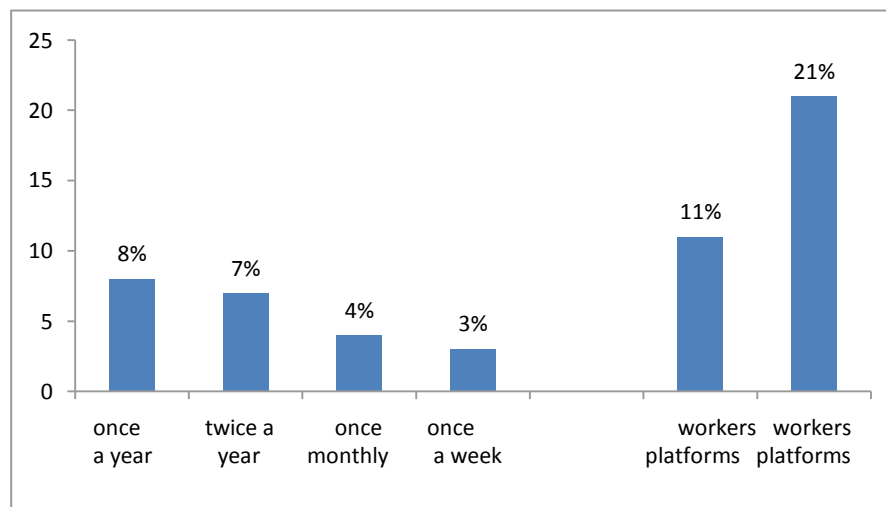
In the context of a range of online market, an important issue is also the **frequency (consistency) of the work on shared economy platforms**. In majority of cases, platform workers in shared economy do not earn their incomes through a different platform. These are usually just additional activities to their main employment and / or they are more active on other platforms. The investigations showed that they often do not do just one type of work through the platforms. According to the research of four European countries, every person did even four types of work on average (for example professional work, personal services, household services, driving etc.)

⁴⁷ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

⁴⁸ Huws, U., Joyce, S. (2016): Crowd working survey. University of Hertfordshire. Available online: <http://www.feps-europe.eu/assets/a82bcd12-fb97-43a6-9346-24242695a183/crowd-working-survey.pdf>.

⁴⁹ Cited according to De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

Graph 3: Percentage of platform people in the UNited Kingdom and frequency of their activity in the last year (in %)



Note: Potential platform workers are those that have attempted to find employment via platforms but have not been successful. Source: Huws, U., Joyce, S. (2016): Crowd working survey. University of Hertfordshire. Available online: <http://www.feps-europe.eu/assets/a82bcd12-fb97-43a6-9346-24242695a183/crowd-working-survey.pdf>.

Empiric data suggest that when the job providers join in a collaborative platform it can often be a one-off matter. Potential workers register in a provided application, they complete one or two tasks, and then become inactive. Drahokoupil and Fabo⁵⁰ illustrate it on an example of data from the ListMinut platform. It is possible that the workers try their luck on another platforms or completely leave this way of being used. Similar reality is indicated also in the results of the Eurobarometr investigation from 2016⁵¹ (also see chapter II.3.4), which found out that only 15 % platform workers offer their services regularly, whereas 28 % did it only once.

In all four European countries where the investigation of authors Huws and Joyce⁵², was carried out, only one third of platform workers provided work via online platform at least once a month.

De Groen and Maselli⁵³ describe the same characteristic on the market of shared platforms in the USA: About a half of the platform workers offer just one type of service there, the second half offers two or more types of services. Nevertheless, the intensity of activities on different types of platforms tends to be low. Approximately 30 % workers offer their services only a few times a year, another 30 % every months and the remaining 30 % weekly. Only about 10 % of workers provide their services on daily basis.

Although, as already stated above, it is just a casual income for a majority of workers, there is also a large number of those who have the work for platforms as their only income or main income

⁵⁰ Drahokoupil, J., Fabo, B. (2016): The platform economy and the disruption of the employment relationship. ETUI Policy Brief. European Economic, Employment and Social Policy, N° 5/2016. Available online: <https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>.

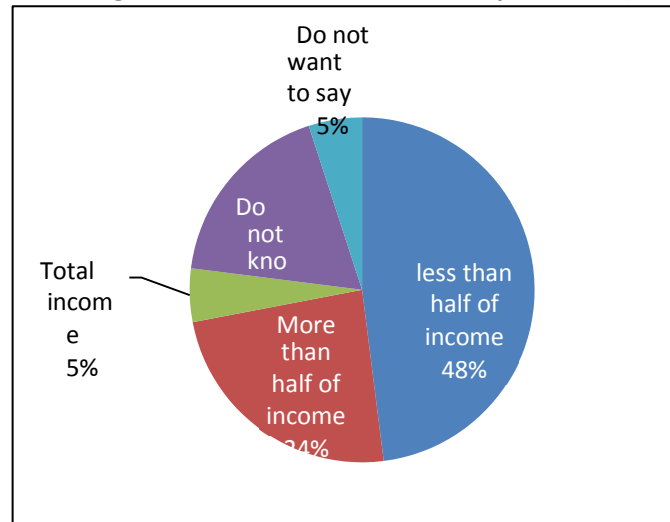
⁵¹ European Commission (2016): Flash Eurobarometer 438: The use of collaborative platforms. Available online: <http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/FLASH/surveyKy/2112>

⁵² Cited according to De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

⁵³ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

incomes. More than one third of those who shared information about the proportion stated that in the investigation of the University of Hertfordshire (it is one quarter of all workers of shared economy who took part in the investigation), see graph 4.

Graph 4: Proportion of earnings earned from work for online platforms (% of all platform workers)



Source: Huws, U., Joyce, S. (2016): Crowd working survey. University of Hertfordshire. Available online: <http://www.feps-europe.eu/assets/a82bcd12-fb97-43a6-9346-24242695a183/crowd-working-survey.pdf>.

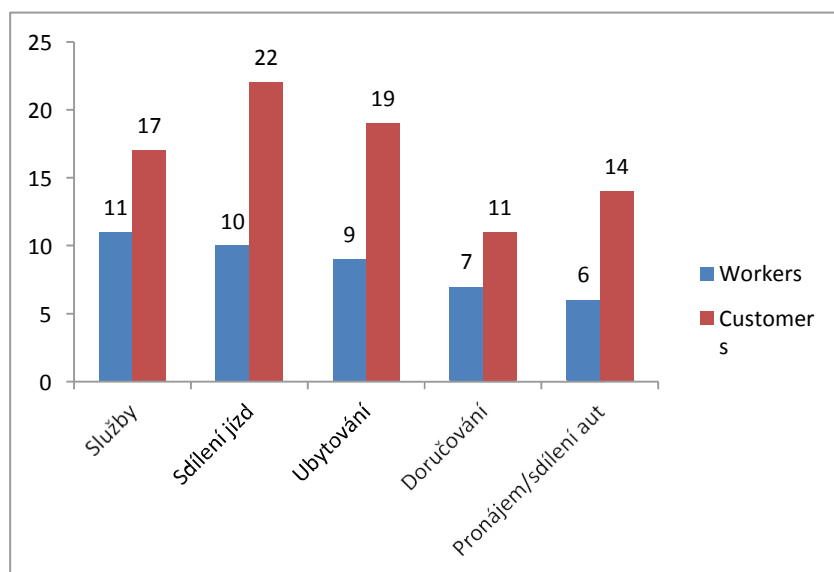
II.3.2 Structure of online labour market

It is possible to assume that labour market in shared economy will generate, just like classical labour market, some structural tension between a supply and demand for work. The features in shared economy have still not been investigated and described properly, nevertheless, there are some results of partial investigations, which confirm an existence of those tensions.

According to a research of company Burston-Marsteller, Aspen Institute and magazine TIME⁵⁴, the activities of those who provided services (work) on platforms are placed quite equally among different sectors: 11 % provided services for households as for example minor repairs due to moving, 10 % transportation by automobile, 9 % accommodation, 7 % food delivery, 6 % renting or sharing automobile. Structure of a demand for the shared economy services differs, it is shifted more significantly towards automobile transportation (22 %), accommodation (19 %) and services (17 %) – see graph 5. Providers as well as the platform users are active on more (two on average) types of platforms.

⁵⁴ Burston-Marsteller, Aspen Institute, TIME (2015): The Collaborative Economy Survey. Available online: www.burston-marsteller.com/ondemand-survey/.

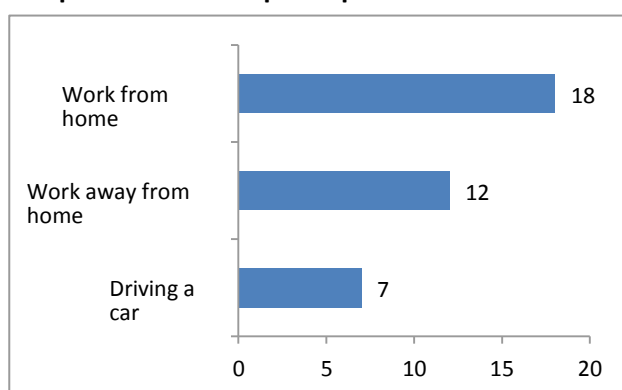
Graph 5: Proportion of American population that participates in shared economy (in %).



Source: Burston-Marsteller, Aspen Institute, TIME (2015): The Collaborative Economy Survey. Available online: www.burston-marsteller.com/ondemand-survey/.

Some implication of certain structural tensions between demand and supply on labour market in shared economy are provided by a British investigation of authors Huws and Joyce from the University of Hertfordshire⁵⁶. That investigation has placed an expectation of the people interested in the work on platforms (what work they are looking for) and type of work they really do next to each other. The respondents most often looked for online work on platforms they could do from home, such as Freelancer, Upwork, Clickworker or Peopleperhour – 18 % (see graph 6). 12 % were interested in the work carried out in other people's households, like cleaning, joinery or gardening via platforms like e.g. Handy, Taskrabbit, Mybuilder, and Mopp, and 7 % looked for work as drivers for Uber, Blablacar etc.

Graph 6: Type of work on platforms which participants are interested in (% of adult population).



Source: Huws, U., Joyce, S. (2016): Crowd working survey. University of Hertfordshire. Available online: <http://www.feps-europe.eu/assets/a82bcd12-fb97-43a6-9346-24242695a183/crowd-working-surveypdf.pdf>.

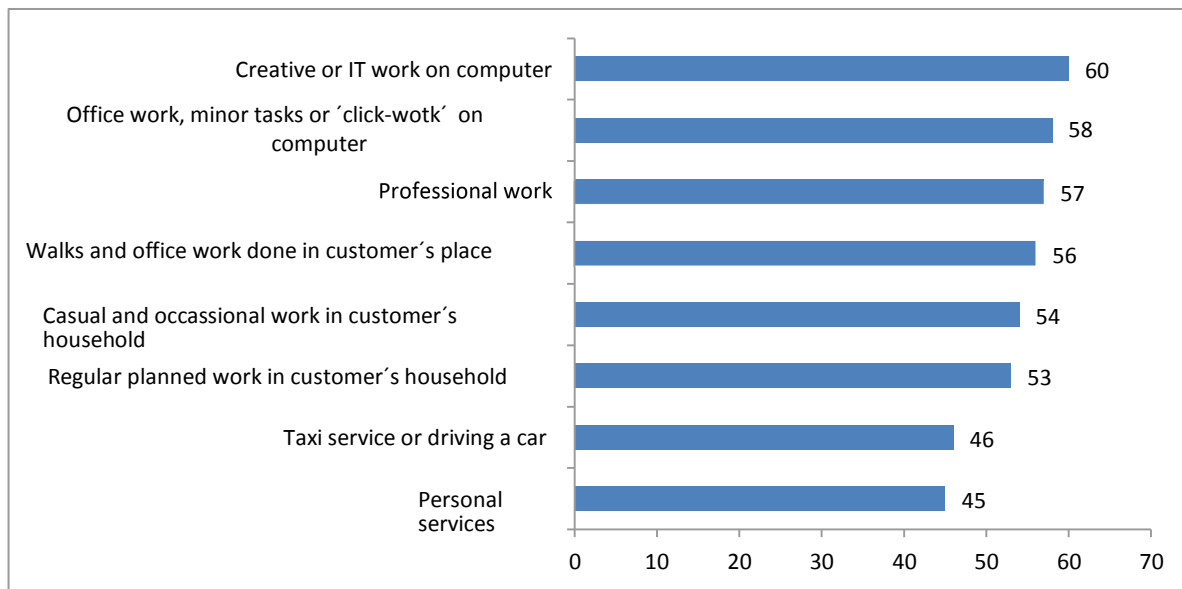
Graph 7 shows what type of work is really done most often by the platform workers. Taking into account that one worker can do more different types of work, which were investigated in the more detailed classification, data are not directly comparable with the information about preferences

⁵⁵ Huws, U., Joyce, S. (2016): Crowd working survey. University of Hertfordshire. Available online: <http://www.feps-europe.eu/assets/a82bcd12-fb97-43a6-9346-24242695a183/crowd-working-surveypdf.pdf>.

in graph 6, nevertheless, it is still possible to find some indications of imbalance between generally prevailing interest of workers and reality of the labour market.

The most common type of work done via the platforms (about two thirds of workers) was online office work, online short jobs and the so-called „click-work“⁵⁶. A significant percentage of workers (over 45 %) carried out more difficult tasks, such as professional work, creative work, taxi services and other services in customers' households.

Graph 7: Type of work carried out by the workers of shared economy platforms (% of active workers on platforms)



Note: Workers often do more than one type of work on the platforms, that is why total sum does not make 100 %.

Source: Huws, U., Joyce, S. (2016): Crowd working survey. University of Hertfordshire. Available online: <http://www.feps-europe.eu/assets/a82bcd12-fb97-43a6-9346-24242695a183/crowd-working-surveypdf.pdf>.

The lack of balance between the preferences and reality of the platform workers is indicated in a comparison of a proportion of people who declared they were looking for work, such as drivers (7 % of those who look for work on platforms), and those who really worked there (46 %). Also the jobs in customers' premises were specifically searched for by only 12 % of those interested, nevertheless, only 56% of workers really worked in offices or assistance services in customers' premises, 53 % did regular work in the households of customers and 54 % did occasional work in customers' households. This information can be summarized into a conclusion that very many customers are probably attracted by work which is done online from home, nevertheless, in reality, there is much greater opportunity to become successful in jobs that are physically carried out in customers' premises, alternatively when driving a car.

Another fact apparent from the data is a great width of performed activities from those very demanding ones in terms of qualifications and professional work to some simple jobs, while people who are active on platforms usually make their income from more different types of work and many of them are registered on platforms (61 % of the respondents stated that they were registered on 2-5 platforms and 7 % even on more than five).

⁵⁶ Easy jobs that require work with a computer and/or the Internet.

Information of that character can be a very beneficial contribution to understand the dynamics of work on present digital markets, especially in terms of the tension between its attractiveness and its real character, respectively to explain the big difference between the proportion of people who will try the work and those who will keep it for a long time (see above).

II.3.3 Participants on online labour market

When carrying out various studies, the authors also studied the question of what characteristics are typical for the participants in digital labour market - who are the people that do the work and those who demand it.

Providers of services / workers

Practically all available investigations of shared economy agree on the fact that a worker who provides services through online platforms is usually young (under 35), educated and s/he lives in a city area. For example an international research of company ING carried out in 2015⁵⁷ or an American study of company Burston-Marsteller, Aspen Institute and magazine TIME⁵⁸ also from 2015, and other ones found out more. According to the last mentioned study, providers of the services in the USA include many more representatives of ethnic or race minorities (55% respondents offering services in the USA belong to minorities, on the other hand, there are 34% of the respondents who do not offer services on the platforms). Representation of minorities and young people is even more significant among those whose incomes from platforms constitute the most important part of income. In addition to that, those people often have children and are married.

It is a confirmation of the above mentioned investigation of the University of Hertfordshire⁵⁹, in which a group of the 25-34 year-olds involved 33 % respondents who tried to find work through online platforms, which is a higher percentage compared to the total adult population (16-75 years), where it was 21 % people. More than half of the platform workers are younger than 35 according to the investigation. Nevertheless, a participation of older generations is not exceptional – 16% of them is older than 55, which is a confirmation of the fact that (at least in Great Britain) age does not constitute a barrier for participating on digital labour market. Similar demographic profile of those who work in shared economy was shown in an investigation in European countries⁶⁰. The biggest group is formed by the young (the so-called millennials⁶¹) – their proportion moved between 44 % in the Netherlands to 57 % in Sweden. In all countries, there was only a small proportion of the older age group (above 45). It is therefore a confirmation that this type of work is used by the younger age groups more often, as the environment is closer to them and they are used to moving about in it. Available empirical data, however, put down the common idea that there are many students among the platform workers. The sample of platform workers in the investigation of the University of Hertfordshire involved only 10 % students, and among those who work for the platforms at least once a week there is even lower percentage – 6 %. This information corresponds with general percentage of students of the population of Great Britain (8 %), which implies that students are not represented among the platform

⁵⁷ ING International Survey (2015): What is mine is yours – for a price. Rapid growth tipped for the sharing economy. Available online: https://www.economics.com/ing_international_surveys/sharing_economy_2015/.

⁵⁸ Burston-Marsteller, Aspen Institute, TIME (2015): The Collaborative Economy Survey. Available online: www.burston-marsteller.com/ondemand-survey/.

⁵⁹ Huws, U., Joyce, S. (2016): Crowd working survey. University of Hertfordshire. Available online: <http://www.feps-europe.eu/assets/a82bcd12-fb97-43a6-9346-24242695a183/crowd-working-survey.pdf>.

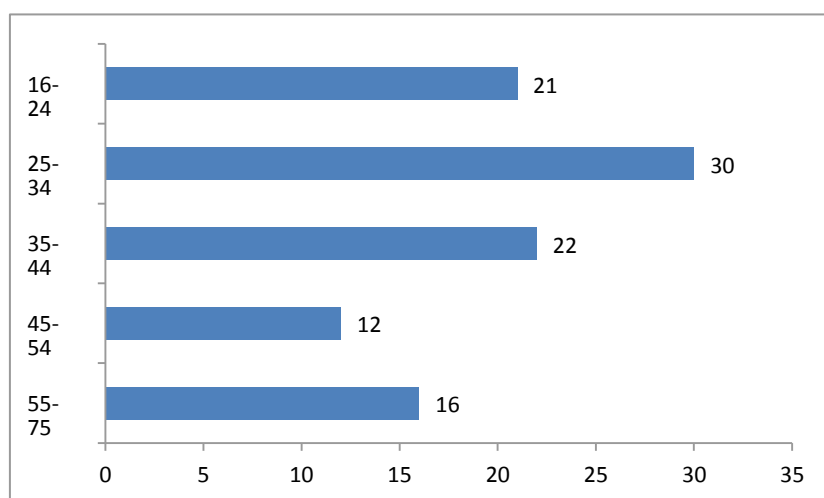
⁶⁰ Huws a Joyce, citation according to De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

⁶¹ There is no single specification of the cohort but it is usually a generation born between 1980-2000.

workers more than any other groups. Considering the fact that there are more young people among the platform workers, it is even possible to say that the representation of students is slightly underestimated. We can present a hypothesis that study duties and attempts to gain work experience more often in classical employment do not allow any higher participation in their case.

Graph 8 shows that besides the mentioned higher representation of younger age groups, there is another issue when a participation on the labour market is higher for the age group of 55-75 compared to the age group 45-54. It is very to be related to a higher representation of the workers in pension age, who have more time and at the same time they look for some extra income.

Graph 8: Age of the platform workers in the United Kingdom (% of the platform workers)



Source: Huws, U., Joyce, S. (2016): Crowd working survey. University of Hertfordshire. Available online: <http://www.feps-europe.eu/assets/a82bcd12-fb97-43a6-9346-24242695a183/crowd-working-survey.pdf>.

Data available from research also show that in the countries with advanced economies, it is now the workers with low incomes who usually search for work on the platforms, as they try to find additional income. There is probably a different situation in the less advanced countries.⁶²

An investigation of authors Huws and Joyce from the University of Hertfordshire⁶³ found for example that 42 % of the platforms workers in Great Britain earn less than £20 000 a year (before taxation and other reductions) and only 7 % earn more than £55 000 a year – see graph 9. For comparison – median of gross income before taxation in Great Britain was in years 2014-2015 £22 400.⁶⁴

Considering the proportion of men and women who belong to platform workers, the results of research are not unified. It can be seen from the data of the authors from the University in Hertfordshire that work for online platforms is done less often by women (54 %) compared to men (46 %) in Great Britain, which is a different result from the one in American studye

⁶² Drahokoupil, J., Fabo, B. (2016): The platform economy and the disruption of the employment relationship. ETUI Policy Brief. European Economic, Employment and Social Policy, N° 5/2016. Available online: <https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>.

⁶³ Huws, U., Joyce, S. (2016): Crowd working survey. University of Hertfordshire. Dostupné online: <http://www.feps-europe.eu/assets/a82bcd12-fb97-43a6-9346-24242695a183/crowd-working-survey.pdf>.

⁶⁴ Gov.UK – National Statistics (2017): Distribution of median and mean income and tax by age range and gender. Available online <https://www.gov.uk/government/statistics/distribution-of-median-and-mean-income-and-tax-by-age-range-and-gender-2010-to-2011>.

companies Burston-Marsteller, Aspen Institute and magazine TIME⁶⁵, which reached a conclusion that services are most often carried out by men (and it is in the exactly opposite proportion than how it appeared on the British sample): men – 54 %, women – 46 %.

Specific position of Great Britain in this indicator is also confirmed in another indicator of authors Huws and Joyce⁶⁶ in four European countries. In Austria, the Netherlands and Sweden, there are also more men, whereas in Great Britain, there are more women. Men are represented more often on the labour market, which would not be surprising, firstly because of the fact that men form a larger part of normal (offline) workforce, and then also due to the fact that shared economy enters deeper into the fields which are traditionally a domain of men (e.g. transportation). Nevertheless, available data do not explain why it is the opposite in Great Britain.

The authors of the above mentioned research of American shared economy ⁶⁷created two demographic profiles for two different types of platform workers. The first type are those who rely a lot on incomes from work through platforms (the so-called motivated workers⁶⁸), the second type involves only casual workers. The motivated workers were, on the contrary to the occasional ones, young men more often. At the same time, they also lived in marriage and had children more often. They more often offered their services on more platforms. It is apparent that it is a group for which it's traditionally more difficult to get a normal employment and at the same time, they bear a responsibility of financial provision for a family.

People who receive services / customers

According to the investigation results (see e.g. the Eurobarometer investigation described in chapter II.3.4), it is usually the younger people who live in bigger cities who are more aware of the shared economy platforms.. From a viewpoint of economic status, it is usually people who are employed or self-employed. It is apparent from empiric data that workers and service users of shared economy usually tend to be similar socio-economic groups of people. American study PwC⁶⁹ from 2014 states that typical shared economy clients are younger people (aged 18 – 24) and families with children up to 18 years old. However, it is possible to spot several differences. Customers of the platforms have incomes slightly higher than an average compared to their workers - see graph 9. Nevertheless, the difference is not dramatic – the percentage of those who, according to the study of the University of Hertfordshire, earn more than £55 000 a year is about 11 % platform workers (versus 7 % among providers of services), and percentage of those who have incomes lower than £20 000 is 36 % among the users (versus 42 % among providers). As stated before, the investigations in the USA find out that there is much less representatives of ethnic minorities among the platform customers. Their average age is also slightly higher compared to the service providers but it is still true that in both cases, it is more about the younger age group - see graph 10.

⁶⁵ Burston-Marsteller, Aspen Institute, TIME (2015): The Collaborative Economy Survey. Available online: www.burston-marsteller.com/ondemand-survey/.

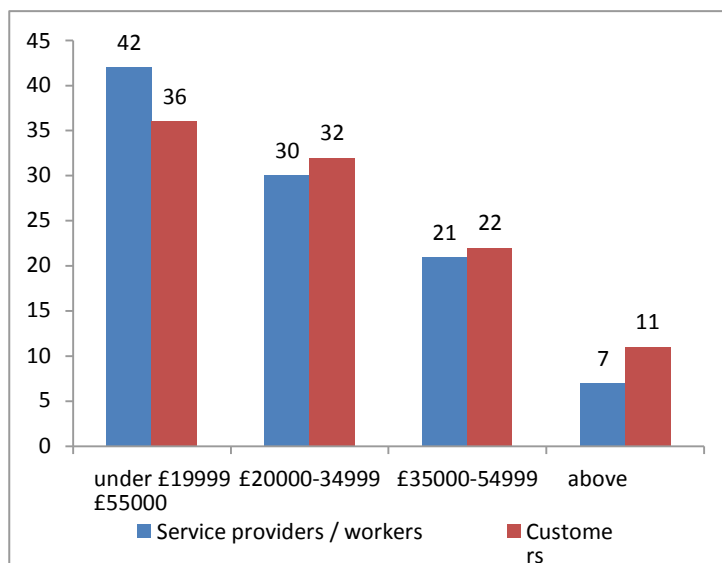
⁶⁶ Huws and Joyce, citation according to De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

⁶⁷ Burston-Marsteller, Aspen Institute, TIME (2015): The Collaborative Economy Survey. Available online: www.burston-marsteller.com/ondemand-survey/.

⁶⁸ Motivated workers are defined as those who depend on income from the platforms and it is the most important source of their income, they get more than 40% of their monthly income from them, or they are not able to find work on a classic (offline) labour market. ⁶⁹ Cited according to: Veber, J., Krajčák, V., Hruška, L. (2016): Shared economy Prague, VŠPP. Available online:

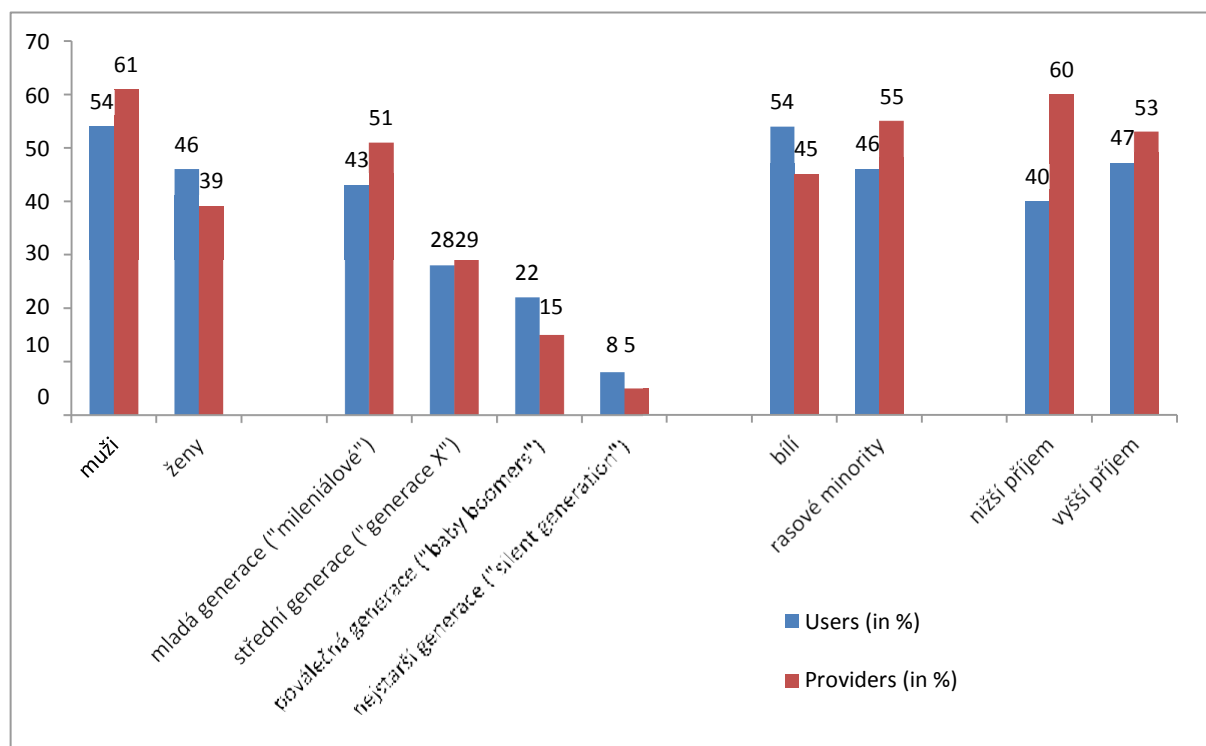
<https://www.vspp.cz/wp-content/uploads/2017/05/zprava.pdf>.

Graph 9: Participants of shared economy in the UK according to income groups (in %)



Source: Huws, U., Joyce, S. (2016): Crowd working survey. University of Hertfordshire. Available online: <http://www.feps-europe.eu/assets/a82bcd12-fb97-43a6-9346-24242695a183/crowd-working-surveypdf.pdf>.

Graph 10: Comparing the demographic profiles of providers and users in shared economy



Explanations: Classification of age groups is presented in the study according to traditional American terminology for individual generations where one follows the other. Available materials do not contain more precise specification according to a year of birth, it is, however, possible to assume the following range:

Young generation (millennials) = under 35 at the time of investigation (born after 1980)

Middle-aged generation (generation X) = 35-55 years at the time of investigation (born between 1960-1980)

After-war generation (baby boomers) = 55-75 at the time of investigation (born between 1940-1960)

The oldest generation (silent generation) = 75 and more (born between 1920-1940). Lower income = less than 50 thousand USD a year Higher income = more than 50 thousand USD a year.

Source: Burston-Marsteller, Aspen Institute, TIME (2015): The Collaborative Economy Survey. Available online: www.burston-marsteller.com/ondemand-survey/.

II.3.4 Flash Eurobarometer 2016: Using collaborative platforms

In 2016, an investigation called flash Eurobarometr (Flash Eurobarometer) was carried out ⁷⁰, which investigated experience of European population with shared economy (the investigation used a term collaborative platforms). This investigation is one of the few resources of empirical data on shared economy, which enables international comparison in the whole EU including the Czech Republic.

The Eurobarometer regulates the above mentioned mistake in online investigations, which - thanks to its character - provides slightly exaggerated estimates of the population participation on the shared economy platforms, as they probably include respondents who are more active online. The investigation Eurobarometer of shared economy was carried out by means of phone calls. Although it was carried out at the same time as an investigation of authors Huws and Joyce ⁷¹ in selected four European countries and also involved a participation on platforms, which did not involve a significant component of work, its findings show that lower participation of society in terms of providers as well as of service receivers. General conclusion was that majority of respondents (52 %) are aware of the services offered through the collaborative platforms, and 17 % of the EU inhabitants used the services offered by the platforms at least once.

From the viewpoint of the sociodemographic classification, according to the results of Eurobarometer, the greatest knowledge of the collaborative platforms can be seen in case of the younger people (15-39 years) and more educated people who live more often in the city areas, and services of the platforms are used more often by men than women (21 % vs. 15 %). From the viewpoint of organisation of work, services of collaborative platforms are more frequently used by entrepreneurs (26 %) and employees (25 %) rather than manual workers. From the respondents who have some direct experience with using the platforms, almost one third (32 %) sometimes offered services via those platforms. Again there were men more often than women (35 % vs. 26 %) and inhabitants who lived in cities.

Nevertheless, there are huge differences between different countries. The greatest **awareness** of the existence of collaborative platforms is in France (only 14 % respondents stated they have never heard of them). Other countries were further apart – in Croatia, 28 % have never heard of them, in Estonia it was 32 %. It was 46 % of respondents in the Czech Republic. On the contrary to that, the lowest knowledge of collaborative platforms can be found in countries like Cyprus (87 % never heard of the platforms), Malta (83 %) and surprisingly also Great Britain (70 % never heard of the platforms).

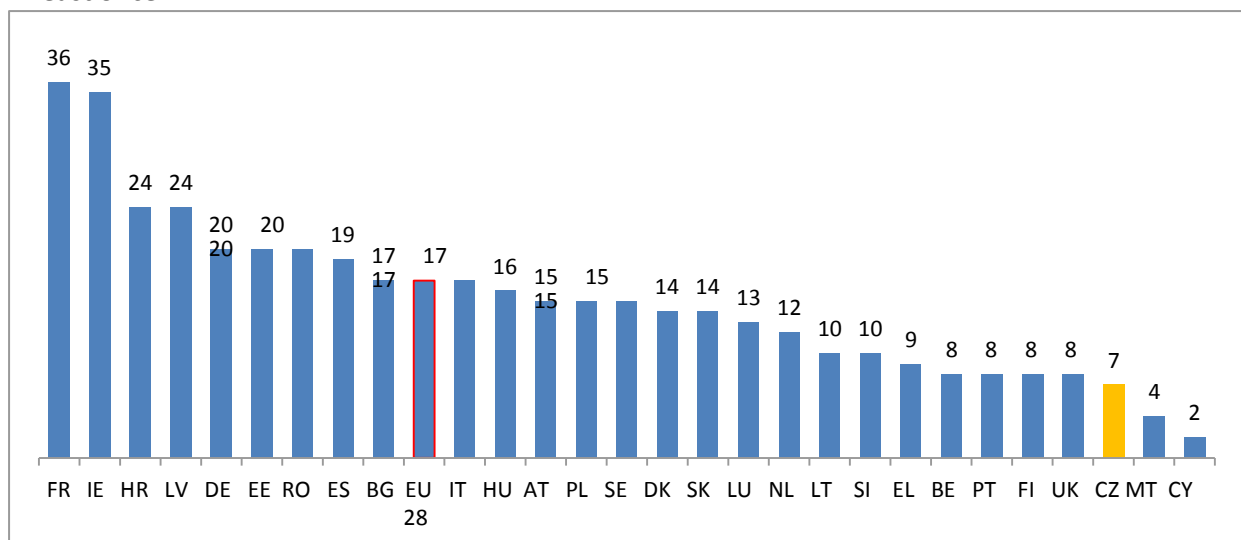
Personal experience of using the collaborative platforms is the most frequent in France and Ireland, where 36 % resp. 35 % of respondents stated that they used them at least once – see graph 11. The percentage is very low in the Czech Republic – 7 %. There is a lower proportion of people who have some experience with collaborative platforms only on Malta (4 %) and Cyprus (2 %).

If we take a closer look at the frequency of using the collaborative platforms – see table 2, the respondents in Ireland (12 %), Latvia (9 %) and France (7 %) use the services of the platforms regularly (at least once a month). Respondents from the Czech Republic, Cyprus, Greece, Malta and Slovenia (1 %) are on the other end of the scale.

⁷⁰ European Commission (2016): Flash Eurobarometer 438: The use of collaborative platforms. Available online: <http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/FLASH/surveyKy/2112>

⁷¹ Citováno podle De Groen a kol. (2017): Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

Graph 11: Total percentage of respondents who used the services of shared economy platforms at least once.



Source: European Commission (2016): Flash Eurobarometer 438: The use of collaborative platforms. Available online: <http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/FLASH/surveyKy/2112>

It is therefore apparent from the above mentioned information that although a large part of the Czechs have some idea of the shared economy and the platforms, only a small percentage of them really use the services offered by the collaborative platforms. A possible explanation can be a high level of distrust or simply in conservative approach to new trends. It is also confirmed in a answer to the question of what are the main problems when using services offered on the platforms when compared to traditional trade of goods and services - see table 3. In the Czech Republic, people very often stated (40 %) unclear responsibility in case of some problem and also insufficient information about services provided (27 %).

Table 2: Experience with the shared economy platforms (in %)

	I have never heard of the platforms	I have heard of them but never visited them	I have visited one or more platforms and I have paid for services	I sometimes use the services of the platforms (once in a <small>four months</small>)	I use the services of the platforms on regular basis (at least once a months)	Another reply (spontaneous)	No answer	Do not know
FR	14	47	9	20	7	1	2	0
AT	38	47	6	5	4	0	0	0
BE	61	30	2	4	2	1	0	0
BG	48	34	3	9	5	0	0	1
CY	87	11	0	1	1	0	0	0
CZ	46	47	3	3	1	0	0	0
DE	40	38	4	10	6	0	1	1
DK	42	44	7	5	2	0	0	0
EE	32	46	6	10	4	0	2	0
EL	64	25	3	5	1	0	0	2
ES	42	38	4	10	5	1	0	0
EU 28	46	35	4	9	4	0	1	1
FI	60	30	1	5	2	1	0	1
HR	28	48	7	13	4	0	0	0
HU	36	47	6	7	3	1	0	0
IE	34	31	6	17	12	0	0	0
IT	52	31	3	9	5	0	0	0
LT	61	29	3	4	3	0	0	0
LU	48	38	4	6	3	0	1	0
LV	50	25	7	8	9	0	0	1
MT	83	13	1	2	1	0	0	0
NL	44	44	3	6	3	0	0	0
PL	51	33	4	7	4	0	0	1
PT	58	34	3	3	2	0	0	0
RO	52	26	4	12	4	1	0	1
SE	49	35	3	7	5	1	0	0
SI	68	19	1	8	1	2	1	0
SK	59	22	1	7	6	0	3	2
UK	70	21	1	5	2	0	1	0

Source: European Commission (2016): Flash Eurobarometer 438: The use of collaborative platforms. Available online: <http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/FLASH/surveyKy/2112>

Table 3: What are the main problems of people who use services offered through digital platforms compared to traditional market of things and services? - maximum 2 answers

	Responsibility not clear if there is a problem	Disappointment because the goods do not meet expectations	Insufficient information about services provided	Lack of trust in a provider or seller	General lack of trust in internet transactions	Other	None	Do not know
EU28	41%	27%	17%	27%	28%	2%	2%	5%
BE	38%	30%	24%	27%	31%	1%	4%	3%
BG	26%	36%	25%	26%	26%	0%	1%	4%
CZ	40%	23%	27%	23%	25%	2%	2%	9%
DK	37%	33%	7%	24%	9%	4%	4%	11%
DE	46%	35%	15%	26%	13%	2%	4%	6%
EE	31%	29%	17%	27%	20%	2%	8%	14%
IE	43%	15%	18%	25%	34%	3%	0%	2%
EL	34%	29%	17%	20%	39%	3%	3%	2%
ES	48%	18%	16%	31%	42%	2%	1%	2%
FR	42%	31%	16%	26%	36%	3%	2%	3%
HR	25%	25%	15%	26%	32%	3%	1%	4%
IT	38%	20%	19%	20%	32%	1%	1%	5%
CY	33%	14%	26%	26%	33%	-	3%	7%
LV	28%	41%	20%	26%	21%	4%	5%	4%
LT	17%	25%	22%	22%	35%	3%	3%	6%
LU	43%	35%	22%	25%	31%	2%	2%	2%
HU	32%	17%	22%	33%	39%	2%	4%	3%
MT	29%	17%	15%	29%	28%	3%	8%	6%
NL	48%	32%	15%	33%	22%	4%	1%	5%
AT	53%	36%	21%	30%	15%	1%	2%	4%
PL	36%	22%	16%	26%	26%	1%	2%	8%
PT	32%	11%	22%	21%	45%	6%	1%	6%
RO	33%	22%	30%	29%	35%	1%	1%	5%
SI	23%	27%	12%	35%	24%	12%	1%	3%
SK	18%	25%	17%	23%	19%	5%	5%	8%
FI	53%	24%	26%	33%	15%	0%	2%	5%
SE	44%	28%	13%	24%	18%	4%	2%	11%
UK	41%	27%	12%	37%	27%	1%	1%	7%

Source: European Commission (2016): Flash Eurobarometer 438: The use of collaborative platforms. Available online: <http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/FLASH/surveyKy/2112>

The EU inhabitants who are aware of the collaborative platforms state the most frequently that their biggest advantage is that the access to services is more comfortable (41 %). About one third of the respondents mentioned the fact that it is cheaper or free of charge on the contrary to traditional trade (33 %), one fourth of respondents chose an option to exchange products or services instead of money payments. In an international comparison, the Czech Republic inhabitants select price as the greatest advantage of collaborative platforms most frequently - see table 4. On the contrary, the lowest proportion of the Czechs, when compared to other countries, consider the more comfortable access to services as a main advantage of platforms (only 15 % platforms).

Table 4: What are the main advantages of using services offered through digital platforms compared to traditional trade of goods and services? - maximum 2 answers

	It is cheaper or free	There are new or different services	More convenient access to services	Possibility to exchange products or services instead of money payments	Other	None	Do not know
EU28	33%	24%	41%	25%	3%	4%	8%
BE	30%	29%	42%	40%	1%	2%	7%
BG	21%	22%	47%	17%	2%	3%	11%
CZ	53%	31%	15%	26%	0%	2%	11%
DK	35%	26%	27%	18%	6%	1%	10%
DE	26%	16%	57%	19%	3%	5%	9%
EE	27%	20%	61%	8%	1%	4%	17%
IE	22%	23%	62%	12%	3%	1%	3%
EL	36%	23%	42%	25%	1%	5%	7%
ES	32%	33%	21%	31%	8%	7%	6%
FR	40%	28%	37%	33%	1%	4%	6%
HR	35%	31%	30%	15%	4%	3%	4%
IT	29%	22%	38%	17%	2%	3%	10%
CY	33%	29%	27%	44%	1%	1%	4%
LV	41%	14%	51%	21%	4%	4%	8%
LT	25%	17%	37%	17%	4%	4%	13%
LU	48%	34%	29%	36%	1%	2%	5%
HU	35%	15%	51%	12%	5%	7%	5%
MT	23%	23%	57%	13%	7%	-	7%
NL	37%	27%	35%	39%	5%	2%	10%
AT	33%	23%	45%	31%	1%	2%	8%
PL	36%	16%	42%	24%	4%	2%	9%
PT	22%	19%	32%	28%	6%	2%	16%
RO	27%	28%	61%	13%	3%	1%	10%
SI	33%	19%	43%	24%	5%	1%	7%
SK	32%	18%	28%	15%	3%	5%	13%
FI	45%	22%	46%	26%	-	1%	9%
SE	21%	21%	41%	18%	7%	4%	12%
UK	36%	26%	40%	28%	1%	5%	8%

Source: European Commission (2016): Flash Eurobarometer 438: The use of collaborative platforms. Available online: <http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/FLASH/surveyKy/2112>

II.3.5 Earnings in shared economy

It is quite a complicated task to compare the earnings in the shared economy and in the traditional one. Available data are very limited and fragmented. Moreover, it is complicated to choose a relevant comparing method. Majority of platform workers are independent agents, entrepreneurs who get paid for completing a single task. Their earnings therefore depend on how many tasks they complete and on price per unit. At the same time, there are big differences in the remuneration modules carried out by individual platforms as well as in the types and an activity level of workers on different platforms.

Earnings of the workers of shared economy are influenced by the charges taken by individual platforms. The charges differ in different sectors and they can form quite a

significant part of total price for completed task. The PwC UK study ⁷² states that the providers (workers) receive on average 85 % of transactions value in shared economy. Most platforms have a principle of fixed or variable provisions that move between 1-2 % in case of peer-to-peer lending, and up to 25 % v in shared transport.

Remuneration systems of the platforms are not always transparent. In some cases, an exact amount of a charge for platform is not known to its workers, as they can only see their net income, or they use an alternative scheme of remuneration. Not all exerted work is paid for, too. For example designers who join in a competition on the international platform CoContest or on Czech platform Topdesigner receive remuneration only if their proposal is decided to be a winner or one of the winners by a client. Most designers who join in competition therefore do not receive any remuneration for their work. Nevertheless, it is not only participation in the competitions but also a normal work through a platform which involves some proportion of work that is not covered in income. There is an estimate that a platform worker spends 18 minutes in every hour on average doing unpaid work when s/he searches applications and does other activities to increase his / her chances to be successful⁷³.

The amount of remuneration depends on a proportion of labour force which potentially can complete a task to great extent, and on related competition position of the worker. It can be deducted from the little data available on some platforms that providers of physical/ local services receive higher wage per hour compared to providers of virtual services. ⁷⁴ It even seems that the incomes for the low to medium qualified physical jobs are even higher than parallel income of a worker on traditional labour market. Providers of work demanding high level of qualification earn more than providers of work that requires low to medium qualification.

The remuneration in the context of virtual services that can be provided independent of a location is an important question. Platforms that arrange virtual work build a real global market where workers from less developed countries can compete for work with those from well developed countries. This necessarily decreases a price, especially in the case of the low to medium qualified activities. De Groen and Maselli⁷⁵ give an example of when virtual services that require general knowledge (e.g. platforms Crowdfunder and Mechanical Turk) are those with the lowest payments – they move between 1,6 Eur and 5,10 Eur per hour – see graph 12.

Whereas in richer countries (such as the USA), the incomes for virtual services fall below an average wage significantly (23%), earnings in poorer countries (such as India) are a lot above average of local average wages (more than 500%)⁷⁶ – see table 5. On the other hand, earnings for physical services move below the average wages there. Such significant wage bonus in the area of virtual services is a good motivation for the providers in India to enter the digital labour market. The reason for why people in more developed countries are still willing to provide virtual services on online platforms

⁷² Vaughan, R., Daviero, R. - PwC UK (2016): Assessing the size and presence of the collaborative economy in Europe. Available online: <http://ec.europa.eu/DocsRoom/documents/16952/attachments/1/translations/en/renditions/native>.

⁷³ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

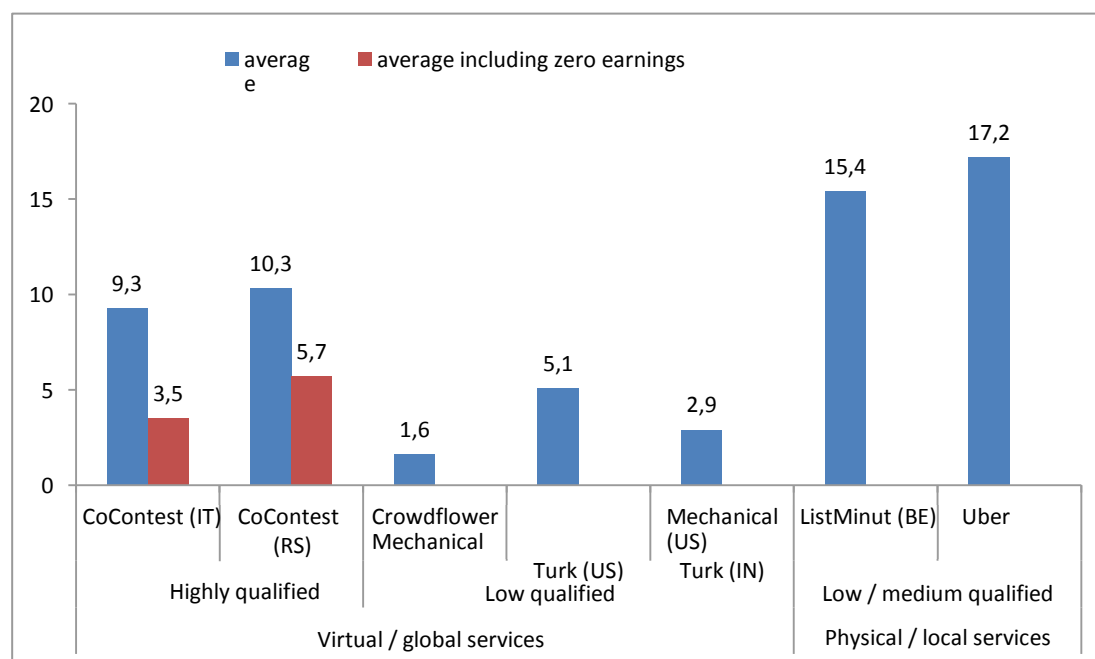
⁷⁴ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

⁷⁵ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

⁷⁶ De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

can be for example the fact that it is only an extra income besides usual work, they may want to work from home, or they consider it to be enjoyment / self-realization.

Graph 12: Earnings across the platforms and countries (in Euros per hour)



Explanations: The graph describes earnings per hour before taxation from various platforms in various countries (cleared off and without zero incomes). The CoContest earnings per hour were calculated on the basis of a private research of a platform, which attempted to find out a number of hours spent on creating a design of 200 users of the platform. The time needed to find a job via platform is included, except for the ListMinut.

Source: De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

Table 5: Comparison of the gross incomes from selected platforms and minimum and average wages in several countries.

	Virtual / global services				Physical / local services	
	Highly qualified		With low qualification		with low / medium qualification	
	CoContest		Mechanical Turk		ListMinut	Uber
Workers (country)	IT	RS	US	IN	BE	US
Average (€)	9,3	10,3	5,1	2,9	15,4	17,2
Minimum (%)		759%	74%	1,37%	166%	283%
Country average (%)	70%	318%	23%	549%	84%	88%

Explanations: The table provides incomes per hour before taxation from various platforms in several countries (cleared and without zero incomes) compared to minimum and average wages. Expenses of services provision have not been taken into account. For the purpose of the comparison, annual incomes and minimum earnings have been calibrated by monthly incomes that were higher than the average weekly hours at work. For the purpose of the comparison, the latest data about earnings on country levels have been used, which are, however, usually older than the data from the platforms. To limit the volatility impact of the exchange rates, the same exchange rate to calculate the hourly earnings in euros has been used. Exclusion of zero earnings has a significant impact especially in case of platforms which are based on competition about an income, like it is e.g. on CoContest. If the zero earnings are included average earnings will fall significantly to 3,5 to 5,7 euros for designers and architects from Italy, respectively Serbia.

Source: De Groen, W.P., Maselli I.: The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report, EU 2016.

It is likely that a location of the virtual services provision will play a more and more important role when allocating work in the future. It is possible to speculate that should there be the same skills available in two different countries, it is more likely that a demand for them will appear in the country with a higher level of incomes and the work will be carried out in the country with a lower level of incomes. Information available so far from the shared economy researches show that majority of jobs have been demanded and carried out within national environment, nevertheless, there are some signs of the work being transferred to the countries with a lower level of incomes.⁷⁷

At the same time, a part of the less qualified and routinely repeated tasks carried out via the Internet (virtually), which currently constitute the greatest potential for globalization of digital labour market, can be automatized quite easily. A level of automatization of the jobs will depend on the comparison of the automatization costs and costs of cheap labour force willing to complete the jobs (they probably often come from the poor and developing countries).

Some platforms make it possible for the workers to work anytime they like, according to their needs, e.g. Uber (considering there is a system of job offers in certain times and locations – see the chapter below II.3.6). Some other platform workers fully depend on a demand, e.g. CoContest, Crowdfunder, Mechanical Turk, ListMinut. A consequence of the second case is a lower level of incomes, potentially also lower than incomes for similar type of work on traditional labour market.⁷⁸

An important question when assessing income levels is also a level of expenses related to work for online platforms. Although it has already been said that shared economy is specific because it significantly decreases the costs of an individual transaction (see chapter I.1), it is important to consider the fact that those as well as other expenses (related to e.g. needed tools, technology, automobile, accounting or similar) are paid by the platform workers, as they are self-employed. Normal workers employed in similar positions do not pay those expenses, therefore to compare the incomes of both groups all of those costs have to be considered; this issue has, however, not been taken into account a lot until now.

One of the key aspects when working through the shared economy platforms is the fact that a remuneration the workers may receive or respectively, whether they can offer the services at all depend on the systems of assessment and ratings the platforms have to a great extent. Therefore it is essential for the systems to be clear, stable and fair.

The study of ING from 2015⁷⁹ in selected European countries confirms general experience that shared economy provides its workers quite small incomes up until now. Majority of respondents in their study who participated in shared economy earned less than 1000 Euros from that activity in the last year. Nevertheless, their answers varied a lot – from 1 Euro to 50 000 Euros, with a median on 300 Eur⁸⁰. The results are shown in the following graph 13. It indicates some polarization between those who earn only occasionally through the platforms (and it is very little) and those for whom it is a more systematic activity, which brings a more significant income. In the context, it is clear that describing incomes received by the shared economy workers and reaching middle values (average, median) may be a little speculative, as it is a presence of two different groups that corresponds with reality more.

⁷⁷ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

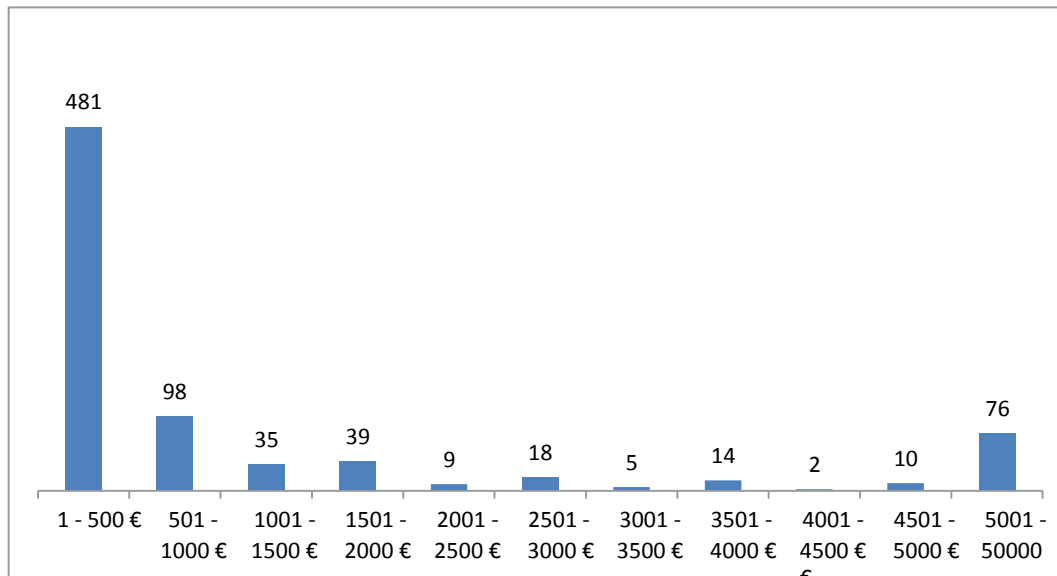
⁷⁸ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

⁷⁹ ING International Survey (2015): What is mine is yours – for a price. Rapid growth tipped for the sharing economy. Available online: https://www.economics.com/ing_international_surveys/sharing_economy_2015/.

⁸⁰ ING International Survey (2015): What is mine is yours – for a price. Rapid growth tipped for the sharing economy. Available online: https://www.economics.com/ing_international_surveys/sharing_economy_2015/.

workers with different strategies, various approaches and possibly also expectations in their relationship to shared economy. That division corresponds with some concepts of possible regulative measures, the basis of which is to outline when it is an occasional activity of a small range that does not require special regulation, and when it is de facto business activity connected with taxes or other duties.

Graph 13: Number of people according to an amount of their income (in the last 12 months)



Source: ING International Survey (2015): What is mine is yours – for a price. Rapid growth tipped for the sharing economy. Available online: https://www.economics.com/ing_international_surveys/sharing_economy_2015/.

Wages per hour is a different question. Although it is usually expected that the workers of digital labour market get paid less than workers on traditional labour market, empiric data from some researches indicate that it does not have to be so. An example of that could be the incomes on platform ListMinut presented by authors De Groen and Maselli⁸¹. Only the median wages of the workers who look after children was under the median wage of corresponding sector of classic labour market, whereas earnings per hour in different sectors were similar. It is more the lower total extent of this type of work that contributes to total lower incomes (e.g. annual) in online labour market more than lower remuneration per unit. At present, the platforms therefore do not provide an adequate amount of work to be able to generate total incomes that would be comparable to traditional forms of employment, and that is in spite of the fact that many shared economy workers are active on more than one platform⁸².

⁸¹ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

⁸² De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

II.3.6 Working conditions

Working conditions are set by the users and platforms to a great extent. Platforms are dominant if they have a large number of workers available. In this situation, customers can place the last minute requirements, which contributes to higher insecurity on the side of workers, and at the same time to less effective use of their time. The study of Eurofound from 2015⁸³ pointed out the fact that the following factors belong to the most risky ones considering the working conditions of platform workers: insecure income, insufficient social security, isolation, stress and sweeping the boundaries between the private life and work. Moreover, it is possible to add a highly competitive environment or the necessity to react in a very short time.

On the other hand, as already mentioned above in chapter II.1, work via platforms may also bring some more beneficial aspects of working conditions, such as higher flexibility. Just the combination of personal control of one's own work, possibility to decide flexibly about one's own time, choose a type of work and set one's own prices together with a perspective of financial income belong, according to some empirical studies,⁸⁴ among the most frequent incentives that bring workers to shared economy. In case of the people working online, there is also a possibility to work from home. Platforms are motivated at the same time to provide those benefits, and they do not want to make an impression that they impose too much control onto their workers. Together with that they also attempt not to be considered employers of their workers, which would mean they would be obliged to have the same responsibilities and obligations as normal employers.

In digital market, tasks are often allocated by means of algorithms set up by the platforms and / or customer/s make decisions. In both cases, assigning work depends on rating (previous evaluations) of the worker. Platforms often do not publish a specific rating method except for the cases when they specifically aim to support some specific type of behaviour of their workers. A general assumption is that rating is usually based on the characteristics of a worker and the feedbacks from his/her customers. The workers who do not fit the conditions can be excluded from the results of searching, and therefore their chances of getting another job via the platform may be very limited. These mechanisms contribute to an effect of „long tail“ (long-tail effect) on one side and appearance of the so-called „superstars“⁸⁵ on the other side, which means that a small group of successful platform workers does the greatest part of work, whereas a large majority of others has a chance to get only a limited amount of orders.

In practice, platforms limit the freedom of decision-making (flexibility) of their workers into some extent, and they set conditions for the workers to increase overall effectivity. Authors de Groen and Maselli⁸⁶ present their own case study of online platform ListMinut, from which it becomes clear that supply and demand do not meet up absolutely directly even on the flexible online platforms. Only less than one

⁸³ Eurofound (2015): New forms of employment. European Union, Luxembourg. Available online: https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1461en.pdf.

⁸⁴ For example Teodoro, R., Ozturk, P., Naaman, M., Mason, W., Lindqvist, J. (2014): The motivations and experiences of the on-demand mobile workforce. Rutgers School of Communication & Information. Available online: <https://www.winlab.rutgers.edu/~janne/CSCW14-mobileworkforce.pdf>.

⁸⁵ De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

⁸⁶ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

quarter of demanded jobs found their processors and they were completed, while it is the factor of price and geographic distance between them which is considered the most important aspect when pairing an ordering party and a processor. In order to increase the effectivity, the platforms, which arrange local/ manual work, often focus especially on the more inhabited areas. Some of them do not use dynamic setting of a price. For example the platform Uber sporadically increases prices in situations when a demand for service is significantly higher than a supply to motivate its drivers to go out and earn more money. It then practises more gentle forms of control when asking drivers to provide their services especially in times of rush hour (for example by messages about needed drives at a moment when a driver switches off the Uber application or when a higher demand is expected, alternatively, it provides a map to the drivers with some areas where they can have higher incomes).

Another example is the platform TaskRabbit⁸⁷, which requires its workers to accept the minimum of 75% jobs (types of work, time and place where they are willing to work are defined by the workers themselves). The workers must complete 85 % of assigned tasks and also in 85 % of cases they must reply within thirty minutes once they receive an offer (nevertheless, that applies only in times they have agreed beforehand). If a worker does not fulfill one of the conditions his name will not be viewed any longer in the results of searching and de facto he will not then have a chance to get another work through the platform. That way it is not only the flexibility of workers that can be limited to a great extent but also the possibilities of their earnings, especially on the platforms where the jobs are allocated on a basis of ratings to usually a smaller group of workers. On the other hand, assessments bring some monitoring to the platforms, necessary for a provision of good quality services.

Other problems arising on labour market include some health risks which are not (unlike in case of traditional employment) outlined in the labour law. It is firstly about physical risks, as for example a risk of an accident in case of deliverers riding bicycles or drivers (which is higher especially because of the fact that an amount of remuneration depends on how fast the service is in some cases), possibility of a threat on the side of a client (e.g. in case of Uber drivers) etc., and secondly, there are psychical and social risks, like for example psychological tiredness and stress when doing routine virtual tasks, a risk of discrimination etc. ⁸⁸ Conditions of the platforms are often set to force workers to complete tasks very fast without needed breaks. At the same time, the work is usually carried out without any contact with other workers, without belonging to any work team, which results in a risk of social isolation which increases a level of psychological stress. See also chapter II.3.9 where attention is paid to the phenomenon of precarization.

II.3.7 Role of education in shared economy

The questions of education in the shared economy environment have been paid a rather little attention so far. Nevertheless, it is assumed that not only in connection with development of shared economy and digital labour market but also in general, in connection with digitalization and automatization of industry and the whole society, the importance of lifelong education will increase more and more. At the time of high flexibilization

⁸⁷ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

⁸⁸ European Parliament (2016): The situation of workers in the collaborative economy. In-depth analysis. Directorate General for Internal Policies. Dostupné online: [http://www.europarl.europa.eu/RegData/etudes/IDAN/2016/587316/IPOL_IDA\(2016\)587316_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2016/587316/IPOL_IDA(2016)587316_EN.pdf).

of labour market as well as high requirements of adaptability of workers, it will be important for the workers to learn additional knowledge and skills and they will have to adjust their qualifications. Besides that, being successful on digital labour market requires a high level of ability of orientation, to become visible and therefore a good level of at least user level of ICT skills. Everyday communication with clients in some types of work for shared platforms requires a high level of social and communication skills. A level of the skills usually determines also the assessment the platform workers get from his/her clients to a great extent, and therefore it influences his/her income. On the other hand, a formally achieved qualification does not play any role in shared economy, therefore it is not important whether a worker has some official certificate for a job or whether s/he completed adequate education or practical experience. It is possible to say that a role of the so-called soft skills is increasing in shared economy (flexibility, ICT skills, organisational abilities, social and communication skills, being precise, consistency etc.), whereas a role of formal qualification completed in the initial education is decreasing.

The situation of the shared economy platform workers and employees in traditional labour market differs in terms of an approach to as well as the availability of further education. Workers in shared economy are currently responsible for their own education themselves. For them it is a sufficient time and financial situation and many of them will not be willing or able to do them, which puts them to a disadvantage compared to the employees who can access education usually thanks to their employers. Nevertheless, overall flexibility on labour market, the trends of alternative forms of work not only in shared economy but also in the traditional employment relationships, and more frequent changes related to work connected with that may lead to decreasing willingness of businesses to invest into education of employees also on the side of companies.

It is likely that investments into education, no matter if it is on the side of companies or individuals, will be targeted and individualized more in the future. The decision making itself about what an individual will learn is very important in the environment of flexible and changeable economy and it is a part of the learning process. On one hand, there will be the already mentioned threat of increasing „digital gap“, that is falling behind of a small group of population with no access or skills of using modern technologies, on the other hand, there will be greater online availability of education and information for everyone including the groups under threat, since the new technologies and digital interconnection will enable development of new forms of further education, which begin to be carried out by various initiatives within shared economy: e-learning, educational web portals, alternative education systems like for example Khan academy, adaptive training programmes (study applications which control mistakes and students' progress and according to that they modify further content and access), open education, the MOOC courses⁸⁹ and so on. Many of the courses can be used free of charge. Development of shared economy and being successful when working for the platforms will require development of specific skills by the workers. Besides some specific skills connected with completing specific tasks a worker carries out, there will also be specific types of general skills needed for easier movement on digital labour market. These skills include especially the following:

- **Networking** - continuous work within networks will require an ability to cooperate and become oriented in a complex and multicultural environment..
- **Digital literacy** - in future, it will be just as important as reading, writing and counting. It is closely connected to the ability to work with information effectively. Ability to think in those

⁸⁹ MOOC (massive open online course) are courses carried out on the Internet, where there are no limitations of the number of participants.

technologies, ability to solve problems through them effectively, is often stated to be the more important than the knowledge of some content itself. All participants on labour market will feel a greater need of their digital literacy in the future as well as ability to adjust to a fast development in the area of ICT.

- **Effective interconnection of ICT skills with specific field** - key aspect will be a combination of specific knowledge from the field and relevant ICT as well as continuous learning and increasing the knowledge. Especially the skills in the area of mobile devices and mobile applications, clouds, processing big data and so on will be required.
- **English language** - for the worker to be successful on global labour market created by shared economy, communication in English language will be - especially in case of the virtual services - a key ability, especially in written form which is used in the Internet environment.

The skills that will be specifically required in shared economy in the future are difficult to predict considering how fast environment is changing and due to unpredictable changes. A key thing will be to learn all life, actively look for some up-to-date information from one's field, when studying one should use available new technologies, the Internet, social media and similar. Critical thinking, social intelligence, counting skills, media literacy, working with information and cooperation in virtual environment will also be important. It will also be important to be able to take a risk and manage insecurities - self-confidence, wide skills and the ability to adapt to unpredictable and quick changes.

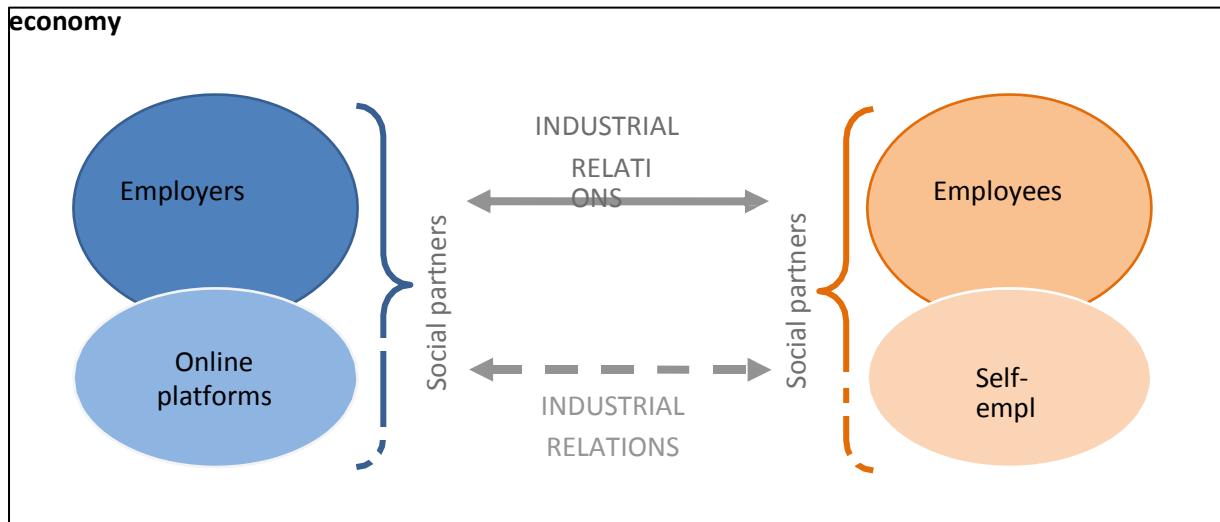
II.3.8 Social dialogue in shared economy

Considering the fact that labour market of shared economy is made (according to current legislative understanding) mostly by the independent businessmen (self-employed), who provide services to private clients, a role of social partners in shared economy has not been defined so far. Nevertheless, some authors – as for example de Groen and col.⁹⁰ present an opinion that into some extent, it is possible to compare the relationships between subjects and groups in shared economy to traditional industrial relationships, which are regulated by the means of a role of social partners and collective negotiations mechanisms – see picture 3. Online platforms are not formal employers of their workers, nevertheless, the function they have to them is to a great extent analogic to the function and the role of employers in traditional economy. The segment of transportation is an often presented example (with dominant platform Uber). Individual workers of the platform (formally businessmen) are in a similar position as the workers in traditional companies. In traditional business sphere, the position of employees is protected by legislative framework and collective agreements. There is no such frame in the new segments and for the new types of work, or it is not clear how and into what extent should the existing frame apply to them. Having a social dialogue as well as collective negotiations in the shared economy environment are, however, complicated due to the following reasons:

⁹⁰ De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

- The status of people who work via platforms and on platforms is often unclear, it is not defined in relation to the existing legislation (e.g. whether a worker is an entrepreneur or not, whether a platform is a middle party or an employer).
- Neither the platform workers nor the platforms are usually members of trade unions or associations of employers.
- For the platforms and also for their workers, it can be difficult to become united, as there is no framework within which the negotiations should be carried out.

Picture 3: Industrial relationships in traditional businesses and industries and in shared economy



Source: De Groen a kol. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

The literature⁹¹ often speaks about a risk of some imbalance in the kvazi-industrial relations where the platforms have a lot more power compared to the possibilities of their workers. This situation led to a state in some cases where the platforms can determine working conditions in a way it became an advantage for them, and their workers can either accept those conditions, or stop working. In this context, platform Uber is often mentioned, which uses some control mechanisms for its drivers, where the half-automatized systems of assessment are of key importance in the possibilities to get work, and some valuation which de facto controls and greatly influences the work of drivers according to their needs, and drivers can either adjust to the situation or leave the platform⁹². Maselli⁹³ states that this effect is not universal in the functioning of the shared economy platforms. Only the situation when a platform functions on a purely demand (client) principle and at the same time, it has a large amount of workers, it makes it possible to push the workers to situation which is not beneficial for them, and transfers a higher level of stress and pressure on them.

⁹¹ For example De Groen a kol. (2017), Todolí-Signes (2015, 2017), Rosemblat a Stark (2015).

⁹² Rosenblat, A., Stark, L. (July 30, 2016): Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers. International Journal Of Communication. Dostupné online: <https://ssrn.com/abstract=2686227> nebo <http://dx.doi.org/10.2139/ssrn.2686227>.

⁹³ Cited according to De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

II.3.9 Prekarization of work

New forms of work bring, due to existing insufficient legislative anchoring and due to the above mentioned unclear working relationships, a range of risks for the working conditions, social security and incomes of involved workers, in another words, they bring a high risk of work precarization⁹⁴. Atypical forms of work, especially temporary work (and until recently also self-employment) expand on the Czech labour market for a long time even outside platform economy. Although the public spheres should ensure an access to employment covered by employment legislation and to social security for all groups of workers. Besides the below discussed issues it is important to observe a risk of weakening of the possibilities of collective enforcement of employment rights - see also chapter II.3.8.

In the last few years in Europe, there is an expansion of prekerious work, which also includes the Czech Republic⁹⁵. In 2014, EU had about one fifth of workers (18%) at places that could be characterised as prekerious work⁹⁶, which involves involuntary part-time work, temporary work and self-employment without inferior employees. In 2006, it was 16,3% workers. Nevertheless, a closer analysis of the data shows that there a completely reasonable explanation for the increase and that is involuntary part-time work (increase by 1,8 p.b.). Increase in the number of the self-employed plays a part in the growth of this indicator only by 0,2 p.b. A part of the temporary workers, on the other hand, decreased by 0,3 p.b. The proportion of prekerious work is much higher in the younger age groups. A group of people under 25 years made 50 % in 2014, while four fifths of them had a temporary contract, one third worked part-time involuntarily and only as little as 0,13 % employees aged under 25 years were self-employed. The proportion of the young people who have prekerious work increased from 44 % in 2006 to almost 50 %. It is therefore apparent that until now, there have been other factors than shared economy that have contributed to the expansion of prekerious work⁹⁷. In spite of that it is important to remember that shared economy falls into this trend, it strengthens it and with its huge perspective of its further development, it could become a key factor in the dissemination of prekerious work in the future. One of the main reasons is also the fact that it contributes to general flexibilization of labour market where even the traditional forms of employment relations (full-time permanent employment carried out mostly in employer's premises) begin to loosen, employees (as well as employers) look for some new structure, such as a combination of more part-time jobs, project work, work from home, work from distance co-working etc. Within the shared economy platforms, there is a risk that „business“ of the individuals who provide their services will, in many cases, de facto not be a free choice to carry out one's own business

⁹⁴ According to ILO, prekerious work is defined as objective and subjective insecurity in various aspects, especially concerning the lasting of employment, then unclear employment status, missing access of social security and other common benefits related to employment, low income and obstacles in trade unions organisation and in collective negotiation. A recent study of the European Parliament considers the key features of precarious work to be poverty and low income, reduced approach to standard labour rights (social insurance, protection against arbitrary dismissal), low quality of work leading to

a risk of stress and medical problems, reduced possibilities of career building and education.

ILO (2012): From Precarious to Decent Work (s. 27). Available online: http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---actrav/documents/meetingdocument/wcms_179787.pdf

European Parliament (2016): Precarious Employment in Europe. Part 1: Patterns, Trends and Policy Strategy (s. 23).

Available online: [http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/587303/IPOL_BRI\(2016\)587303_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/587303/IPOL_BRI(2016)587303_EN.pdf).

⁹⁵ European Parliament (2016): Precarious Employment in Europe. Part 1: Patterns, Trends and Policy Strategy (s. 11).

Available online: [http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/587303/IPOL_BRI\(2016\)587303_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/587303/IPOL_BRI(2016)587303_EN.pdf). ⁹⁶

De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>

⁹⁷ It is especially about the economic insecurity connected with the results of economic crisis in the specified time period and related general increase of the youth unemployment in Europe.

aim but it will be a result of the circumstances where the person tries to earn adequate income and will not find any other possibility; especially if it is a larger number of easier (cheaper) activities or jobs for more different platforms or customers. These people will be under an increased amount of threat because of the risks coming from precarious work including lower access to education, career building, medical and social care, fewer possibilities how to secure adequate income in old age or how to defend one's rights (trade unions interference will not be possible) etc.

As already mentioned above, the shared economy platforms may support the breaking of work into a large amount of smaller partial jobs, which are then divided into those that require creativity and higher level of skills and those where lower level will be enough. Whereas the first type of jobs is usually connected with a high quality work relationship as well as higher amount of earnings, higher level of security and similar, the second type is connected with a constant threat of being transferred to cheaper countries or of automatization. In some extreme cases, it is possible to see some of the shared economy platforms, such as Amazon Mechanical Turk, where people usually do things like identifying objects on pictures for a very small reward in the amount of 1 cent and similar.⁹⁸

Some negative aspects of platform economy and their impacts are well known even from traditional economy. Authors Drahokoupil and Fabo⁹⁹ give an example of practise when the Uber service calls its drivers

„partners“, which is a usual sign from practise frequently called „bogus self-employment“ (it is false self-employment, which Czech economy also calls „švarc systém“). People working in those conditions are expected to continuously present themselves as valuable 'goods' to a wide scale of customers, to actively offer to do specific services where a customer selects them for in similar way as 'from a catalogue', while they are de facto trapped in precarious and often also stigmatized practise and work with no possibility of further career building or development.

II.4 Future development

Practically all available studies agree in a general assumption that a proportion of shared economy will increase significantly in the future. The platforms do not develop in the same way in all segments of labour market. It is apparent that some industries are more suitable for their coming to existence and development, whereas in case of others, no opportunities for their development have been discovered yet. The PwC study from 2015¹⁰⁰ identifies local services such as transportation, boarding and accommodation, art/entertainment among segments, in which it is very likely that the shared economy will grow significantly in near future.

⁹⁸ Drahokoupil, J., Fabo, B. (2016): The platform economy and the disruption of the employment relationship. ETUI Policy Brief. European Economic, Employment and Social Policy, N° 5/2016. Available online: <https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>.

⁹⁹ Drahokoupil, J., Fabo, B. (2016): The platform economy and the disruption of the employment relationship. ETUI Policy Brief. European Economic, Employment and Social Policy, N° 5/2016. Available online: <https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>.

¹⁰⁰ Cited according to Drahokoupil, J., Fabo, B. (2016): The platform economy and the disruption of the employment relationship. ETUI Policy Brief. European Economic, Employment and Social Policy, N° 5/2016. Available online: <https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>.

Similar study of the University of Pennsylvania from 2015¹⁰¹ states that shared economy will have an impact on a range of industrial fields, then also travelling, taxi services, car rentals, bike rentals, finances or music. The study also expects some impacts on employment.

II.4.1 Factors of future development

A specific range of development of platforms in the future will depend on many factors, while many of them probably cannot be identified, as they will arise from the circumstance that cannot be predicted today or from a combination of circumstances as generally expected in case of the development in society and technology during

4. industrial revolution. The most significant identified factors that can influence the future development of online work platforms and shared economy in general include especially the following:

- **Further development and increasing accessibility of ICT.** One of the most important factors that contributed to the existence and fast development of shared economy. The trend is assumed to continue also in the future.
- **Legislation and regulation.** Legislation and regulation can be key factors supporting or significantly limiting the future development of the platforms. Due to the fact that there can be different forms of regulation in different countries, these interventions can significantly influence international competitiveness of the individual countries and regions. Well-balanced and considerate approach to regulation is therefore essential.
- **Trust of customers / users.** A level of trust of the users is an important factor of the future development of shared platforms. A large group of people still considers using digital services, especially those that include financial transactions, to be risky. A level of such lack of trust is higher with the higher age categories, and it is expected that a level of trust to those transactions will continue to grow. Nevertheless, growing complexity of digital environment (and a role of for example digital terrorism which is hard to estimate in advance), some more serious problems can happen more often, such as some hacker attacks (see for example the worldwide attack using the ransomware WannaCry in May 2017), which may slow down the increasing trust.
- **Long-term sustainability of prevailing casual work in a relation to professionalism.** At present, there is a dominant scheme when the shared economy businesses rely on the flexible workers who work part-time. Some authors¹⁰², however, ask a question, whether this model will be sustainable from the long-term point of view or if it is only a temporary condition, which will enable an initial fast rise of those businesses. One advantage of using the type of workers is that they are able to respond to a highly heterogeneous demand in a better way. On the other hand, quality of work and reliability are usually higher when a worker invests into his/her education and equipment beforehand or when s/he has an opportunity to gain experience. This development can be seen in the area of electronic business (e-commerce). At the start, there were just occasional sellers and occasional buyers in the center of businesses like eBay, now, however, majority of transactions are carried out by professional businessmen. We must

¹⁰¹ Rubicon (2015): The Sharing Economy: A New Way of Doing Business In: Knowledge@Wharton. Available online: <http://knowledge.wharton.upenn.edu/article/the-sharing-economy-a-new-way-of-doing-business/>.

¹⁰² See for example Farronato, C., Levin, J., Brusson, J.N., Abele, M., Iacangelo, S., Schmid, Ch. (2015) The sharing economy. . New opportunities, new questions. Investment strategy and research. Credit Suisse, Global Investor 2.15. Dostupné online http://www.oxfordmartin.ox.ac.uk/downloads/GI_215_e_GesamtPDF_01_high.pdf.

also not forget the role of high stability and loyalty of workers whose relationship to their employer (or platform / provider of work) is more dominant and more long-lasting.

In a similar way, there is an issue of shared financing, where trust as well as the ability to estimate risks plays its role too. Specialized financial institutions, especially banks have played a role in ensuring some security of an adequate environment so far. Should the process of ensuring security be based on a different basis, for example the blockchain basis, it will be an encouragement for the P2P financial transactions. But even in that case, it will mean that the users of the financial P2P platform will orientate themselves in all available records and information and will be able to optimize their activities. That is of course hard to achieve in reality. It is hard to imagine that some specialized institutions providing sophisticated services will be pushed away by the competing P2P platforms. Their effect will probably remain only in the area of simple services, the performance / result of which can be easily assessed by a user.

- **Opportunity to individual development.** Previous point is also connected with a question of whether the current boom of platforms, in which many people see the opportunities to manage their own development and personal growth, is able to fulfill that promise in a long term, from the perspective of workers as well as of companies. This idea is definitely based on reality. A worker at those platforms chooses his future career to a great extent, s/he can try out new things and test his/her abilities to be successful on labour market. Nevertheless, a really top professional potential, innovative ideas and new solutions may have better conditions for development in companies opened to innovations. Some successful innovative companies often have environment (sometimes also formalized systems) that support initiative and creativity of employees. They support team cooperation and try to maximize the effect coming from the combination of different strengths of individual team members. Employees in such teams are often loyal, they identify with business targets of their company and often also 'breathe' for the company, which brings extra added value to their work. Teamwork then has a greater combined effect different from a plain sum total of the performance of individual workers. Environment like that is hard to imagine in the conditions of shared platforms. Work is individualized and very fragmented here. It can happen that the low qualified jobs are done by individuals with higher qualifications, whose potential may remain unused that way. Nevertheless, it is possible that such approaches of shared economy platforms will appear in the future, they will have a high level of innovation based on targeted use of individual potential and they will generate cooperation.
- **Using a potential of big data.** Further growth of the platforms is expected also in connection with the so-called 'big data revolution'. The speed of platform development will be influenced by their ability to use the possibility of digital collecting, processing and correct use of data, which will be available about one's activity and behaviour of all participating subjects, in a similar way as it is possible in companies like Facebook and Google and they will benefit from a large amount of data available and improve their products thanks to that.¹⁰³ This skill will have a great influence on increasing the effectivity of the platforms and their capacity to quickly satisfy a personalised short-term offer.

¹⁰³ Farronato, C., Levin, J., Brusson, J.N., Abele, M., Iacangelo, S., Schmid, Ch. (2015) The sharing economy. New opportunities, new questions. Investment strategy and research. Credit Suisse, Global Investor 2.15. Available online http://www.oxfordmartin.ox.ac.uk/downloads/GI_215_e_GesamtPDF_01_high.pdf.

II.4.2 Estimates of future growth

Considering the fact that the future growth of shared economy depends on many various factors, in some cases also on arbitrary political decisions, it is very difficult to predict for the future. In spite of that there are studies that attempt to provide at least an indicative estimate. For example the often cited report of PwC from 2015¹⁰⁴ estimates a growth of profits in key sectors of shared economy from 15 billion USD in 2015 to 335 billion USD in 2035. A study which the PwC did in 2016 for British market¹⁰⁵ gives an estimate that five key shared economy sectors (peer-to-peer accommodation, peer-to-peer transport, services for households, professional services and collaborative finances) in Britain could be twenty times higher in 2025 compared to 2015. But it is important to say that shared economy in Great Britain is now growing in the fastest way in the whole Europe. This estimate of the pace of growth is the greatest when compared to other fields or branches of economy. Estimates of that type with a long time horizon have only a limited value, nevertheless, the assumption that the growth of shared economy will be significant is widely accepted.

The growth of shared economy in the Czech Republic can be illustrated on an example of two most important platforms. Airbnb declared a year-on-year increase in the number of offers by 84 % in the Czech Republic in 2015,¹⁰⁶ Uber had over 1000 active drivers in February 2016¹⁰⁷ and in 2017, it was more than 2000¹⁰⁸. Future extent of shared economy in the Czech Republic will be influenced by similar factors as in the rest of the world. Besides the above mentioned general (global) trends, it is necessary to also consider the following specific factors:

- **Language barrier.** There is still an existing language barrier in the Czech Republic. International platforms function in English and for a large proportion of population it is difficult to access them, and there is a question of into what extent it pays off for the international platforms to start working in Czech language mutation. The experience so far indicates that when considering the minimum unit costs per transaction (see above) it is more likely to pay off for the big players, such as Uber or Airbnb. There are also platforms coming to existence in the Czech Republic that practise similar principles as some foreign ones, alternatively, they have their own original purpose. In some cases, there is an acquisition by an international platform (for example BlaBlaCar). It can be expected that when the young generation comes, the problem with the language barrier to do with English will get smaller.
- **Traditional conservative approach / lack of trust.** Another possible barrier of the growth of shared economy can be some traditional conservativeness of Czech consumers. It is known that e.g. when compared to the western countries, the Czech Republic has slowly established trust to online shopping, online platforms etc. Those conclusions support e.g. the results of the investigation Barometr (see chapter II.3.4), according to which is the Czech population - when compared to the other European countries - relatively well informed about the existence of the shared economy platforms, however, the level of their active use belongs to the lowest ones in the EU.

¹⁰⁴ PricewaterhouseCoopers (2015): The Sharing Economy. 2015. Available online:

<https://www.pwc.com/us/en/technology/publications/assets/pwc-consumer-intelligence-series-the-sharing-economy.pdf>.

¹⁰⁵ PricewaterhouseCoopers (2016): Outlook for the Sharing Economy in the UK. Available online:

<http://www.pwc.co.uk/issues/megatrends/collisions/sharingeconomy/outlook-for-the-sharing-economy-in-the-uk-2016.html>.

¹⁰⁶ Idnes.cz (7. 12. 2015): Amateur accommodation is becoming a hit in the Czech Republic. Cheap accommodation is a problem for hoteliers. Available online: http://ekonomika.idnes.cz/airbnb-rust-v-cesku-0om-/ekonomika.aspx?c=A151206_172024_ekonomika_rny.

¹⁰⁷ Idnes.cz (20. 2. 2016): Uber now requires a trade certificate from its drivers. They have to face higher fines.

Available online: http://ekonomika.idnes.cz/novinky-v-prazskem-uberu-0hl-/ekonomika.aspx?c=A160219_2226600_ekonomika_rny.

¹⁰⁸ Euro (6. 9. 2017): Uber transported 340 percent more people in Prague in half a year. However, a number of journeys remains hidden. Available online: <http://www.euro.cz/praha/uber-v-praze-za-pololeti-prepravil-o-340-procent-lidi-vice-pocet-jizd-ale-taji-1370372>

III. Legislative environment for good functioning of work platforms

Existence and development of shared economy is connected with some intensive discussions about to what extension and in which aspects it should or should not be polarized today. This debate is strongly polarized. There are opinions for the regulations (such as Rauch & Schleicher, 2015¹⁰⁹) and then other ones that are strictly against (such as Sundararajan, 2014¹¹⁰). The supporters of the regulations state that it is necessary to ensure protection and safety of consumers, the objectors state that negative impacts of the regulations are more expensive than market failure that appears as a result of shared economic development.

A basic difference between working in traditional economy is that as it was already stated that is carried out in a form of independent work - workers are therefore not employees but self-employed. However, those specifications are not definite and one of the frequently discussed topic related to shared economy is the new setting of the boundaries between dependent and independent work, which is carried out through the digital platforms (for further information see chapter III.3.4)

As the range of shared economy grows wider, the work via platforms grows wider, too, and will probably grow yet further behind the activities usually carried out by the self-employed people so far. It will therefore be necessary to find a way how to ensure the protection of rights for the platform workers, similar to those of the traditional workers. Some steps in that respect have already been done after the intensive discussions in some parts of the USA and Europe, for example an implementation of a category of 'dependent contractor' as a step between an employer and a self-employed person or supporting collective organisations that represent the rights of workers or implementing various duties for the platform operators in relation to workers and customers, and other.

According to an opinion of professionals, it is now important to set up clear rules for shared economy, especially in the following areas:

- legal environment for employees - new definition of the status of an individual who provides services;
- medical insurance rules and tax system,
- protection of intellectual property
- legislation to protect consumer
- liability insurance of the platforms
- regulation of the tendencies of some platforms towards monopolization.

¹⁰⁹ Rauch, D.E., Schleicher, D. (2015): Like Uber, But for Local Governmental Policy: The Future of Local Regulation of the „Sharing Economy“. George Mason University Law and Economics Research Paper Series 10-01. Available online: https://www.law.gmu.edu/assets/files/publications/working_papers/1501.pdf.

¹¹⁰ Cited according to Lenaerts, K., Beblavý, M., Kilhoffer, Z. (2017) Government Responses to the Platform Economy: Where do we stand? CEPS: Policy Insights. Available online: <https://www.ceps.eu/publications/government-responses-platform-economy-where-do-we-stand>

III.1 Approach of supranational institutions to the phenomenon of shared economy

III.1.1 The European Commission

In the last few years, the central European Union institutions (the European Commission and the European Parliament) paid a lot of attention to the shared economy. Besides other things, they ordered to carry out several studies and issued several documents related to the theme.

In June 2016, the European Commission issued an important communication called the European agenda of the economy of sharing¹¹¹. The Communication contains instructions related to supporting consumers, businesses and public bodies to get involved in shared economy with faith, and states that the new economic models can contribute significantly to the growth of employment in the EU, if they are encouraged and developed responsibly. Due to rapid development of these new forms, a line of independent separate regulative arrangements come into existence on national as well as regional level, which greatly contributes to insecurity on the side of providers of the services but also consumers, not even considering the fact that the approach can slow down the innovations, growth and creating new jobs. It is important to support regulation environment that protects consumers and ensures fair taxation. It is, however, necessary not to do that to the detriment of positive development of new business models.

According to the EC instructions, member countries should distinguish between the people who provide services only occasionally and professional providers. There are different ways to do that - for example by setting up some limit related to a range of work or a level of income when doing those activities. Professional providers of services should be obliged to get a trade licence or a permission, should it be necessary in respect of some main rules and a respect of public interest. On the other hand, platforms should not be bound by a permission or a licence in case they work as a middle party between consumers. Prohibition of work should be only an extreme solution. This protection should not constitute excessive obligations for the natural persons who provide those activities only occasionally. There are tax obligations for the providers of the services as well as the organisers of platforms (especially the income tax and the value added tax). The Commission calls for a full cooperation with the corresponding internal organs for the registration of economic activities and making tax collection easier. A Communication of the European Commission concerning shared economy includes a useful clarification concerning a definition of a 'worker' in the EU legislation, when it states that the definition may also relate to people who do their working activity through the web platforms. A key aspect of the discussion is the nature of work arranged by a web platform. Particularly whether it is an employment or not. The EU legislation which ensures rights to the workers defines employment according to three categories: the inferiority-superiority relationship, nature of work and provided remuneration. The document also proposes a stand-point of the Court of the EU saying that "the primary feature of employment means that a person does some work for some time / s/he provides service for another person and receives remuneration under a leadership of another person."

¹¹¹ European Commission (2016): European agenda for economy of sharing. Press release. 6/2016. Available online http://europa.eu/rapid/press-release_IP-16-2001_cs.htm.

¹¹² Veber, J., Krajčik, V., Hruška, L. (2016): Shared economy. Prague, VŠPP. Available online: <https://www.vspp.cz/wp-content/uploads/2017/05/zprava.pdf>.

¹¹³ Veber, J., Krajčik, V., Hruška, L. (2016): Shared economy. Prague, VŠPP. Available online: <https://www.vspp.cz/wp-content/uploads/2017/05/zprava.pdf>.

The following three criteria can be also used for shared economy:

- Relationship of inferiority - superiority: There is an existing evidence of inferiority-superiority if the person who does the work / provides a service for a web platform on the basis of the platform requirements and s/he cannot choose what s/he will do and how, remuneration for work and working conditions.
- Remuneration: A worker is not a volunteer provided that s/he receives a remuneration for completed service / work which exceeds the costs from a collaborative platform.
- Area of work: In this connection, there is a reference to the work of economic value, which is effective and real except for the services which are of so small range that they can be considered marginal and additional.

The Commission also states that many arguments of the web platforms owners, e.g. that the workers are not monitored continuously and they do not work continuously, are not adequate enough not to be able to consider the work organised through a web platform to be employment.¹¹⁴

Because of the above described criteria and their usability in shared economy, there are some authors who¹¹⁵ claim that work in shared economy does not have to differ from another types of "employment relationships" - which could mean that people who do work / provide services for a web platform will comply with the same labour laws as the workers in traditional employment relationships. For example a court in Great Britain decided that the Uber drivers are considered to be employees (not the self-employed people), they should receive at least the minimum income and have right of paid holiday. In many other European countries, however, shared economy workers are self-employed people who are not obliged to receive minimum income, are not bound by the labour laws and collective agreements¹¹⁶.

Regulation should go above the framework of the existing definitions and should pay attention to specific risks connected with the work arranged by a web platform.¹¹⁷

III.1.2 European Agency for the Health and Safety at Work

The European agency for the health and safety at work¹¹⁸ formulated problems which required solving in connection with the new digitized forms of work:

- It is important to clarify a look and a position of online mediation platforms. If they function on the same principle as the job agencies, they shall be bound by the same legislation.

¹¹⁴ Drahokoupil, J., Fabo, B. (2016): The platform economy and the disruption of the employment relationship. ETUI Policy Brief. European Economic, Employment and Social Policy, N° 5/2016. Available online: <https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>.

¹¹⁵ Drahokoupil, J., Fabo, B. (2016)

¹¹⁶ De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online:

<https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

¹¹⁷ Drahokoupil, J., Fabo, B. (2016)

¹¹⁸ EU-OSHA – European agency for safety and health in work (2015): A review of the future of work: online labour exchanges or “crowdsourcing”: Implications for occupational safety and health, Discussion paper, Bilbao.

- It is necessary to clearly clarify a position of a subject that employs. If the platforms arrange work / services directly among the self-employed and their customers, their relationship is apparent. However, if a platform arranges work for people who are not self-employed, it is not clear who bears responsibility for the work - whether it is the worker or the platform. It is also not clear who would be liable for eventual damage, accident or similar in that case.
- It is also important to set the ways how it would be possible to certify the skills gain while doing crowdworking work, which applies especially to healthcare, electrotechnical professions, IT and similar.

III.1.3 OECD

A recommendation for shared economy was also issued by the OECD. His meeting with the ministers in 2016 ¹¹⁹ resulted in a conclusion that at present, there is no point in distinguishing between classical and online activities but a key thing is to direct the attention to predicting and preparation for digitalization of society, to look for ways of using the advantages of digital economy and to strengthen the faith in the global network ecosystem. The conference of ministers calls for some other steps in digital agenda, especially in four directions, which are:

- openness of the Internet and innovations,
- trustworthiness in digital economy environment,
- building a global interconnection,
- work and skills in digital economy.

Another OECD material¹²⁰ pays specific attention to how the shared economy influences tourism. The document states that the governments stand, thanks to shared economy, in front of a challenge of expansion and development of tourism, and it call them to reconsider the existing legal regulations towards implementing new activities related to shared economy into existing regulation frames. It also recommends to explore an influence of shared economy on taxation and to consider an implementation of an accommodation tax for the providers of accommodation. Politics and regulation mechanisms in the area of tourism should be modernized while aiming towards encouraging better and better performance and quality of services, towards more effective use of self-regulating approaches and safer use of data, which the platforms collect.

OECD also recommends to strengthen data collection and research results about the impacts of shared economy on tourism and local communities and to support sharing of the examples of good practise related to regulative responsibility among all levels (national, regional, local).

¹¹⁹ OECD (2016): Ministerial Meeting on The Digital Economy: Innovation, Growth and Social Prosperity, 21-23 June 2016, Cancun, Mexico. Available online: <http://www.internetsociety.org/doc/oecd-2016-ministerial-meeting-digital-economy-background-paper>.

¹²⁰ OECD (2016): Re-thinking policies for the tourism sharing economy. Available online: <http://www.oecd.org/industry/tourism/re-thinkingpoliciesforthetourismsharingeconomy.htm>.

III.2 Regulation of shared economy

When thinking of setting up an adequate framework for good functioning of new relationships in shared economy from the viewpoint of the impacts on labour market, it is good to realize first of all what should be regulated in quite a heterogeneous area of shared economy and why. If the regulation is necessary in some segments of shared economy, then there is a question of what width and depth it should go. How to set up the regulation and conditions not to prevent development of new forms of service provision and at the same time to ensure the equal opportunities and needed protection of the receivers' and providers' rights. If the new setting of the conditions and regulation of the new forms of providing services and work within shared economy should be the same as for the existing standard forms of business and work, eventually, whether the two segments should be differentiated or united.

Regulation should also prevent negative externalities, therefore social expenses, which are not included in the prices of transactions and therefore they are not paid by either party to the transaction relationship in shared economy, however, they will show as subsequent expenses in a longer or shorter horizon and they must be paid from public resources. That can happen for example in case when one does not pay fees to local budgets, tax escapes or when not paying social insurance or other necessary expenses.

Defining the shared economy segments according to their need of regulation

Considering the fact that the term shared economy is still described only vaguely and it involves a great spectrum of activities from quite narrow area of sharing property, services and time on non-profitable level to the regular business activities, it is good to sort out and separate the individual segments in terms of regulation and legislative frameworks. The relevance of regulation obviously grows with a level in which the transactions become to have a market and especially profit character.

The study carried out for the government office of the Czech Republic¹²¹ describes a constructed graphic **shared economy model** (see picture 4), which comes from a general theory of behaviour and relationships of economic entities. The authors use the CMCE model to describe different areas of shared economy and to identify the spheres where some limited level of regulation is desirable and where it is acceptable. The model describes an interaction between households and businesses. There are activities of households on the left part of the graph bordered by line C. There is a dominant influence and behaviour of business as well as business environment in the right part of the graph. This part falls into the existing state regulation to a great extent.

The bigger circle in the middle of the graph represents the whole shared economy, from which the inside circle is a subset when shared economy is practised using the Internet - the inside circle grows larger and larger because more and more sharing is done online at the expense of direct physical sharing, such as an assistance to a neighbour or shared ride.

Area I involves households and their free use of leisure time and things in their personal property. It is not necessary to regulate this area. This area, surrounded by line C, involves property *de iure* as well as *de facto* (that is real property connected with personal and originally targeted use of a product / service for one's own needs) - for example buying a car originally and primarily for one's own need (the car can be later used for sharing but that was originally not a plan). The area which is outside

¹²¹ Veber, J.; Krajčůk, V.; Hruška, L. a kol. (2016) *Shared economy*. Prague: VŠPP (available online: <https://www.vspz.cz/wp-content/uploads/2017/05/zprava.pdf>)

line C, on the other hand, involves only property de iure but not de facto (that means property that are owned / bought for one's own business activities).

Area II shows clear sharing from which there is no economic effect or specific financial profit (for example Coachsurfing – provision of accommodation not for the purpose of financial profit but in order to get to know different culture; Blablacar, etc.)

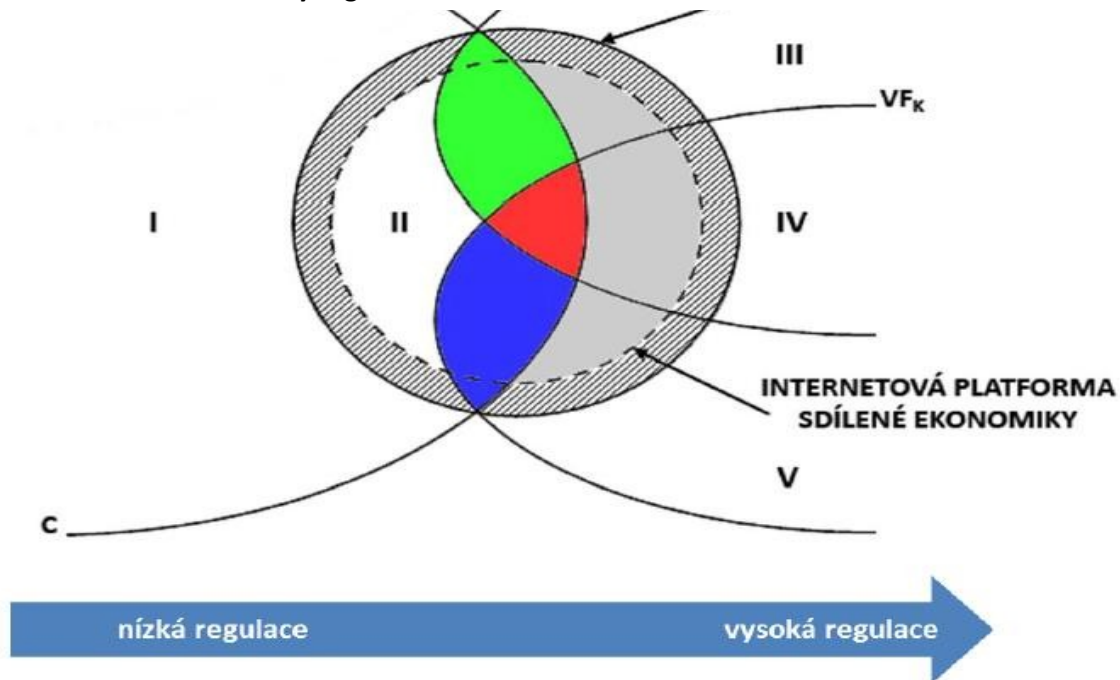
Green area represents sharing only one's own work (for example Hlídačky.cz).

Red area represents sharing one's own work as well as capital (for example Uber – sharing work as well as cars).






Blue area represents sharing of only capital (for example original Airbnb, Zonky).

Grey area is the most important from the viewpoint of regulation (it is de facto grey economy). The authors call it 'fuzzy sharing'. One buys property purposely for business, not for his/her own need (s/he de facto does not own them). In some cases, even the platforms themselves (Airbnb, Uber) help to finance such purchases (real property, automobiles) to fulfill the condition of ownership de iure.

Picture 4: Shared economy segmentation model



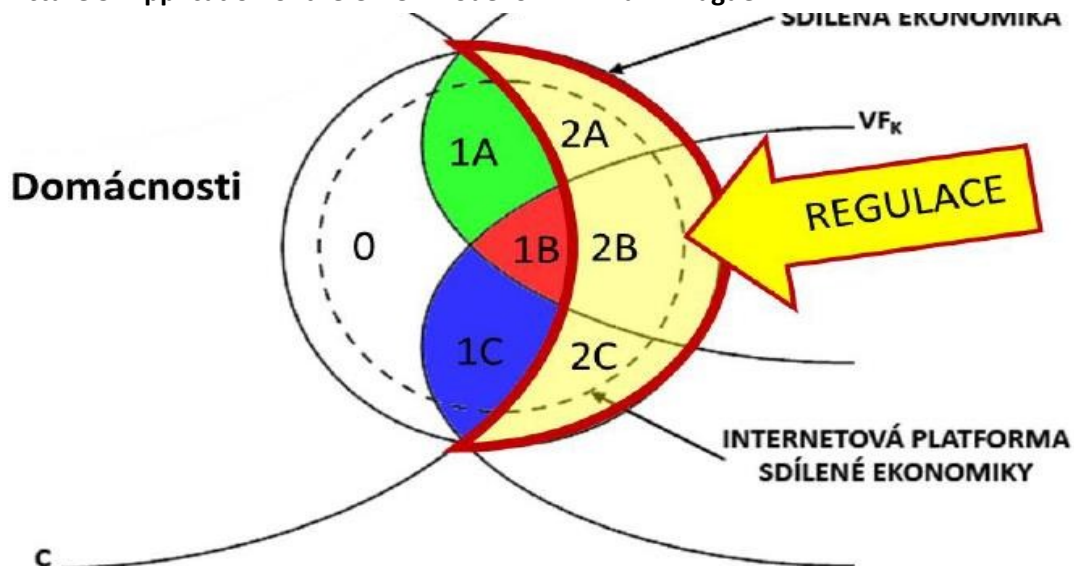
Explanations: C – households (ownership for personal use, leisure time); VF_k – Capital production factor, VF_L – labour production factor.

-  The original classical shared economy without a connection of the Internet (digital) platforms a virtual sharing
-  tool Sharing of production factor of work only
-  Sharing production factor of work as well as capital – personal property and
-  personal work Sharing production factor of capital – personal
-  Fuzzy sharing using production factors. State regulation is necessary

Source: Veber, J., Krajčík, V., Hruška, L. (2016): Shared economy. Prague, VŠPP. Available online: <https://www.všpp.cz/wp-content/uploads/2017/05/zprava.pdf>.

In this context, it is important to refer to a fact that many platforms go through a process of profesionalization. The initiatives of originally clean sharing (de iure and de facto) of private properties gradually become classical business subjects, which only use the existing online forms of organising work, and which therefore lose their sharing character. This is happening by the means of various ways and mechanisms. In case of Uber, the profesionalization of drivers in the Czech Republic - they need to have a trade licence since Uber implemented the obligation - is a result of the external pressure to have a full legalization of the platform. In case of Airbnb, hosts get a higher number of properties for the business purposes and they de facto become professionals in providing accommodation services, alternatively, they are business investors. The development is a result of an attempt to find a well-established functional platform to establish one's own business intention. Similar process goes on in case of the samll platforms, too - e.g. Czech bikesharing platform Rokola started in a non-profit form and was based on a membership of individuals and sharing refurbished bicycles (presents from private persons), but now, after an important investor joined in, it has been transformed to a private company aiming to expand and make profit, and it de facto changes for a model of renting bicycles of their own production.

Picture 5: Application of the CMCE model on AirBnb in Prague



Explanations: C – households (ownership for personal use, free time of people de iure, but also de facto); VF_K – Production factor of capital; VF_L – production factor of work.

0 - an area where sharing is free of charge, for example accommodating a friend, classmate

1 - an area where sharing is provided against payment, production factors are not invested to make a profit on purpose

2 - an area where sharing is provided against payment, production factors are de facto invested purposely to make a profit, regular basis is typical here. State regulation is necessary. Financial regulation in terms of the compulsory keeping the hosts register and a record of the guests - tax control - and additional charges for negative externalities (charges for keeping local infrastructure etc.).

A - sharing only a production factor of work (not used in accommodation)

B - Sharing production factor of work as well as capital - personal property (flat / house) and personal work (preparation and cleaning of room)

C - Sharing production factor of capital - personal property (flat / house), work is delegated to another subject, renting services (preparation and cleaning of room)

Source: Veber, J., Krajčík, V., Hruška, L. (2016): Shared economy. Prague, VŠPP. Available online: <https://www.vspp.cz/wp-content/uploads/2017/05/zprava.pdf>.

Diversification of the originally clean sharing activities and their shift towards enterprise are described by the authors of the above mentioned publication¹²² on an example of shared accommodation. It is possible to show it using the CME model - see picture 5.

Considering the relationship to regulation, the authors Veber, Krajčák and Hruška present ¹²³ the following classification of different types of sharing:

- 1) **True sharing** – completely on a private basis, partners know one another (e.g. free of charge lending, services for relatives, neighbours, shared transportation to work etc.),
- 2) **Occasional sharing** - occasional, providing items or services usually against charge and either using on-line platform or without it, partners usually do not know one another,
- 3) **Commercial on the basis of on-line platform** - communication interconnection between those who offer / workers and clients is carried out by a middle party through an on-line platform; those who offer get a financial payment and there are also charges for a platform operator; this form of sharing can be divided into three groups:
 - a) *those who respect regulation conditions* - people who offer as well as the middle party are transparent and respect existing legislation for specific products or services that are offered (for example Liftago, Carsharing, Rokola etc.)
 - b) *those who circumvent the regulations* - especially those who offer do not always bind with the regulations; the mediating platform that organises a distribution process defends itself saying that it is those who offer who are obliged to keep the regulations, not the platform (for example Uber, Airbnb)
 - c) *without influence of transactions and conditions of their realization – platform does not guarantee regulative conditions* - it is up to the person who offers whether he fulfills the regulative conditions or not; the arranging platform does not guarantee that a service provider will be qualified and that s/he pays taxes (for example Hodinový manžel, Super soused); also including the platforms zprostředkující that arrange the sales of the second-hand goods.

From the viewpoint of regulation and potential negative impacts, the most problematic seems to be the *commercial sharing avoiding regulative conditions* (3b), which includes dominant players who significantly influence market in their segments (Uber, Airbnb). In that area, it is necessary to update valid legislation and perhaps also to strengthen activities of controlling authorities. There are especially the following risks arising from the irregular work of this type of platforms: not recording the movement of foreign nationals (when not recording the accommodation of foreigners); hygienic risk; unequal business conditions; meeting tax obligations; safety risks for consumers.

Then some attention has to be paid also to another two shared economy segments, which are *occasional sharing* (2) and *commercial sharing not guaranteeing regulative conditions* (3c). In case of occasional sharing, it will be essential to set up a line saying when it still is an occasional provision of service and when it has a character of economic activity that has to be a subject of taxation. It is possible to for example choose a financial or another quantitative limitation. In case of *a commercial sharing with no guarantee of*

¹²² Veber, J.; Krajčák, V.; Hruška, L. a kol. (2016) *Shared economy*. Prague: VŠPP (available online: <https://www.vspp.cz/wp-content/uploads/2017/05/zprava.pdf>)

¹²³ Veber, J., Krajčák, V., Hruška, L. (2016): *Shared economy*. Prague, VŠPP. Available online: <https://www.vspp.cz/wp-content/uploads/2017/05/zprava.pdf>.

regulation condition, it will probably be essential to accept some regulations in time, however, it will depend on further direction in development of the segment. Even in case of this type of sharing, there could be a threat that it will result in having uneven conditions for entrepreneurs-the self employed, and their taxation remains a question.

Analogically, it is possible to draw a typology of workers who participate in shared economy in relation to regulative arrangements – see table 6.

Table 6: Typology of the shared economy workers in relation to labour market

Participation of a person in shared	Existing regulation	Desirable regulation
Private natural person, does not have profit (true sharing)	Absolutely personal matter - is not regulated	Regulation is not necessary
Private natural person, has occasional profit	The labour-legal situation and protection of people arises out of the main source of income; limitation of the amount of extra incomes that does not comply with further obligations is	To consider whether the set financial boundary is adequate considering the criteria of casual income also for the shared economy conditions
Person who has own business (his/her activity meets the legislative		
a) A person who really has a business in accordance with valid legislation (a self-employed person)	It is related to the current regulation of the self-employment	To consider whether it is necessary to increase legislative protection of the workers to better correspond with the conditions of shared economy, especially in the perspective of possible mass expansion of independent (and less protected) work; (it is especially about the issues like social security, ensuring access to education, adequate working conditions, possibilities of
b) A person is legally an entrepreneur, his/her activity, however, de facto fulfills the attributes of dependent work for one employer (Uber...)	Formally, the regulation for the self-employed applies to him/her, however, s/he is de facto a dependent person (it is breaching the law by the platform)	According to the existing regulation, settlement of the case is enforceable; It is possible to consider the possibility of a firmer legislative grasp and differentiation of what character of work it is, alternatively to consider introducing of a new legal category with adequate regulation
c) A person in a „grey zone“ – his/her activity fulfills the attributes of the self-employment but a person who is legally self-employed is not	It is not a legal state; It is about personal responsibility and awareness of a person. A person should declare to be either self-employed or a private person having occasional profit.	According to the existing regulation, a composition of condition can be claimed, however, in some cases it could be difficult to confirm the condition; It is possible to ask the platforms which have not taken care of it to inform their members and to encourage them in respecting valid legislation, alternatively to strengthen the general information work of public administration for the people in the area; Shared economy has mechanisms (online evidence), which enable to have better control to

Source: Own work

At present, there are many platforms and practically each one of them is an original business purpose with some innovative mechanisms of work. Relationships of people who enter into their activities on the side of „the providers“, on the side of „customers“ or the intermediary subject (that is a subject that owns the operating platform) are very different on different platforms. Specific

regulation which would cover all specific cases in detail, would therefore have to be very large and also difficult.

Some simple and more general regulation will be more suitable and at the same time it should cover the whole width of the new forms of business and various professional activities in shared economy including those that can appear in the future. Generally, desired regulation should regulate conditions for shared economy as well as standard forms of employment at the same time. It is about securing the rights in the following directions:

- **protection of state and public sphere** - especially the protection of state incomes and lower administrative structures incomes, control of movement of foreigners from the third countries atc.;
- **protection of business subjects rights** - securing equal opportunities for enterprise and removing the risks of unfair competition;
- **protection of individual rights** - especially a protection of de facto dependant work the people who participate as 'the offering' subjects in shared economy, securing equal opportunities for people who are self-employed, to find some regulation mechanisms that will prevent precarization of the people
- **protection of consumers rights.**

It is also important to pay attention to the fact that the complications coming in connection with shared economy are usually dealt with by the local self-governments rather than national governments (e.g. in case of Uber and Airbnb). Laws and regulations are usually prepared and presented on a national government level, which means that cooperation and exchanging information among different levels of public administration is a key factor for solving problems and preparing conditions for development of shared economy. ¹²⁴

Regulation versus deregulation

As already presented above, there are supporters of regulation on one side and those who disagree with it on the other side. Another opinion polarization exists between the way the conditions on market should be adjusted, whether there should be stricter rules and regulations for the shared economy platforms in the areas where they have a competitive advantage compared to the operators of similar services in traditional economy, or whether it should be just the opposite - to back away from the regulatory conditions which the traditional providers have to keep. In many cases, it seems that the regulations are outdated and not adequate ¹²⁵

(in the times of satellite navigations, it is for example useless for the taxi service drivers to learn the entire city by heart etc.), and they should be limited or removed, just like the built-in self-regulating tools in the on-line platforms can lead to a decreasing need of the detailed regulative arrangements on general level and subsequently to them becoming easier or their complete removing.

At the same time, traditional providers could head towards a greater use of the methods common in shared economy to ensure the quality of services (for example online feedback from customers), which is a trend frequently seen in many companies (especially in the area of for example retail and internet sales).

¹²⁴ Lenaerts, K., Beblavý, M., Kilhoffer, Z. (2017) Government Responses to the Platform Economy: Where do we stand? CEPS: Policy Insights. Available online: <https://www.ceps.eu/publications/government-responses-platform-economy-where-do-we-stand>.

¹²⁵ Veber, J., Krajčík, V., Hruška, L. (2016): Shared economy. Prague, VŠPP. Available online: <https://www.vspp.cz/wp-content/uploads/2017/05/zprava.pdf>.

It would be good to have a balanced and functional combination of both approaches aiming towards maximum simplification of the rules and maintaining the minimum regulations ensuring relevant goals of public administration in the areas like protection of consumers, tax duties and protection (de facto) of dependant work.

III.3 Potential regulation topics

As a part of the present debate about the rules for good functioning of shared economy, several often repeated areas can be spotted. Below is offered an overview of the main topics which are important especially when considering the need of regulation and state intervention (legislative or some other, for example informational, character). Various occurrences in shared economy are usually closely interconnected, therefore also the below described thematic areas overlap and determine one another into some extent and it is not possible to solve them separately. The below mentioned classification was chosen only because of its clear arrangements and being systematic and there is no claim of pregnant and definition-defined classification.

One type of governments' reactions is aimed at the extent of shared economy (prohibition of work of some platforms or their parts). The first reason for the radical action is the need to set some rules concerning the organisation of work with an aim to ensure a certain level of security for the customers. The second reason is to prevent unfair competition.

Another type of government reactions are the actions aiming to support the shared economy development. Polish Ministry of development for example started the informal consultations with the web platforms recently with an aim to collect information about byrocratic obstacles that stand in the way of their development. In the United Kingdom, the act on degradation has moderated the requirements to get a permission for Airbnb in London.¹²⁶

III.3.1 Status of platforms - middle parties or employers

There are many discussions concerning the issue of whether the shared economy platforms should be considered the middle parties or employers. A great diversity among the platforms makes it again impossible to form an easy answer. Majority of on-line platforms active in Europe declare to be the middle parties connecting a demand for work with a supply. In several cases, the workers on platforms can decide not to become employees, as it is for example in case of deliverers of platform Deliveroo in Belgium. Such examples are, however, more of exceptions than rules.

In some countries, there was a discussion about a status of the on-line platforms on a level of governments and public organs. The Inspectorate of Work investigated the matter in France. Its recently published modification contains a suggestion of introducing a system of labelling (labelling) the platforms, which would make it possible to clarify their status. In Belgium, online platforms can officially register at tax institutions and provide

¹²⁶ De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

them information about their employees and their activities.¹²⁷ Setting up the platforms status is difficult but it can be an essential step towards moving forward in the area of regulation of shared economy.

In the context, it is important to point out a great variability within the shared economy platforms. Platforms differ a lot in the proportion of centralization and decentralization which they use in their work. It is possible to show this on the difference between Airbnb and Uber. Airbnb is a very opened platform that enables entry for various hosts, it does not regulate their prices, quality of offer nor other conditions (general quality of services is ensured only by means of a feedback from accommodated guests). Uber, on the other hand, applies strict regulations to its drivers including price setting. Its offer is more standardized and its drivers have only limited possibility to provide their services for more platforms. These arguments were used by the Uber drivers to support the call for a change in their status on employees.¹²⁸ See also box 2: Case Uber.

¹²⁷ Lenaerts, K., Beblavý, M., Kilhoffer, Z. (2017) Government Responses to the Platform Economy: Where do we stand? CEPS: Policy Insights. Available online: <https://www.ceps.eu/publications/government-responses-platform-economy-where-do-we-stand>.

¹²⁸ See also Codagnone, C., Martens, B. (2016): Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues. Institute for Prospective Technological Studies Digital Economy Working Paper 2016/01 JRC, str. 15. Available online <https://ec.europa.eu/jrc/sites/jrcsh/files/JRC100369.pdf>.

Box 2: Case Uber

One of the best known and the most frequently used platforms of shared economy is the P2P taxi service Uber. Its expansion to new locations is connected with court disputes and bans on work and it is closely monitored by the media. Platform Uber often serves as an example of some possible negative (but also positive) impacts of shared economy development on local markets. A position of Uber was first solved in Spain in 2014 when a profit taxi service 'Elite Taxi' in Barcelona filed an accusation against Uber at the Commercial Court for unfair competition, since no Uber driver had a taxi service city licence. Uber defends itself in the dispute by saying that it is only a digital platform providing a service for drivers, who are self-employed. And this is the reason why it falls into the e-commerce type of services. The Commercial Court demanded the European Court of Justice in Luxembourg to file a statement in the view of the European legislation. The Court of Justice asked an attorney general M. Szpunar to file a statement, and in 2017, he stated that the electronic platform Uber, although it is innovative, falls into the area of transportation services and Uber drivers can be required to have the necessary permissions / licence according to the local legislation. He says in his statement that Uber is not only a middle party like for example portals that work in the area of buying flight tickets or hotel reservations or which keep online sale of goods. In their case, the resulting service is independent of those intermediaries, whereas drivers working for Uber do not do their own activity which could exist independently of the platform. Their activity can exist only via the Uber application - 'it is an organisation and management of a complete system of public transportation on request'.¹²⁹ According to the statement of the advocate general, it is only a recommendation for the EU Court. A final decision of the Court can have an impact on the other services, too, which arrange services through the online platforms like e.g. Airbnb or Deliveroo. It is possible to assume that this approach of the court as well as another ones will force the ride-sharing platforms to gradually change to a more traditional model of employment relationships. Besides the question of whether the services of platform Uber are legitimate, there is also an issue of a position of the drivers, who do not have a status of employees and they also do not fulfill the condition of being independent and their own responsibility, which is typical for the independent businessmen. Court disputes concerning this issue initiated by the Uber drivers appeared for example in the USA¹³¹. The result is that for example in California, the transportation platforms have to provide training for the drivers; in Pennsylvania, the platforms have to inform the drivers in writing about the conditions of their insurance and clearly state what is paid for by the platform, the platforms also have to take care of insurance in case of an accident in the minimum amount of 1 mil USD. Activities of the platforms also cause tension because of unfair competition. This is pointed out especially by the classical taxi services. They are worried that their drivers will leave and go to Uber, which will then have the good quality drivers fulfilling all requirements needed to operate a taxi service. Drivers will have the same work and the same money. They will, however, not be obliged to comply with the EET system, pay income taxes, social and medical insurance payments, road tax, take their vehicles to technical control and emissions measurements in terms specified for taxi services, comply with price regulations for taxi services (for example in Prague they have a specific maximum price for a taxi service), compulsory insurance in case a passenger should suffer from medical or property damage and so on. Questions of security are also discussed. When a taxi driver enters the personal road transportation market s/he has to prove his/her clean record, medical fitness and s/he has to be reliable in terms of the Act on the Road Transportation. S/he mustn't have a ban on his/her permission to work as a taxi service driver. S/he does not have to comply with all stated obligations and parameters as a driver of 'alternative taxi services'. It is also possible to work there for the drivers who had been sentenced for a violent crime, drivers who had been prohibited to work as taxi service drivers or who are not healthy enough to drive. They can be people without identity, who cannot be inspected by the public administration and the organs participating in criminal proceedings. They do not have to have any legal relationship to a vehicle they drive for a taxi service, so they do not have to be found when searching a driver on the basis of the vehicle identification.

¹²⁹ The Court of the European Union (11 May 2017): Statement of the attorney general regarding C-434/15 Asociación Profesional Elite Taxi v. Uber Systems Spain, SL. Press release no. 50/17. Luxembourg. Available online: <https://curia.europa.eu/jcms/upload/docs/application/pdf/2017-05/cp170050cs.pdf>.

¹³⁰ Farronato, C., Levin, J., Brusson, J.N., Abele, M., Iacangelo, S., Schmid, Ch. (2015) The sharing economy. New opportunities, new questions. Investment strategy and research. Credit Suisse, Global Investor 2.15., str.13. Available online http://www.oxfordmartin.ox.ac.uk/downloads/GI_215_e_GesamtPDF_01_high.pdf.

¹³¹ See for example New York Post (June 13, 2017): Uber drivers should be legal employees with benefits: judge. Available online: <http://nypost.com/2017/06/13/uber-drivers-should-be-legal-employees-with-benefits-judge/>.

III.3.2 Equal opportunities on market

One of the most frequent criticisms aimed towards the shared economy platforms points out that they get a competitive advantage by avoiding local regulations and rules required to enter the market in given segment (for example licence, hygienic requirements and similar). Many cities for example use some means to limit the number of hotel rooms, taxi service automobiles or they regulate the ways by means of which the operators can set up their prices. Traditional providers also pay various taxes and fees etc. Peer-to-peer platforms, at least when they first enter labour market, are not bound by any of the conditions, which generates a significant inequality on market in terms of competition. Many cities recently adopt some regulations of the platforms (for example New York and San Francisco in the area of peer-to-peer rentings), or they ban them completely (for example Italian ban on the carsharing services without required licence).¹³²

Especially the transportation branch is in the most member states from the viewpoint of working conditions strongly regulated, much more than providing accommodation and sector of small services. At the same time, the issue of competition in this field plays a key role. For example in Spain, the transportation services via on-line platforms are allowed only if they are done under a proper licence to rent a vehicle with a driver. These licences are under a strict regulation by collective agreements, royal decrees and laws which set quite strict rules from several points of view including a size and age of vehicle. Besides that, drivers must be either registered to become self-employed or employed by an owner with a licence. In the second case, an owner is obliged to make sure that the drivers are recorded in a social security system. This is why Uber could not work in Spain from 2014 and now the company attempts to enter the Spanish market again saying that it cooperates only with drivers who have the licence. Some countries prohibited the application UberPop¹³³, although Uber is permitted in a form of UberX or UberBlack (depending on country) assuming that drivers will fulfill a range of obligations.

According to a statement of the government office representatives, the Czech Republic, just like the **European Commission**, prefers a way of **deregulation**, therefore having more free rules for the existing service providers (especially those rules that appear to be old-fashioned or unjustified), not making the conditions for shared economy stricter. An example of such old-fashioned regulation can be the necessity of using taximeters or examinations of a knowledge of topography, which are very easily replacable by the mobile applications to monitor a journey and calculate prices for customers, etc.¹³⁴ On the other hand, there are some conditions, like for example the requirements of a condition of a vehicle or insurance still remain important.¹³⁵

In the Czech Republic, the Government Office ordered the ministries to create an overview of the existing legal regulations directly related to shared economy by the end of 2017. In relation to that, the Government Office will prepare a report for the government by the end of January 2018, which will include the overviews of the position of the resorts as well as especially a proposal of changes, which would lead to a revision of the existing laws or to creating some new ones¹³⁶.

¹³² Farronato, C., Levin, J., Brusson, J.N., Abele, M., Iacangelo, S., Schmid, Ch. (2015) The sharing economy. New opportunities, new questions. Investment strategy and research. Credit Suisse, Global Investor 2.15. Dostupné online http://www.oxfordmartin.ox.ac.uk/downloads/GI_215_e_GesamtPDF_01_high.pdf.

¹³⁴ Veber, J., Krajčik, V., Hruška, L. (2016): Shared economy. Prague, VŠPP. Available online: <https://www.všpp.cz/wp-content/uploads/2017/05/zprava.pdf>.

¹³⁵ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

¹³⁶ Interview of the week: Ondřej Malý - a digital coordinator of government. Hospodářské noviny 8. 9. 2017.

III.3.3 Problematics of taxes

Generally speaking, it is true that tax duties shall apply to all businesses that provide comparable prices whether they are in traditional economy or shared economy ¹³⁷. But as already stated above, the shared economy platforms declare themselves to be the middle parties, not a traditional employer. From that, it is apparent that in the present situation, they are not responsible for paying income taxes and social security contributions for their 'employees'. Incomes should be declared by the workers themselves, however, there is no guarantee that it really is so. Paying taxes is therefore a particularly important question in connection with shared economy. Majority of European tax systems were designed on a basis of present market structures, and should the web platforms become predominant, the market structures and collection of taxes should change significantly. It is desirable to consider the questions from the viewpoint of three levels: platform, its worker and goods / service. An emphasis is put on taxation of employment or a worker. The income from the platforms is in many cases connected with paying more different taxes – income tax, VAT and so on.

Shared platform workers are partly encouraged and invited to declare incomes. In practise, it is true, however, that profits from business activity of shared economy are often not declared and it is difficult for the tax offices to collect them. At present, there isn't sufficient information available to be able to judge whether all incomes received from shared economy have been declared.

On the other hand, there are not many offers for the platform workers to have to declare incomes. Most of them have to pay taxes but do not have to have access to a good quality social security. Moreover, many of them do not even realize that they have to hand in a tax declaration. Not even the platforms are obliged to declare earnings of individual collaborating workers. Platforms can even be motivated not to inform about their workers' earnings not to be considered employers and / or not to put off the workers from the activities on the platform. Company Uber, for example, used a legislative gap in some countries to avoid the obligation provide information to tax institutions (Oei & Ring, 2015¹³⁸). This is why Uber decided together with several tax institutions recently to provide information about the incomes of its drivers.

Some countries issued some information materials and methodic instructions to exercise national tax regime and include shared economy in it. For example in the United States, it is the Internal Revenue Service (IRS) that helps the tax payers who receive incomes from the shared economy activities, which are usually taxable. IRS provides tax advice and also helps with practical matters concerning paying taxes, such as estimates of quarterly taxes of the self-employed people or reporting rentals. Another example is the Canadian Revenue Agency, which published specific information for individuals and web collaborative platforms concerning paying taxes. This agency emphasizes that every person or company has to declare all incomes made through shared economy, and it points out that there are other requirements that have to be met (for example tax from selling goods or other payments). There are another examples in Europe, too. For example the in 2015, the Finish tax institutions published

¹³⁷ This call is contained also in the recommendation of the European Parliament members from 3 May 2017 (see European Parliament (2017): Internal Market Committee calls for EU strategy on the collaborative economy. Available online <http://www.europarl.europa.eu/news/en/press-room/20170503IPR73223/internal-market-committee-calls-for-eu-strategy-on-the-collaborative-economy>.)

¹³⁸ Citation according to De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

specific methodical instructions how to deal with the incomes from services like Uber and Airbnb in tax declarations. Even the web platforms themselves point out the missing information and instructions about complying with the tax obligations (for example in Poland).¹³⁹

As already mentioned several times, shared economy also created some new possibilities of tax collection, since using the data of digital platforms could improve the inspectability and monitoring of incomes in some branches, especially in those which were previously 'grey', as for example the personal consumption services where the workers are employed by private persons and payments in cash are common.

In some American and European cities - for example in France or the Netherlands - the local institutions have agreements with Airbnb on tax collection¹⁴⁰. In France in 2016, company Airbnb transferred the touristic taxes in the amount of 7 million Euros to the local institutions. Amsterdam decided to allow its inhabitants to rent their homes for the maximum of 60 days a year¹⁴¹. There are also examples of provisions to ensure exchanging of information. For example in Estonia (see above), the platforms that work in the area of transportation of passengers send information about drivers to the tax institutions. A driver then finds out about his incomes through the platform in the previously filled-in form for a declaration of taxes.¹⁴² The same thing was done in Belgium, where the acknowledged platforms of shared economy, such as ListMinut, declare their incomes they get via the platform to a national tax institution.¹⁴³ In the USA, the companies must provide forms for a declaration of taxes to their workers who are not in employment and who earn more than \$20 000 a year.¹⁴⁴

In some cases, the existing legislation has been changed for the purpose of a better regulation. In Nevada for example, a new modification determines a consumer tax for Uber and Lyft¹⁴⁵ in the amount of 3 %, it is the same as for another transporters. On the basis of the recently implemented law on Rhode Island, companies Uber and Lyft are liable to %- tax applicable to all rides which begin and end in the state. In Italy, they introduce a recent tax law on shared economy which implements a graduated income tax¹⁴⁶. Personal income lower than 3 000 € is not liable to tax, incomes under 10 000 € are liable to 10 % tax and incomes over 10 000 € are liable to ultimate rate.

In Belgium, similar provisions have recently been included in the law on shared economy, while the incomes from work in the amount of 5 000 € received through accepted/certified on-line platforms are liable to 10 % tax. Unless the income from the business activities crosses the border, there is no obligation to pay VAT and the social security contributions. Otherwise the workers have to register as the self-employed people. The regime also applies only to the work carried out

¹³⁹ De Groen and col. (2017)

¹⁴⁰ For example. Vaughan, R., Daviero, R. - PwC UK (2016): Assessing the size and presence of the collaborative economy in Europe. Available online: <http://ec.europa.eu/DocsRoom/documents/16952/attachments/1/translations/en/renditions/native>.

¹⁴¹ De Groen and col. (2017)

¹⁴² European Commission (2016): A European agenda for the collaborative economy. Brusel. Available online: <http://ec.europa.eu/DocsRoom/documents/16881>.

¹⁴³ De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

¹⁴⁴ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

¹⁴⁵ Eurofound (2016): Digitalisation and working life: Lessons from the Uber cases around Europe. EurWORK topical update. Available online: www.eurofound.europa.eu/observatories/eurwork/articles/working-conditions-law-and-regulation-business/digitalisation-and-working-life-lessons-from-the-uber-cases-around-europe.

¹⁴⁶ For example. Vaughan, R., Daviero, R. - PwC UK (2016): Assessing the size and presence of the collaborative economy in Europe. Available online: <http://ec.europa.eu/DocsRoom/documents/16952/attachments/1/translations/en/renditions/native>.

through the platforms that were officially accepted by the Belgian federal government. There are more different rules for the incomes from renting property (general city tax applies).¹⁴⁷

In France, the position of 'automobile entrepreneur', which was created in 2008, encouraged self-employment, since it made payment of taxes from that activity easier. All taxes and costs of the labour force not related to incomes are replaced by a single tax determined by the share from income.¹⁴⁸

There are different tax regulations for those that provide accommodation in different EU countries. For example the Belgian law determines that the income taxes relate also to the incomes one receives through Airbnb, same as for example the payments of VAT and touristic taxes, which are collected on local and regional level, therefore they may differ depending on particular place. In Belgium, the Brussels region as well as the Flanders have rewritten the rules for touristic accommodation thanks to Airbnb. In Denmark, it is possible to be freed of the income tax from incomes obtained from renting a flat or a house if they are under 24 000 DKR. The situation when a large part of incomes is not taxed is not new, of course. It is especially the incomes from casual work in the area of services for households and those of informal character that are traditionally not declared (for example small jobs for households). National estimates of a level of the undeclared incomes in the area of services for households vary a lot – from 15 % in Sweden up to 70 % in countries like Spain or Italy or even 90 % in Germany.¹⁵⁰ Some countries try to solve the problem in the area of services for households by some regulative arrangements, which can possibly be used (considering the parallels between both segments) as an inspiration as well as for considerations of the shared economy regulations.

A significantly greater proportion of incomes in the area of household services is assigned in the countries with existing schemes, which motivate the workers to declare their incomes (in some cases, declaration of incomes is even financially more interesting for a worker than not declaring them). For example Belgium has introduced a system of donated vouchers (vouchers), where both participants – a client as well as a worker get some benefits and a worker is also partly covered in the social security system at the same time.¹⁵¹ There are intermediaries at the same time, who conclude a special employment contract with a worker, which also covers social security, pension insurance paid holiday and financial contributions in case of illness. The costs of the scheme vary depending on their form and a level of participation, nevertheless, a majority of them demand a contribution from the state. At the same time it is true that where they have the schemes for households there it is less likely that the shared economy platforms will receive a large proportion on the market in this segment. From the viewpoint of the new set-up of the system of income tax payments in the environment of shared economy, there are three main possible forms of adjustment: i) a platform is required to provide its workers the documents needed to declare taxes, ii) agreement between a platform and the public administration about automatic provision of the information about incomes, iii) to require from the platforms to ensure themselves

¹⁴⁷ Lenaerts, K., Beblavý, M., Kilhoffer, Z. (2017) Government Responses to the Platform Economy: Where do we stand? CEPS: Policy Insights. Available online: <https://www.ceps.eu/publications/government-responses-platform-economy-where-do-we-stand>.

¹⁴⁸ De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

¹⁴⁹ Lenaerts, K., Beblavý, M., Kilhoffer, Z. (2017) Government Responses to the Platform Economy: Where do we stand? CEPS: Policy Insights. Available online: <https://www.ceps.eu/publications/government-responses-platform-economy-where-do-we-stand>

¹⁵⁰ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

¹⁵¹ De Groen, W.P., Maselli, I. (2016)

the administration of taxes and contributions on social security.¹⁵² At the same time, it is possible to use some new possibilities how to control tax obligations, which is possible by the character of online platforms that either have detailed information about received incomes or the payments between participants are carried out directly through the platforms, which is true in many cases. It is likely that this type of procedures will not be accepted willingly by the platforms (especially those providing virtual services carried out by workers all over the world).

III.3.4 Statut of the platforms workers / protection of equal opportunities of workers

Majority of the implemented regulative arrangements concerning shared economy have been connected with the area of taxation or sector conditions for running a business so far. Little attention has been paid to the questions of the equal opportunities for all categories of workers, therefore a matter of distinguishing dependent and independent work and connected possibilities to indentify real business/self-employment versus fake business/self-employment.

The authors of the study Shared Economy, issued by the VŠPP¹⁵³ offer the following possibilities of how to understand the role of an individual who provides services in shared economy: If it involves (a) only a *person*, who has some capacity and free time (or work) which s/he provides in a form of sharing (as for example a courier, repairman), or s/he even uses his/her own automobile for occasional transportation (e.g. for Uber), or s/he takes a co-passanger on his planned journey (Blablacar), or s/he shares a free room, cottage, flat to stay over night (e.g. Coachsurfing), or if it is the case (b) of a *businessman* according to the existing valid legislation (especially in case that the stated activities are carried out more frequently – in that case it would be necessary to determine a treshold of a range and frequency of provided service), or if (c) it will be necessary to create *another category of a work role* for this type of sharing. From the legislation point of view, it is especially important to assess whether it is a business to do with a classical meaning of the word, which is a subject to the corresponding legislation (tax, field regulation, labour-legislative, security or another type of legislation determined conditions concerning the activities) or if it is about sharing leftovers. As an indication in order to differentiate, the study of the Government Office of the Czech Republic describes ¹⁵⁴the following factors: i) the frequency of services; ii) a motive, that is whether it is about making profit or only compensation of the costs ¹⁵⁵; iii) amount of turnover.

The above mentioned issues also relate to **the question of work protection and equal opportunities** of all people who do similar type of work. In a present situation, platform workers do not have the same rights as employees because from legal point of view, they are not employees. The question is whether this is a reason to change/extend **a definition of dependent work** in the future. At present, the Czech Republic defines it as a work, „which is done in relation to the superiority of an employer and the inferiority of an employee, on employer’s behalf, according to the employer’s instructions and an employees carries it out for an employer personally.“¹⁵⁶ When doing dependent work, there are then some conditions under which the dependent work is carried out - it must be done for wages, salary or

¹⁵² De Groen, W.P., Maselli, I. (2016)

¹⁵³ Veber, J., Krajčík, V., Hruška, L. (2016): Shared economy. Prague, VŠPP. Available online: <https://www.vssp.cz/wp-content/uploads/2017/05/zprava.pdf>

¹⁵⁴ Section for the European issues of the Government Office, the Czech Republic (2017): Shared economy and digital platforms The Government Office of the Czech Republic. Analytical material - version 1

¹⁵⁵ In this connection, it would also be good to distinguish deeper what should be included into the compensatable expenses. Whether it is only a price of material and amortization or whether it is also a reward for provided time or for work. If wages are included, what is the reasonable price. ¹⁵⁶ The Act no. 262/2006 Sb., the Labour Code, as amended.

remuneration for work, costs and liability of an employer, during working hours and in the place of work, alternatively another agreed place. The work carried out on the basis of other contracts (outside labour law), for example in a form of the one-off (they may repeat) orders when a supplier uses his/her own work equipment and is not liable to the instructions of an orderer (for example regarding working procedures or working hours), it does not fulfill the features of dependent work and should be considered self-employment.¹⁵⁷

Work platforms have brought some new **combinations of the individual elements of those definitions**. On one hand, they use the fact that work can be done absolutely anywhere (it does not have to be only a workplace of an employer or a previously agreed location) and using own working equipment of individual registered people, which fulfills the characteristics of independent work, on the other hand, other characteristics of this activity (work on behalf of an employer, according to his instructions and depending on his organisation) correspond more with the conditions of dependent work.

It is quite difficult to place the shared economy workers into some of the existing categories. In this context, there is a lot of discussion about whether it is not necessary to have a brand new status for those workers, which would represent something between self-employment and employment and could be called e.g. 'dependant self-employment'. The topic is a subject of public discussions, however, specific implementations are an exception. In some countries (Canada, Germany, Spain), the answer for pseudo-self-employment (*known as a schvartz system in the Czech Republic*) appears to be a new legal category of a contractor usually dependant on one source of income („dependent contractor“).¹⁵⁸ In Belgium, there is a proposal from ministry to implement a new legal position of platform workers. This new status could be called "autonomous employee" and its main purpose could be not only to clarify the employment status of the shared economy workers but also to solve the situation of other workers outside shared economy, the status of whom is unclear. So far, no specific steps have been accepted.

Similar approach has been considered in France. Implementation of a new status was understood to be a possible solution of the problems arising in connection to different types of work that does not fall into the classification of working relationships. French Inspectorate of Work explored the idea of the new status implementation and reached a conclusion that it would not be necessary, since the existing models already covered activities and relationships that appeared in shared economy.¹⁵⁹

A wide diversity of tasks and activities, levels and types of required skills and relationships among workers, platforms and employers are made more difficult by created criteria related to status of the workers which would be generally usable. This is the reason why countries prefer to keep the existing legislative framework and attempt to apply it to shared economy. Some governments declared clearly that there are some categories which the shared economy workers belong to according to their opinion (e.g. in Slovakia, the workers are considered to be the self-employed), other governments decided for a different approach. For example in Belgium, a legal position of a platform worker is not important if s/he earns less than a specific amount through the platforms. However, if a person earns more than that amount, s/he must register as a self-employed person. .

¹⁵⁷ MPSV (2012): A statement concerning the new definition of illegal work.
Available online:

https://portal.mpsv.cz/sz/obecne/prav_predpisy/vyklady/svarcssystem.

¹⁵⁸ Foundation for Young Australians (2016): The New Work Order. Available online: <http://www.fya.org.au/wp-content/uploads/2015/08/fya-future-of-work-report-final-lr.pdf>.

¹⁵⁹ Lenaerts, K., Beblavý, M., Kilhoffer, Z. (2017) Government Responses to the Platform Economy: Where do we stand? CEPS: Policy Insights. Available online: <https://www.ceps.eu/publications/government-responses-platform-economy-where-do-we-stand>.

There is a mixed approach in many countries, which means that the status of the shared economy worker is determined individually in each case. For example in Hungary, the shared economy workers are either self-employed or small entrepreneurs or they provide services registered as natural persons. There are only very few cases when the shared economy workers have a status of an employee with a contract. In Denmark, these workers are generally considered to be self-employed, and it is a job of the central tax office to determine whether the self-employed people pay taxes in the same way as employees or employers (e.g. a self-employed person who works only for one employer is considered to be an employee). Also in Germany, they discussed an issue of the position of the workers on the platforms considering their absence of the right for minimum wages, sick leave, paid holiday etc. The shared economy workers there can be classified as the self-employed people, employees or even consumers depending on the sort of conditions (for example regular or irregular using a platform).

In France and Belgium, the relationship of inferiority and superiority plays an important role. For example in France, it was determined that the relationship of superiority and inferiority is considered from three aspects – from a driving aspect, control and sanctions. Only the workers who are not in an inferior position in any of the three categories are not classified as employees. If the criteria were applied to shared economy, workers could be considered employees provided that they could not accept or refuse freely whether to provide a service, they receive instructions related to work or they can be sanctioned (also for bad behaviour).

Analysis of the position of the shared economy workers is also complicated due to various rules and regulations valid in different sectors. There are examples in transportation and accommodation. For example in Hungary, Uber drivers are considered to be self-employed, whereas other drivers who provide the shared transportation services when commuting between cities are not considered self-employed.

De Groen and col.¹⁶⁰ notifies of the fact that there are existing regulations for a real occasional work in many European countries and they are usually determined by a certain amount of income, special registration or otherwise. In case of casual workers, the law tries to ensure their employment relationship is not regulated too much taking into consideration how irregular and peripheral the work may be.

In some countries, an arbitration has been established in order to solve disputes between crowdworkers and assigning organisations (Australia). Some countries have adopted (Great Britain) or consider adoption of (Australia) a position of advisor / protector of the rights of the self-employed people, especially the platform workers, who would monitor things for the government and s/he would recommend some measures to protect workers in untraditional forms of work.

III.3.5 Social security

The issue of the status of the platform workers also closely relates to an issue of their access to social security. Most of European countries have large social security systems managed by the state administration institutions, which provide social benefits to community as a whole or to specific groups. Social security systems are often financed from the compulsory contributions

¹⁶⁰ De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

of employers, employees or both of them. Social security benefits are paid in order to support health and good living conditions of people, especially at times and cases when they are vulnerable. They usually include the benefits in times of illness, unemployment, maternity / paternity, disability, occupational diseases and injuries, to support family, in old age (pension) etc. Some social security benefits are accessible to any inhabitant. Different benefits apply only to those who are in employment, that means on employees.

Platform workers usually have lower or no level of employment protection and often do not contribute to the social security system. The law and the social security level are unclear to the platform workers especially due to uncertainties of their status (whether they are in employment or not). Since the majority of platform workers are not considered to be employees from the legal point of view, they have to rely on the system which applies to the self-employed people.

An important problem in this respect is also that the shared economy workers are not always aware of the fact they do not have to have the same rights of social protection a normal employees and the situation may become a problem in the future. The key issue is therefore to make the information accessible to all who the information concern. Nevertheless, it is important to say that for majority of the shared economy workers, it is currently only occasional income, and they are included in the social security in their main employment. However, that situation could change significantly in the future and it could be assumed that there will be more workers who will have main and their only income from the platforms.

Although there are different social security systems in different countries and there are also different advantages employees and the self-employed can use, it is usually true that the self-employed people cannot access the social security system in the same extent as employees. Problems concerning social security in a context of shared economy appear for example in Canada. On one hand, the platform workers are not obliged to contribute to the system, but on the other hand, they do not have access to the key parts of the social security including the unemployment insurance (EI) and Canadian pension plan (CPP). CPP is a universal system, which is available to all Canadians and lasts irrespective of a change in employment. Considering the growing number of people, who are involved in non-standard employment, the expansion of those universal systems could be a useful strategy of how to increase protection of all.¹⁶¹

As the number of the self-employed people grows and their constitution changes, it is important to prepare a new model of financing the social security network. The models already come to existence in some countries. One possibility is the already mentioned creation of a special status, which will provide the platform workers protection in a similar way as in case of the part-time workers, temporary workers or those who work for agencies. If this status is created, the shared economy platforms could contribute at least for some social security tools for those workers. However, it will be difficult to achieve that, as it is not easy to determine criteria for identification of the 'dependent self-employed'.

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¹⁶¹ De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

¹⁶² Codagnone, C., Abadie, F., Biagi, F. (2016): The Future of Work in the Sharing Economy. JRC Science for policy report. European Commission. Available online: <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101280/jrc101280.pdf>.

Another possible solution is a transferability of benefits. That suggestion involves creating the individual safe accounts that do not relate to any specific employer and which provide universal benefits. Alternatively, it is possible to set up a right to claim benefits by means of an independent employment status.¹⁶³ According to the suggestion, the last employer of a worker would have to pay his/her contributions to the social security system as if s/he was still a worker in employment.

German Ministry of Labour and Social Affairs included a suggestion on their White Book concerning the self-employed people. In Germany, it is a law that the self-employed people cannot contribute to the pension funds. The contributions are exclusively for the employees (and the contribution is divided equally between an employer and an employee). As a result of that, there are many self-employed people who are not covered for pension and they have to face a risk of poverty in old age. German government proposed some modifications of the law that would enable the self-employed people to contribute to the system, so that also the shared economy workers could join in, too. The main problem German government has to resolve is where the second half of the contributions should come from.¹⁶⁴

Social protection of the shared economy workers causes fears of professionals as well as politicians and it has been a subject of discussions in many countries. Denmark is an especially interesting case; there has been tension between the shared economy workers and the right of the social security benefits, which has led into several court disputes. One case related to a work for platform Happy Helper when being granted a state grant. The second case related to an entitlement to unemployment benefits in connection with renting an automobile through platform GoMore. The unemployed person was denied the unemployment benefits, as an insurance fund in unemployment assessed the situation stating the worker was not available for Danish labour market. In both court matters, a judgement was called in favour of a platform worker.¹⁶⁵

An example of an individual solution on a basis of one platform is Uber in Great Britain. This platform is under a huge political pressure, due to which it began to offer its drivers an insurance in case they became sick or injured. A condition of that is reaching a minimum of 500 Uber journeys and a payment of 2 GBP a week (that is 104 GBP a year) for insurance. Drivers may claim up to 2000 GBP if they cannot drive for two weeks or longer as a result of illness or injury during an Uber journey. They are insured up to 300 GBP a week for one year provided the accident had happened while driving for Uber. Drivers or their families may ask for up to 50000 GBP if a driver dies or have lifelong consequences as a result of an accident while driving for Uber.¹⁶⁶

Another form of inspiration for one of the possible provisional directions may be various insurance or saving schemes with some contribution from the state. For example in the Netherlands in 2006, they set up a life saving scheme, which was free of taxation and it enables to create a financial reserve for the times of lower work activity. The scheme applies to employees, nevertheless, the principle can apply to any group of workers. It is an individual insurance where its

¹⁶³ For example. Maselli, I., Lenaerts, K., Beblavý, M. (2016): Five things we need to know about the on-demand economy. CEPS Essay No. 21, Brussels. Available online: www.ceps.eu/system/files/CEPS%20Essay%20No%2021%20On%20Demand%20Economy.pdf.

¹⁶⁴ De Groen a kol. (2017)

¹⁶⁵ Lenaerts, K., Beblavý, M., Kilhoffer, Z. (2017) Government Responses to the Platform Economy: Where do we stand? CEPS: Policy Insights. Dostupné online: <https://www.ceps.eu/publications/government-responses-platform-economy-where-do-we-stand>.

¹⁶⁶ Business Insider (2017): Uber will offer insurance to UK drivers in case they are injured or sick. Available online: <http://uk.businessinsider.com/uber-will-offer-insurance-to-uk-drivers-in-case-they-are-injured-or-sick-2017-4>.

participant saves a part of his/her income (which is tax-free) to finance prospective parental leave. This is a voluntary insurance. Similar schemes could serve the self-employed platform workers as some kind of substitution of the state system of social security.

III.3.6 Working conditions

It is clear from the above mentioned information that the shared platform workers, or at least their large part, are a group on labour market that is under a potential risk and needs some form of protection. As there is no specific framework to regulate the working conditions on the basis of shared economy, individual countries generally rely on their existing legal system concerning working conditions. But existing framework does not have to be sufficient enough to solve the challenges of shared economy, as it is usually unable to react to the challenges of digitalization in general¹⁶⁷.

Protection of platform workers should also include specific questions, which have not been solved by the labour-legal legislation, such as the right to temporarily deactivate one's account on a platform without a negative impact on one's assessment, or the right for protection before unlawful cancellation of one's account by a platform¹⁶⁸, or a possibility to transfer and keep the electronic ratings and evaluations from the users, which constitute their "digital market value".¹⁶⁹ Creators of politics should consider an extension of collective agreements to wider categories of workers, which currently apply only to "employees", with an aim to also include the shared economy workers. Workers who do not fall into the category of employees should be protected by legislation relating to self-employment. On the other hand, technologies and processes used by the platforms could lead into achieving higher effectivity when monitoring all processes going on through a platform including a monitoring of conditions for the purpose of achieving better regulation of security and protection of health.¹⁷⁰

The area of working conditions and equal opportunities in relation to a good quality of work could include a problematic of minimum earnings, too. In traditional economy, a higher level of minimum wage prevents having more and more badly paid jobs in services because more expensive services replace them and they are done by qualified workers.¹⁷¹ Minimum wages is therefore a tool in a fight against polarization of employment and against work poverty as a sign of prekerious work. It is possible to assume that the extension of the institute of minimum earnings also for the shared economy platform workers should have similar effect in this segment, too. At the same time, that would mean equalization of a position of platform workers and employees in traditional employment relationships.

¹⁶⁷ De Groen a kol. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

¹⁶⁸ Drahokoupil, J., Fabo, B. (2016): The platform economy and the disruption of the employment relationship. ETUI Policy Brief. European Economic, Employment and Social Policy, N° 5/2016. Available online: <https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>.

¹⁶⁹ European Parliament (2017): Internal Market Committee calls for EU strategy on the collaborative economy. Available from online <http://www.europarl.europa.eu/news/en/press-room/20170503IPR73223/internal-market-committee-calls-for-eu-strategy-on-the-collaborative-economy>.

¹⁷⁰ Drahokoupil, J., Fabo, B. (2016): The platform economy and the disruption of the employment relationship. ETUI Policy Brief. European Economic, Employment and Social Policy, N° 5/2016. Available online: <https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship>.

¹⁷¹ Cedefop (2015): Focus on Polarisation of skills in the labour market. Available online: http://skillspanorama.cedefop.europa.eu/en/analytical_highlights/focus-polarisation-skills-labour-market.

Especially the simple, routine and at the same time virtual services carried out within the shared economy framework deserve attention (see the classification in chap. I.4). Virtual services, especially those low-qualified and without any specialization (for example the so-called click-work), are extremely badly paid and usually people from all over the world can compete there with one another very easily (if there is no language barrier to complete the tasks). Possible setting up of minimum earnings that could help the wages per hour would be, however, very hard to implement and excised. It is so because the platform workers are usually self-employed (entrepreneurs), which means they set their own prices, and unlike the employees they are not bound by the minimum wages regulations and collective agreements. Also the platforms that would have to be responsible for keeping the prospective regulation of the minimum income have usually seat outside the EU, they are therefore hard to reach.¹⁷²

One of the quite radical solutions, which are discussed not only in connection with shared economy but also in connection with digitalization of society as such (the so-called industrial revolution 4.0), is an implementation of a basic unconditional income. There is a worry about whether digitalization will gradually lead to a detriment of possibilities of paid work standing at the background of the discussions. There are experiments related to basic income in Utrecht in the Netherlands,¹⁷³ similar testing is also planned in Ontario in Canada.¹⁷⁴ A proposal to implement a basic income has recently been declined in a referendum in Switzerland.¹⁷⁵ Implementation of this arrangement is connected with high expenses, while its effects are not absolutely positive in all respects. Problems of implementation of unconditional income in the Czech Republic – see attachment no.3.

III.3.7 Social dialogue

Although, as presented above, the shared economy platforms do not make it possible to use the set mechanisms of collective negotiations, as it is not a case of employee-employer relationship, even today there are some examples of similar processes of the platform workers coming together to create joint representation in order to negotiate with the platform representatives. For example in the USA, there were demonstrations of the Uber drivers, who protested against its restrictions on prices, assessment politics, security requirements and similar. Drivers created associations similar to traditional trade unions (e.g. California App-Based Drivers Association or Uber Drivers Network NYC). Similar examples exist in Europe, too. In Poland and the UK, associations of shared economy platforms came into existence (for example Sharing Economy UK). The largest trade union organisation in Germany (IG Metall) have changed their rules to make it possible even for the self-employed to become members. Social partners pay attention to the problem in other countries, too (e.g. Belgium, France or Slovakia). In the growing number of cases, platform workers themselves founded trade unions.¹⁷⁶

¹⁷² De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

¹⁷³ Hamilton, T.B. (June 21, 2016): The Netherlands' Upcoming Money-for-Nothing Experiment. The Atlantic Daily. Available from online: <http://www.theatlantic.com/business/archive/2016/06/netherlands-utrecht-universal-basic-income-experiment/487883/>.

¹⁷⁴ Ministry of Community and Social Services, Ontario (24 June, 2016): Ontario Moving Forward with Basic Income Pilot. Dostupné Online: <https://news.ontario.ca/mcss/en/2016/06/ontario-moving-forward-with-basic-income-pilot.html>.

¹⁷⁵ BBC News (June 5, 2016): Switzerland's voters reject basic income plan. Available online: <http://www.bbc.com/news/world-europe-36454060>. ¹⁷⁶ De Groen a kol. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

Another interesting example of how to solve the problems is the SMart initiative, where the platform workers sign a contract of employment with the third party. Platform Deliveroo, which offers food delivery by bikers, made it possible for its workers to choose whether they prefer to remain self-employed or whether they want to sign a contract of employment with the third party - company SMart. 90 % of their usually studying workers chose employment contract (in Belgium, this regime is more beneficial for the students because of taxes, social security and similar). SMart is a non-profitable association which supports young businessmen in development of their activities. It provides them with a large amount of services of digital as well as non- digital character, as for example education, advisory services, premises for co-working and similar. So it is a situation when a worker has a security of employment contract (e.g. social security) but s/he organises work himself/herself. Because SMart has to fulfill its obligations of an employer, there are specific wages conditions, working hours and safety at work that are negotiated with platform Deliveroo; there is safety at work training, paying the costs of using professional equipment (including bicycle), length of shifts and remuneration, which is at least a little above the minimum of a minimum wage per hour; originally, workers were paid per delivery. SMart also organises insurance, which is important especially for the cyclists but also for the platforms which start new business models and it is not sure how successful they will be. The members pay Smart a percentage of their income (6,5 %). In case of Deliveroo, this amount is paid directly to the platform. SMart attempted to offer the model also to another delivery platform but this attempt failed. Organisation of this character is close to a scheme of agency employment to a great extent. Nevertheless, it has to be said that none of the member states of the EU puts the employment-legal relationships and social dialogue in shared economy on the first place. In most countries, there has been no discussion on this topic on national level, no government initiatives have been accepted, no court disputes and no legislative or regulation reactions have been implemented.

Considering that collective agreements have an essential influence in the management of many aspects of labour market, and in future it is likely that the employment relationships and social dialogue will be more important. The most important factor will be a shared economy size. If certain limits are reached, it will lead to the situation when social partners will represent even the workers who work in new, highly flexible forms of employment and therefore in general, also the shared economy workers. In this respect it is important to say that the platform workers now carry out activities within shared economy as their collateral employment while being in main employment, in which they are usually represented in the existing system of social negotiation¹⁷⁷. In future, depending on the growth of shared economy would not have to be so, and therefore it is important to deal with the issues now.

III.3.8 Problematics of education

Problematics of education is one of those ignored areas in connection with shared economy. Nevertheless, as a development of shared economy may lead to the fundamental changes and employment relationships in labour market as we know them today in the future, similar impacts may appear in education, especially in further education of workers, which is closely related to their usability at work. Development of shared economy together with a general trend of digitalization and 'internetization' of society brings new requirements of skills on one hand, where it may happen that the individuals with inadequate level of those skills will suffer from social exclusion and impossibility to join into a life of work, and on the other hand,

¹⁷⁷ Lenaerts, K., Beblavý, M., Kilhoffer, Z. (2017) Government Responses to the Platform Economy: Where do we stand? CEPS: Policy Insights. Available online: <https://www.ceps.eu/publications/government-responses-platform-economy-where-do-we-stand>.

opens a great possibility to get education in much cheaper and easier form compared to how it was so far, since also education is an area where the collaborative forms of activities based on sharing begin to enter, too. That applies especially to the easier and more general skills where it is easy to find some education possibilities online.

Nevertheless, training in specialized professional courses is still very demanding in terms of finances and is often unreachable for an individual (because of finances as well as organisation when education is still more and more connected with a relationships between a supplier of a technology and orderer - a company, and is not accessible to public). Another barrier is a traditional approach when individuals often do not realize the necessity of further education and they consider their knowledge from school to be enough for the rest of their lives. Compared to the employees who are often paid for education by their employer, the shared economy workers are in disadvantage. Education workers not only in shared economy but also in general in the lifelong education in highly flexible and changable society, it will be one of the areas which should be a center of attention of the public administration with an aim to create equal and effective regulatory conditions. It will be necessary to consider the possible risks of the unequal approach to further education coming out of the extending new non-standard forms of work and it will be necessary to propose a complex system of supports ensuring equal opportunities of education for everyone to prevent exclusion of some groups from further education and their subsequent falling behind with gaining skills.

Especially the people from some disadvantaged environment who have limited possibilities to use ICT will face a threat of social exclusion. On the other hand, it is exactly those people to whom a participation in shared economy could help significantly to overcome the barriers in entering labour market. Therefore some functional steps should be collected about how to increase their motivation and some knowledge of why to join in the education, alternatively also availability of ICT.

III.4 Consumer protection

Development of on-line platforms of the P2P type has great impacts on consumers in a positive as well as negative sense. A huge benefit of shared economy for the consumers is also that it enables using the new technologies through the online platforms and quickly extend the scale of provided services, to effectively decrease the costs of transactions and information asymmetry and to explore the resources that have not been used so far. It has been confirmed in the extensive investigations among the users of the platforms, which have brought interesting results in this respect. The investigation carried out for the European Commission ¹⁷⁸ showed that general satisfaction of users / consumers of the platforms with services is quite high compared to the satisfaction with the quality and prices provided by classical services.

¹⁷⁸ European Commission (2017): Exploratory study of consumer issues in online peer-to-peer platform markets. Brussels. Dostupné online: http://ec.europa.eu/newsroom/just/item-detail.cfm?&item_id=77704.

Table 7: Satisfaction of consumers/users of services of online platforms compared to the classical services – according to shared economy sectors (in %)

	Sales of a product		Sharing / renting		Sharing / renting		Sharing / renting		Work on request	
	more satisfied	less satisfied	more satisfied	less satisfied	more satisfied	less satisfied	more satisfied	less satisfied	more satisfied	less satisfied
Price	69	7	55	20	67	11	80	6	50	24
Offer	57	11	52	20	64	11	62	13	50	20
Quality of	39	11	50	15						
Quality of					60	10	65	7	53	16
Relation of price /	60	8	55	12	67	8	76	5	55	15
Trustworthiness	40	16	50	15	55	11	60	11	55	15

Source: European Commission (2017): Exploratory study of consumer issues in online peer-to-peer platform markets. Brusel.
Dostupné online: http://ec.europa.eu/newsroom/just/item-detail.cfm?&item_id=77704.

On the other hand, some radical insufficiencies have been pointed out, which should be deal with in connection with consumer protection. According to the investigation, more than half (55 %) of the consumers stated that they had encountered some problem, most often a poor quality of services, problems with keeping given price or agreed expenses, with cancelling a transaction or misusing data.

Table 8: Problems of consumers / users of platforms - appearance (in % of cases)

Problems	Never	Once	2 to 4 times	5 and more	At least once
Products / services were not good quality ones	71	20	7	2	29
Products / services did not match description	72	19	7	2	28
Problems with using websites / platform applications	81	11	6	2	19
Product did not come / Reservation was cancelled	82	12	4	2	18
Price was not agreed / additional costs not reported	85	10	4	1	15
Safety problems with products / services / work	88	7	4	1	12
Misusing personal data	90	5	3	2	10
Other	81	12	3	4	19

Source: European Commission (2017): Exploratory study of consumer issues in online peer-to-peer platform markets. Brusel.
Dostupné online: http://ec.europa.eu/newsroom/just/item-detail.cfm?&item_id=77704.

In the area of consumer protection, especially the following problematic areas should be covered: 1) Transparency of transactions closed by means of the on-line P2P platforms, clearly defined rights and obligations of the transactions participants, existence of legal framework and legal enforceability. 2) Reliability of a system of mutual assessment and reviews and trustworthiness of information about participants' identity, which a platform provides. 3) Refusing the responsibility of platform for the online transactions. 4) Right of compensation for the users as well as the providers. 5) Questions concerning the using and protection of data collected by a platform.

Some problems concerning the consumers, which appear on the on-line platforms P2P, can be solved through the self-regulation and greater transparency based on the clearly defined rights, obligations and responsibilities of participants. As became apparent from the terrain investigations, the self-regulating processes are often only voluntary, their keeping is not ensured systematically – that means

that it will show in a more favourable assessment or a classification of a specific subject but there are no sanctions if it is not kept. Moreover, it is apparent that will not use their own initiative in the self-regulation and be willing to solve the problems which do not fit in their interests, in spite of the fact that they can be connected with negative social externalities.

- **Transparency of transactions**

For the transactions that are not carried out through the online platforms, there are blurred boundaries of who is a consumer and who is an entrepreneur. That creates legal insecurity as well as a question what it is that the consumer protection law or the business law apply to. There is no consensus about how to clarify the difference between entrepreneurs and consumers and to decrease legal insecurity that way. Various possibilities are discussed - for example to create definitions, that is to set up a group of characteristics which will help to distinguish the entrepreneurs from consumers. In some EU countries, there are limitation values set on national level (for example the amount of incomes, frequency of carried-out activity etc.) which help to distinguish between professional and unprofessional activities or between entrepreneurs and natural persons (for the tax purposes, social insurance and similar). There are also suggestions and attempts to determine a new type of economic subjects in the legislation, the so-called prosumers or microentrepreneurs (e.g. legal modification in France). This legal differentiation alone is not enough, as the platform should distinguish this positions clearly in the transactions, which happens only exceptionally. Obligatory declaration of the position when using online platforms could be a solution.

Each platform should also clearly inform the consumers about their rights by creating understandable rules to carry out transactions with references to the national legislation and to ensure the access to sufficient information for the consumers in a prelocation phase.

Signing a contract through an online platform is risky because of its basics related to being internet business, when a purchaser / consumer doesn't have a possibility to see a product and an online procedure will lead him through various steps, often through some forms, to sign a contract. In some countries (e.g. France), is this form of contract, which is prefilled on the side of a purchaser, unacceptable and concluding such contract is therefore invalid.

- **Creating trustworthy environment for consumers and using reviews and rating**

The carried-out investigations among the platform users show that the online users do not use the comparing assessment and rating systems systematically and they do not believe them. Besides that, most platforms do not check whether the assessments come from the real users, whether they are true, whether it is not a hidden advertisement and similar. A platform should always clearly specify how the references are generated, classified and published, how they are verified, how they organise publishing all references including the negative ones.

- **Liability**

It is not always absolutely clear from the functioning of the platforms who is responsible for what. It is especially about the issues of responsibility for illegal behaviour of the users, such as illegal transactions, publishing fake and misleading information and reviews, not completing or bad quality of services or other faults connected with deliveries. A field investigation has shown that in practice, the platforms very often declare that they are not responsible for the behaviour of their participants. But if a platform actively interferes with the conditions and ongoing concluding transactions (e.g. verifies identity, operates user reviews, arranges solving disputes, sets rules connected with return, provides insurance and getting money back), the users will expect it to have some amount of responsibility, too.

The results of a terrain investigation showed that remedy and compensations in case of a problem are often left to a consideration of a platform, which assesses the complaints case from case, and the criteria for such decisions are not clearly set. All platforms should at least consider the conditions to set clear rules they will use in case of cancelled transactions including the claims for compensation and all administrative or storno charges; to inform about the right to withdraw from a transaction including claims for compensation and administrative charges; inform about the rules that apply in case of not complying or incorrect complying with a contract or, if the goods or a service do not match a description, including claims for compensations and administrative charges.

If there is any dispute between the parties to a contract, a consumer is entitled to an out-of-court solution besides a court hearing. A proposal of an out-of-court solution of a dispute according to the Act no. 634/1992 Sb., on consumer protection, a consumer is entitled to file an application to the Czech Business Inspection (ČOI)¹⁷⁹ or through the European Union website to consider the out-of-court solution of consumer disputes. In practise, however, when solving disputes or checking the quality of services, ČOI often refuses to enter in, as it points out that in this case, it is to do with contracts concluded between two individuals and not between a classical consumer and businessman¹⁸⁰. The problematics would deserve a more detailed legal analysis regarding the matter of in what extent is the present amended act on the consumer protection sufficient to cover settling the possible problems in connection with shared economy.

- **Definition of consumer**

Inclarities regarding the rights of consumer protection come out of an unclear position of both sides of transactions carried out in shared economy, that means the users and the providers. It is important whether a user is always in a position of consumer and a provider or supplier in a position of entrepreneur. The existing legislation has been prepared to suit the categories of consumer and entrepreneur - see the Act on consumer protection¹⁸¹. More detailed information about the problem can be obtained from an analytical material of the Government Office¹⁸². According to the study, the base of the definition is a definition of consumer included in the Act on protection of consumer and in the Civil Code¹⁸³, which states that a consumer is everyone who enters into a contract with a businessman or deals with him in any other way outside his business activity or outside doing his own job. A consumer can therefore be a person who purchases services or items from a businessman. A consumer can be only a human, a natural person. It is therefore not possible to apply protection related to entities to him. A consumer is a person who acts for the purpose of personal need (his/her consumption of consumption of a family). When considering whether they are consumers, it is not only about a formal position of the parties (a consumer in a formal sense) but also their factual acting (a consumer in a material sense). As a consumer is defined in relation to a businessman, also a definition of a businessman is important for the protection of consumers. According to the existing laws, a businessman is a person who carries out some business activity, and the activity is defined in the Civil Code to be a self-employment activity carried out for one's own purpose and responsibility under a trade licence or in a similar way, and it is done continuously in order to make a profit. A person who carries out the activity is considered to be a businessman in a view of the work (§ 420 article 1 of the civil code). The Civil Code also states explicitly that a businessman for the purpose of protection

¹⁷⁹ details of the out-of-court solutions are described on the website of ČOI <http://www.coi.cz/informace-o-adr/>

¹⁸⁰ See the article „Millions of tourists occupy Czech flats“, Lidové noviny, 5. 8. 2017.

¹⁸¹ The Act no. 634/1992 Sb. on consumer protection

¹⁸² Section for the European issues of the Government Office, the Czech Republic (2017): Shared economy and digital platforms The Government office of the Czech Republic. Analytical material - version 1.

¹⁸³ The Act no. 89/2012 Sb, § 419.

of consumers when entering into a contract is considered every person who consensually enters that contract in connection with his/her business, production or similar activity or with doing his/her own job (§ 420 article 2 of the Civil Code). This work may appear to be enterprise in relation to a consumer, even though some feature required for enterprise is missing, for example the aim of continuity, the aim of gaining profit or work based on trade licence or in a similar way.

A legal norm of consumer protection should therefore apply also to a user of the services during the transactions of the P2P shared economy platforms. However, it causes problems in practise.

- **Data protection**

Protection of personal and business data is an individual problem. Using and reusing the data of the platform users are frequent practise among the platforms and form a large part of their business models. Especially in case of bigger platforms, consumer data constitute an important value for a platform as well as for the third parties in order to set up prices, for marketing and other business purposes. Information provided by the platforms about the ways of using, sharing and selling data are not transparent in many cases, and therefore it is not clear whether the existing national regulations concerning data protection are fully complied with. Moreover, from the 25th May 2018, the platforms will have to fulfill some new duties set out in a general regulation on data protection of the European Commission (GDPR).

III.5 Examples of arising regulation systems in selected countries

The literature concerned with shared economy and its regulation is in an early phase abroad, too, especially when considering the problems and reefs which shared economy constitutes in connection with regulation. Opposing parties in the discussion state that:

- The shared economy services also function outside the rules and regulations that are there for „protection of public security, ensuring that people pay a fair proportion and to guarantee the rights of the workers.¹⁸⁴“
- Fast growth of shared economy decreases the need of the regulation from up downwards, as it is better for it to rather serve the needs of the consumers. Continuous using of old-fashioned regulation regimmes probably harms the consumers.¹⁸⁵

However, it is important to say that in discussions, they do not distinguish regulations that create regulation strain without bringing any real benefit and arrangements which are targetted at a better functioning of market (for example solving issues concerning justice and/or ineffective redistribution of resources, misusing market power, they repair information asymmetries, overcome externalities or solve deliveries of public goods).¹⁸⁶ The EU governments adopted different approaches in reacting to a rise and development of shared economy. Some created explicit strategies, while another ones have implicate or no strategies. In some member states, the governments expressed their support of shared economy and began with some arrangements to encourage its development (e.g. Belgium). There is an opposite approach in the other member states which aims to decrease the range of shared economy

¹⁸⁴ Leigh, A. (2015): Sharing the Future: Competition in the App Age. National Press Club Canberra, March 24. Available online: http://www.andrewleigh.com/sharing_the_future_competition_policy_in_the_age_of_the_app.

¹⁸⁵ Ranchordás, S. (2015): Does Sharing Mean Caring? Regulating Innovation in the Sharing Economy. Minnesota Journal of Law, Science & Technology, Volume 16, Issue 1. Available online: <http://scholarship.law.umn.edu/cgi/viewcontent.cgi?article=1356&context=mjlst>.

¹⁸⁶ Australian Government (2014): The Australian Government Guide to Regulation.

(for example Spain). There are also member states where their governments hold a neutral position (e.g. Hungary). Despite that, the differing opinions do not have to be reflected in the strategies and initiatives that were developed and implemented.

The most frequent approach of the governments of European countries towards the problematics of shared economy is a modification of legal, regulatory and political frameworks which already exist. None of the studied countries had a specific framework or any methodic instructions that would cover shared economy as such. This approach could be motivated by a Communication of the Commission from 2016,¹⁸⁷ which accepts that the existing frameworks should also apply to shared economy, especially concerning an access to market, consumer protection, taxes, labour law and other areas.

De Groen and col.¹⁸⁸ find that previous reactions of governments to shared economy are generally rather limited, reactive and they focus on solving the undesirable effects rather than trying to bring potential benefits. The same author brings, at another place,¹⁸⁹ an overview of several selected countries in terms of, what regulations currently apply to a person, who will start to earn money through a shared economy platform. His conclusions are summarized in table 9.

Table 9: Minimum conditions set for the occasional incomes / incomes with the shared economy

	Registration		Taxation and social security			Income level ^{*)}
	Required	Expenses	Deductible from income	Social security	VAT	EUR a year
BE	No	X	Yes	No	No	1.439
DE	No	X	Yes	No	No	8.652
ES	Yes	No	Yes	No	Yes	9.173
FR	Yes	Yes	No**)	Yes	No	32.900
IT	No	X	Yes	No	No	5.000
NL	Yes	No	Yes	No	No	6.405
PL	Yes	No	Yes	Yes	No	34.500
UK	Yes	No	Yes	Yes	No	7.551

Notes: *) Up to this limit, an income is considered to be casual and easements apply to it.

**) In France, it is possible to choose between a social security contribution and deductible item.

Source: De Groen, W.P., Maselli I.: The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report, EU 2016

In a principle, there are three main types of requirements for the shared economy platform workers: i) registration with tax institutions, social security funds or in a register of business subjects, ii) proper administration (administration) of incomes and in some cases also expenses, iii) paying taxes and social security contributions. It is true that the simpler and easier rules there are for the workers with lower incomes from the platforms the more likely their participation is and their administrative costs decrease. Participation

¹⁸⁷ European Commission (2016): European agenda for the economy of sharing. Report. 6/2016. Available online http://europa.eu/rapid/press-release_IP-16-2001_cs.htm.

¹⁸⁸ De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

¹⁸⁹ De Groen, W.P., Maselli, I. (2016): The Impact of the Collaborative Economy on the Labour Market. CEPS Special Report No. 138. Available online: <https://www.ceps.eu/publications/impact-collaborative-economy-labour-market>.

in shared economy can provide opportunities for certain threatened groups, for whom it is difficult to join normal labour market (e.g. the unemployed, students, the youth, ethnic minorities...). This is the reason why it is important to pay attention to the resulting regulation and ensure it does not limit their possibilities too much.

Authors Lenaerts, Beblavý and Kilhoffer¹⁹⁰ assume that only the enforcement of the existing framework itself on shared economy is not an acceptable approach. Whereas it can work in a short-term horizon, it is probably unsustainable from the long-term point of view. Moreover, such approach does not have to make it possible for the governments to use the advantages which shared economy brings. New types of work which came to existence as a part of shared platform economy constitute only one example of the new forms of employment that have appeared as a result of digitalization. National governments could therefore develop a strategy targetted at digitalization, which would also include solution of shared economy, rather than adopting political arrangements which are specific only for shared economy.

Within the existing differing arrangements in many countries, it is possible to observe certain lines of approaches where the Czech Republic may find some inspiration when looking for a suitable legal framework for shared economy. Authors of the government study Analysis of shared economy and digital platforms¹⁹¹ discussed the approach to shared economy with some foreign institutions in Estonia, Italy and Belgium. In general, it is possible to say that shared economy across those countries is perceived as the opportunity which must be paid attention and its development should not be obstructed.

Estonia

Estonia is considered to be a pioneer not only in the area of shared economy but also in digital skills as a whole and it is forward compared to other member states of the European Union (for example in a digitalization of public administration). So whereas many countries of the world and Europe (e.g. France, Spain or Germany) prohibited the alternative Uber service after a wave of protests of the providers of classical taxi services, Estonia went in opposite direction. The Estonian parliament adopted a law that regulates the activities of online platforms that arrange transport services. The norm outlines conditions under which it is possible to provide services arranged through digital electronic platform and regulates their position to traditional taxi service. Taxi drivers in Estonia do not have to comply with the previously required conditions of professional training. It is up to the taxi services and the platforms themselves to ensure the training of their drivers in order to do the activity. There is also no need to comply with a previous obligation to have a taximeter if a rate is calculated by means of another electronic form through digital application. The Estonian tax and customs committee (EDCR) in cooperation with company Uber have started a pilot project for the transportation sector, in which it connects its system of contactless recording with contactless payment system of Uber. Within the system, Uber collects data about transactions carried out through the platform, while a part of those data relevant for the purposes of taxation are sent directly to EDCR. EDCR then includes the data in the pre-filled declarations of taxes, which, in the final effect, decreases the administrative load on the side of providers of the platform services and at the same time increases a level of evidence and payment of taxes.

¹⁹⁰ Lenaerts, K., Beblavý, M., Kilhoffer, Z. (2017) Government Responses to the Platform Economy: Where do we stand? CEPS: Policy Insights. Available online: <https://www.ceps.eu/publications/government-responses-platform-economy-where-do-we-stand>. ¹⁹¹ Veber, J., Krajčík, V., Hruška, L. (2016): Shared economy. Prague, VŠPP. Available online: <https://www.všpp.cz/wp-content/uploads/2017/05/zprava.pdf>.

Belgium

A proposal of law on shared economy of the Belgian kingdom was approved by government in June 2016 and it was handed to a parliament. Removing the entrance barriers for the P2P providers of platform services (lending things or money or providing services among people directly, without an intermediary party) shall support an increase in the number of services provided through the applications and digital platforms. People will be able to earn some extra money and do a „business activity of small range“.

A business of a small range within shared economy is separated from traditional enterprise in the law by an income limit in the amount of 5 thousand euros a year. A business of a small range is then less overloaded by administration and it falls into lower taxation or it is freed from the obligation to pay the social security contributions. A purpose of the implementation of the 5-thousand income limit is to prevent a potential breaching of the economical competition. Setting up the boundary distinguishes this way from providing the shared economy services from traditional enterprise, the purpose of which is to have a profit.

To achieve for this type of economical activity to apply to the law on shared economy, it is necessary to have all transactions paid electronically. This will guarantee an easy and transparent identification of all incomes of providers of those services. Considering this fact, all platforms are obliged to register at tax authority. According to law, digital platforms are obliged to pass the information about provided services on the platform and about individual providers to tax authority. In this respect, this obligation is on the side of the platforms, not the providers.

Thanks to a simplified administrative procedure applicable when providing services arranged through the digital platforms, a provider is not obliged to register in a register of entrepreneurs and to obtain a tax identification number.

Italy

In Italy, a proposed modification of shared economy goes a different direction; it is necessary to regulate this area at least partly throughout all sectors. It therefore does not solve the individual sectors separately but they prepare the sort of legislation that will solve the conditions for shared economy universally and complexly. The aim of the law is, like in other countries, to ensure the transparent conditions, fair economic competition, tax fairness and also adequate consumer protection.

The law first of all provides a definition of shared economy and then determines its participants and their relationships. The law intends to confide supervision and regulation of digital platforms in the area of shared economy to the Institute for Economic competition and Market, which will create a national register of digital platforms. At the same time, the Institute will inform the parliament about any existing obstacles in the area of shared economy and will propose suggestions how to resolve the situation. The Institute is then also authorised to collect fines from the intermediaries of shared services that do not have insurance to cover prospective risks. The operator of digital platform is obliged to write a document about company politics, which must be approved by the Institute for Economic Administration and Market, and it must contain a framework of contractual relationship between a platform and a user. Concerning the taxation of an income from ‘business activity of non-professional sharing’, Italy is more benevolent compared to Belgium. Incomes to 10 thousand euros a year are subject to 10 percent tax rate. In case

the annual boundary is stepped over, the taxable incomes are added to the incomes from other activities of a payer and taxation complies with standard rules.

Italian proposal of the shared economy law also considers protection of consumer data. It is determined that if a provider intends to hand over available data about a user to the third party, s/he has to inform the user about this handing over in advance, before s/he provides the service itself. At the same time, according to the law, each user and provider has to get a chance to verify, modify, ask for deleting or completely take away data about hi/her person from a digital platform system. Complying with the rules is supervised by an ombudsman for protection of personal data.

The law also states that the operators of digital platforms will make accessible relevant data about a number of their users, types of services and goods for the national statistical authority for the purpose of monitoring the development of the shared economy phenomena and to assess the effectivity of received regulations.

Also in another countries, it is possible to find many examples of partial steps aiming to create adequate legislative environment for shared economy. However, it is important to say that until now, the topic of shared economy has not been processed academically enough, which complicates the assessment of political recommendations formed by the investigative workers, government officials or other participating parties. It seems, however, that there is a clear match regarding a need of political reaction about development of shared economy, and it is in the EU as well as another countries.¹⁹²

¹⁹² De Groen and col. (2017) Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations: Final Study. European Economic and Social Committee. CEPS. Available online: <https://www.ceps.eu/publications/impact-digitalisation-and-demand-economy-labour-markets-and-consequences-employment-and>.

Conclusion

Shared economy is a phenomenon that attracts a great attention of the media as well as the public, professionals and public administration nowadays. It is an area which is not academically and institutionally dealt with sufficiently, it is not mapped in a complex way, there is insufficient amount of reliable data available and the terms are not defined clearly. In spite of that, especially in the last about 2-3 years, there are many different discourses about this topic, and some of them are based on the results of the empirical investigations. These are usually investigations of partial character, which are marked by definitive lack of uniformity and they are difficult to compare. This increase in the interest of public administration and academic community goes hand in hand with how the shared economy platforms grow and enter into more and more new regions also in the area of shared economy. At present, we are witnesses of turbulent boom of the sector when majority of business models of shared economy still look for their effective look and they go through development which is hardly predictable. Many will probably disappear and some of them will profile in different direction that they aimed for at the beginning. New business models of shared economy also enjoy a great attention of investors, which supports the growth of the platforms significantly. In some sense, it is a capitalization of original ideas about alternative and „non-capitalistic“ economy based on sharing unused resources among individuals.

Most authors of professional dissertations agree that shared economy has a potential to change labour market to some extent. Some even think that shared economy will mean an end of work as we have known it so far. In some segments, like for example in the often mentioned transportation and accommodation, there is clearly ‘still waters swirling’, which the shared economy platforms have brought, especially in terms of their turning aside the existing legislative and formal frameworks. According to available investigations and estimates of the shared economy range and especially its proportion of labour force for whom it is an important source of income, however, it has still been a relatively minor part of labour market. This is true especially in Europe (while in Europe, the Czech Republic belongs to the more conservative markets). It is therefore likely for the shared economy to result in shift hike in near future in relation to the way the work is carried out.

Nevertheless, it is true that shared economy brings not only the numerous opportunities but also great risks for labour market, which should be paid a great attention. Currently, there are clear insecurities and problems which the workforce engaged in the online platforms has to face. In the future, some questions will appear which will grow stronger as well as some new issues that will have to be solved. In this context, it has to be stated that Czech legislation is not prepared for shared economy in many aspects. It will be important to create a legislative framework or extend the existing legislative framework in a transparent way, and if possible, it must be without excessive regulation overload to include the existing and also the future business models based on shared economy.

A new (extended) legislative framework should involve especially the following areas:

Protection of work. Workers’ rights should be protected and ensured fairly irrespectively of the context in which the work is carried out. In this respect, especially the more general legislative differentiation of dependent work and self-employment is a key issue, as well as ensuring equal opportunities for everyone in dependent work including an access to adequate social security, possibility to gather together and of representation in social dialogue, ensuring the right to adequate working conditions, protection against discrimination and so on.

Protection of market and state. State should ensure equal legal conditions for enterprise for everyone, especially when considering legislative and tax conditions. In this context, it is important to identify or create the mechanisms which define a status of online platforms in relation to employment-legal legislation (whether and in which cases it is an employer and when it is intermediary), respectively in relation to regional and sector conditions (licence and similar) and determine the mechanisms for adequate exercising of related obligations. An unequal state can be rectified by means of increasing regulation for the new business models as well as by means of freeing the regulation for traditional models. An important thing is a balanced effective approach, which should contribute to a resulting better securing of services and not limiting market innovations unnecessarily, and a solution may have a different look in each sector. It is therefore suitable to base the decision making on the founded professional discussion from the viewpoint of experts of that specific segment as well as from a viewpoint of law and public administration.

Protection of consumers. According to the carried-out investigations, the consumer satisfaction with products / services provided through the online platforms is quite high so far, it is even higher than in case of classical services. In spite of that, many consumers have encountered some problems. That will logically increase while extending a range and scale of provided services. It will be necessary to ensure consumer rights in the shared economy environment to be protected in a same way as in traditional economy. A basic thing is an adequate definition of a consumer in the platforms environment, which is often unclear there, and determining the quality maintenance mechanisms where a provider of services or a seller will have to ensure, or mechanisms which will set a possibility to control quality by public authorities. To set up some legal and regulatory framework of a functioning of platforms, it is important for a consumer to ensure transparency of transactions concluded through the online P2P platforms including clearly defined rights and obligations of the participants in transactions. Next it is necessary to require some responsibility from the platforms for a process of transactions, reliability and trustworthiness of the assessment system, reviews and information about identity of participants. A consumer has to be certain of his right to a compensation in case a service is problematic and obviously a right to data protection which s/he provided to a platform.

It is useful to use mechanisms that bring digitalization of society for the new legislative frameworks and arrangements of public administration. Shared economy itself often offers some useful tools, like for example new, easier and less expensive possibilities of monitoring, recording, control, collection of charges and similar. It is also possible to create innovative environment where development of regulation mechanisms closely follows the development of shared economy without complicating processes too much, limiting business initiative or automatically conserve the status quo.

And finally it will be necessary to support the shared economy research and continuous monitoring of the environment, which would promptly notify of prospective new risks, or of an increasing level of known risks in specific area, and that way enabled a prompt initiation of discussions aiming towards solving the state.

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The Act no. 262/2006 Sb., the Labour Code, as amended. The Act no 634/1992 Sb. on consumer protection.

The Act no. 89/2012 Sb., the Civil Code.

Attachment 1: Examples of platforms

The first part of the list contains a description of the most important platforms in the Czech Republic. The second part contains some examples of platforms in the world, especially those that are included in the text of the study.

A. Examples of functioning platforms in the Czech Republic

Transportation

Uber (www.uber.com)

Platform Uber makes it possible to order a transportation service via mobile phone with the Uber application. The application searches for drivers who are nearby and available according to a location of a user. Depending on the type of service those are professional or unprofessional drivers with their own or rented vehicles. If a driver agrees he will provide service the application notifies a customer about it and it will show him a driver's profile as well as an estimate of price to user's destination. Once a transportation is over, the corresponding price is immediately taken out of the user's bank card. The application also offers opportunities to assess the drivers as well as customers and an algorithm to calculate a price of transportation.

In Czech conditions, drivers usually work for income, approximately 10 percent are women who can earn some extra money for example during their maternity leave that way. Participation in the network of applications also offers people higher flexibility, possibility to balance their family, financial and work priorities better. It cannot be said that drivers would fall only into one age group, which is close to the mobile technologies. A typical driver of shared service for personal transport has not been profiled even on the global level so far. The most important factor for a final choice of application in Czech environment is the amount of provision, which the application requires in order to provide its software and marketing services, and then also a size of a user base which can arrange an adequate number of customers. One's rate obviously also plays its role and it is often a lot below a market average. It becomes apparent that especially the registered drivers who use the applications in order to gain a sufficient income and filling their capacity use more applications at the same time.

In Prague, this type of shared economy on the market of personal transportation makes approximately 10-15 %. Whether the estimate is created on the basis of the number of active drivers who use the shared economy applications or according to the number of the carried-out rides in one month, which can be from 800 000 to 1 000 000 rides a month in Prague /Kurtiš, Rezková, 2006/. Considering the increasing volume of rides, it is possible that in several years, we may expect increasing importance of the services. The Regional Court in Brno prohibited, in a form of preliminary order, the company Uber to operate transportation services in Brno. Company Uber B.V. claims that it does not operate a taxi service, and therefore it does not have to fulfill the conditions concerning taxi services. According to a court decision, it is not a classical taxi service. By that, company Uber breaches or avoids the rules valid for all other taxi services and it decreases the rights of passengers. According to a decision of the preliminary court order, company Uber has been forbidden to operate or secure the transportation service using the vehicles without parameter. Drivers also must not take customers without an examination.

Liftago (www.liftago.com)

Mobile applications to call taxi service. The conditions for using the driving applications are: legal driving licence for taxi service operation, vehicle in excellent technical condition not older than 10 years, pleasant behaviour and pro-customer service of a driver, smart phone / tablet Android with a display size 5' or bigger from some of the established brands with operation system Android 4.1 and higher, visible position of a phone / tablet for a passenger on a front desk or a front screen, at the same time the best GPS signal, + phone autocharger to last without switching off a display, mobile data tariff with a data limit of at least 3GB, bank account in order to be sent payments.

AJO (www.ajo.cz)

Calling for a car. Available in Brno and in Prague. A client with a valid reservation comes at any day or night time to a car and unlocks it using a mobile phone web application or s/he contacts a dispatcher who will open the car from a distance. First of all, however, a framework agreement must be entered into, agreed amount must be settled and payments for the individual rides are deducted from it. Cars have to be returned in the same hand-over location in which the clients took them. Sharing time is not limited (an hour, week).

Rekola (www.rekola.cz)

Sharing bicycles - characteristic pink bicycles. Neither length nor time of journey are limited. Bikes can be left anywhere in an available zone and accessible for another rider. At present, Rekola operate in Prague, Brno, Olomouc, České Budějovice, Teplice and Kladno. Rekola came to existence in 2013. During that time, it has developed a reliable system that saves time to tens thousands people; it is 5 times cheaper than the station bikesharings and an instalation in a new town is a matter of several weeks, not years.

Blablacar (www.blablacar.cz)

The idea of the company is to share the ticket prices (ride -sharing) and their vision is to change the transportation from one town to another. Their websites and also the mobile applications serve as a market where drivers and passengers are connected. Company profit is made by a commissionary charge in the amount of 10 % from each transaction. It currently has over 45 million members and operates in 22 countries of the world including the Czech Republic. The aim of BlaBlaCar is not only to become a European society but also a global player.

Accommodation and shared space

Air Bnb (www.airbnb.cz)

A portal thanks to which people can offer, search and book accommodation online all over the world. People may use this platform to offer their unused accommodation capacities to anyone interested in accommodation. A rentier does not pay a fee for hi/her accommodation capacity, does not comply with any hygienic regulations or any relatively difficult colaudation process, as it is in case of traditional hotel industry. A rentier pays the income tax and deducts expenses. Electronic recording of turnover applies to these types of rentings but in practise, different types of renting are used as well as different payments, and it is realistic to say that a part of the payments is not recorded. When registering to AirBnB, a rentier undertakes to comply with the local rules, however, a control is missing. The platform gets a fee in the amount of 3 percent from the price of accommodation, which is paid by a guest. The company was founded in 2008 in the USA, and today it works in more than 191 countries. So far, there are about 10 thousand offers of accommodation, from which 70 % is in Prague. An offer of other towns and cities is: Brno, Karlovy Vary, Liberec. In the last year, the offer increased by 84 % - at times of low interest rates on mortgages, approximately 30 % flats are bought for further investment. This platform

constitutes a competition of an addition to traditional forms of recreational accommodation.

Couchsurfing (www.couchsurfing.com)

A community of travellers who look for accommodation and also let another travellers to sleep over on their sofas. The community currently has approximately 10 million members in 200000 cities in the world including the Czech Republic.

ShareDesk (www.sharedesk.net)

Sharing job vacancies („Airbnb for offices“). The aim is to connect the unused offices with the people who look for a place where they could work or have a meeting. The offices can be rented for hours, days or months. Currently, there are 440 cities in 70 countries where it works including the Czech Republic.

Flexiooffice (www.flexiooffice.cz)

Shared offices. One advantage of this solution is that the costs of offices decrease significantly while keeping lucrative address, standard and a quality of an office. In case of shared office, those interested have an office available for a specific number of days in a month. Reservation of a specific date is usually done via reception. A client can plan when and how s/he will use his/her office. S/he does not meet the other entities s/he shares the office with, the timetable is organised so that everyone has privacy in the office.

CowoBrno.cz (www.cowobrnno.cz)

Renting shared offices in Brno. Monthly expenses of shared offices are significantly less expensive than renting own office. Tariffs are always set only for specific days. The tariff may also include a conference room and other facilities (kitchenette).

Finances

Nakopni Mě (www.nakopni.me)

Financing promising projects from various areas. A client who has an idea publishes a project proposal - description, target amount of collected money, deadline for collecting money. Projects are examined according to how likely they are to succeed, and a decision is published within 5 working days. An investor chooses from an offer of current projects and transfers a selected amount of money to a bank account. Should the project be succesful, a client with an idea will get rewarded. Should the project not be succesful full amount shall be returned back to the investor. Investors are anonymous at the beginning and shall the target amount of money be collected a project realizer will receive a contact on the investors. 30 succesfull projects have been published: Pilsen region in a folk song 232 thousand Czech crowns, reconstruction of a piano - 7 thousand CZK. The platforms charges a 3 % provision from collected amount of money + a charge for every day when the project is published (the first day is free, then it is 50 CZK).

Hit hit (www.hithit.com)

Interconnecting creative people with those who wish to support them. Financing of only the creative projects - music albums, film recordings, software development, development of mobile applications. Project theme is sent on a website, details are filled in, they are sent to a moderator for approval and the project starts. Maximum time limit to collect a final amount is 45 days. Provision for projects up to 200 000 CZK – 9 % + VAT + bank fees (1,5- 2,5 %), individual agreement in case of bigger projects, only if a target amount is collected. Over 1 thousand of published projects (succesfull projects TapTap – 223 % of target amount, over 1 mil. - over 2 mil. CZK, Nakopni jatka CZK, 121 % of target amount).

Penězdroj (www.penezdroj.cz)

Interconnecting people with good ideas with people who are willing to support them. Projects must be of business character, creative, charitable. They provide advisory services. The platform offers three different models of how to finance a project:

(a) Reward – creative projects, usually not of business character, (b) Share – business projects, (c) Gift – charity, non-profitable sector. Time period for collecting the money 10-55 days, minimum target amount 5 thous. CZK. Portal operator receives a 7 % provision, for gifts it is 3 % from collected amount of money, bank fees for transferring money to financial partner Pays.

Zonky (www.zonky.cz)

Arranging loans among people. The platform interconnects the people who want to borrow money with those who will lend them money for an interest agreed beforehand. Zonky takes care of all legal and administrative matters, divides individual installments to investors and solves prospective recovery of unpaid claims. The service is provided by company Zonky s.r.o. Project investor is the innovative fund Home Credit Lab N.V. that belongs to the PPF group. Service Zonky.cz is registered at the Czech Central Bank as a provider of financial services of small range, it has access to a bank as well as a non-bank register of client information and its work is supervised by the Central Bank of the Czech Republic.

Fund lift (www.fundlift.cz)

Investing into convertible investment certificates like bonds which will change into a share in company in some time or minibonds with fixed interest rate. After a registration and verifying identity, it is possible to choose an interesting project and send financial contribution for putting him into practise. If a campaign is not financed fully, all financial contributions are returned to investor's account. If a campaign is successful, bonds and shares are issued including their recording and transfer to an investor. Carried out by company Rocklen 360 s.s, which is entitled to carry out activities on capital markets and complies with a supervision of ČNB. The company requires 5 % provision from collected amount. (For example emission of the Favorit Czechoslovakia bonds in the amount of 10 mil. CZK, Isoline - drinks and food supplements, Brewery Zvůkov - minibond with the 6,5 % profit p.a., total investment of 4.5 mil. CZK).

Products, design and author work

Fler (<https://www.fler.cz/>)

Arranging sales and purchases and buying hand-made and artistic goods. Products have to be hand-made by a seller or a creative team, or a product has to bear some other signs of creativity of its author. Server operator Fler is not a seller of the goods, nor its purchaser. A seller is obliged to pay a server operator a provision for arranging the sale in the amount of 11% of a selling price. A seller pays an income tax - s/he has either a trade licence for the work, which is recommended by Fler, or it is possible to tax the incomes as occasional ones. There are **73.000 registered sellers** and almost **340.000 registered buyers**.

Aukro (<https://aukro.cz/>)

Company Aukro operates a platform where people as well as professional sellers can offer their old things they do not need any more, but also new things in auctions. Aukro charges the sellers who pay fines for placing offers and provisions from successful sales, alternatively for a promotion of an offer, which is optional.

FotoBanka (www.fotobanka.cz)

Photographers provide their photos to interested people to be used in advertising or printing. After

creating one's own account, an interested person can download the available photographs 24 hours a day, 365 days a year for a price of 100CZK per photo regardless of a loading and use.

Sale / renting property

Bezrealitky (<https://www.bezrealitky.cz/>)

A reality server, which is the first internet market with real estates, through which it is possible to sell or rent property without an assistance of reality agents. The web pages started in September 2007 and since then they have become a very successful alternative of solving sales or rentals of properties between direct owners and those interested. The biggest advantage of the sale include significant financial savings, since no party is obliged to pay anyone any provision for arrangement. Advertisers pay for inserted advertisement according to a variant, which is from 199 to 999 CZK.

Food

Dáme jídlo (<https://www.damejidlo.cz/>)

Platform offering a food delivery service. Customer provides address where he wants to deliver food, chooses a restaurant and food available in specific location. Food delivery in Praha, Brno, Ostrava, Plzeň, Olomouc, Ústí nad Labem, Hradec Králové, České Budějovice, Pardubice, Liberec.

Rozvoz-jidel.eu (<http://rozvoz-jidel.eu/>)

The main activity of this company is a production and delivery of fresh cooled meals to companies and institutions. Next they offer a production of meals for restaurants and some extraordinary events.

Rozvozjidla.cz (<http://www.rozvozjidla.cz/>)

Platform offering a food delivery service. Customer enters address where he wants to deliver food. S/he selects from an offer of restaurant menus. At the same time, there is a price of delivery and a time when the food will be delivered.

Education

Khan Academy (<https://www.khanacademy.org/>)

A non-profitable organisation which provides the free-of-charge educational tutorials in a wide scale of subjects on a web page www.khanacademy.org. In the Czech Republic, it works on <https://khanovaskola.cz>.

Interconnecting supply and demand

Poptavej.cz (<https://www.poptavej.cz/>)

The platform arranges a demand for services or goods from any area of work or location. Customers place their demands free of charge. Demands are controlled and sent to certified companies from a specific field and region. Companies create an offer tailored to the requirements and send it directly to an email of a customer. Offers of demands are received by a customer within several hours from placement. Comparing offers may save as much as tens of thousand percent of a price of services. A demand system Poptavej.cz functions on a credit system. A company will pay for a credit which is then used to viewing a contact of selected demand. Thanks to limited competition, there is maximum of 10 companies that can react to one demand. One credit is worth 30CZK and everything else is without any other charges.

NejZóna (<https://www.nejzona.cz/>)

A platform that serves to pairing a demand with an offer of various services – from printing (<https://tisk.nejzona.cz/>), via marketing (<https://marketing.nejzona.cz/>), to manual work (<https://nejremeslnici.nejzona.cz/>). Expansion of the portal is already announced and there are the following sections under construction: computers, finances, education, law, organising, transportation, personal services, car. Customers insert their requirements to the portal and it will offer them a contact to a few suitable suppliers in quite a short time and in a sequence which corresponds with a rate of positive references, which the company received on the portal. Portal services are free of charge. Payments are not recorded, they go on directly between a customer and a supplier in a way they agree on. A customer assesses his/her satisfaction with provided service or delivered product on the portal.

Work

Top designer (www.topdesigner.cz)

Creating design and graphic work (logo, web...). An ordering party pays 20 % of a value of winnings for designers to a company - a charge for using a portal. Rewards are paid for the three best proposals - increasing the motivation of designers, an ordering party can use only the first proposal. It is necessary to put together the amount of money in advance. 2 types of projects: (a) guaranteed project – security of choosing the best proposal, (b) not guaranteed project – right to get the money back, little interest on the side of designers. On 6 September 2016, 7 705 registered designers, 997 completed projects, 56 proposal put in for 1 project on average, 5 124 395 Kč winnings paid. A minimum payment has been set up for individual products.

Hlídačky (<https://www.hlidacky.cz/>)

Portal Hlídačky has created a space to demand and offer the babysitting and household cleaning services. There were 4 254 babysitters and 1 113 cleaning ladies in its database in March 2016. Just like other platforms based on the shared economy principles, the quality of services is measured according to the assessments from customers. The portal charges a provision from a demanding party in a form of monthly payment according to a range of services. As the total market in that area is difficult to calculate /cleaning, babysitting, minor repairs, assistance to neighbours/, it is impossible to estimate a proportion which the shared services portal contributes to overall market (Source: Kruliš, Rezková, 2016).

Lidská Síla (<https://lidskasila.cz/>)

This platform provides cleaning services for households. Workers are hired by an online advertising, they go through an entrance interview and prove they have no criminal record. Form of work is self-employment. In case of a damage, workers are protected by an insurance up to 10 mil. CZK. Workers who provide cleaning services on a basis of a contract between a client and a worker (Cleaning agreement), the platform Lidská síla is not a party in it. The portal LidskáSíla.cz will provide a professional worker, arrange a payment from a client to a worker for his/her cleaning services through a provider, and alternatively, it can also take care of the communication between a client and a worker. A relationship between professional worker and platform LidskáSíla.cz is defined in a contract of cooperation, with the business terms and conditions attached to that. Payments for services are paid online by clients.

Super soused (<https://www.supersoused.cz/>)

The platform where a customer places his/her offer (if needed s/he can also modify, change, transfer,

assemble, set up or clear away) and where s/he chooses from offers of various DIY workers also according to their references and mutual assessments. Customers are insured via the platform, and also payments from customers for the services of Supersoused (superneighbour) are carried out via the platform.

yuVe (<http://yuve.com/site/cz.html>)

The aim is to arrange orders of small repairs of flats, houses and their equipment, transportation services. An international platform that entered Czech market at the beginning of 2016. The users must download an application to their mobile phones. An orderer enters his/her requirements into the application, the platform will lead him/her to the registered suppliers in the area of the orderer. A customer will choose a supplier according to references and price. Customer assesses the quality of carried-out services on the platform. The service is now running in a pilot version and it has about 200 registered suppliers.

Easytask (<https://www.easytask.cz/>)

The service Easytask offers arrangements of a contact between customers and suppliers, and there are 4 013 suppliers on their web pages in the following areas: creating and designing web pages, graphic design, copywriting, creating mobile applications, online marketing and administration in a form of virtual assistants. A user who demands something can place a demand for service he is looking for, and s/he receives offers from various suppliers s/he can then choose from and decide what fits him/her best. There are also assessments from previous customers available. Placing demands or creating Easytask user account is not charged for, there are no fees, only in case of business accounts or orders the communication is not direct but it is via a platform operator, which charges a 15 % provision. In March 2016, there were 3 905 carried-out transactions on the portal (Kruliš, Rezková, 2016).

Hledáme architekta (<http://www.hledame-architekta.cz/>)

The web application arranges interconnection of a demand from investors and an offer of architectonic services. It will help find a contact of the architects according to regional location near an investor.

The platform registers (free of charge) architects who offer their services. To register one needs the basic identification details as well as a link to a web presentation, authorisation number ČKA, respectively, the platform may require sending of a copy of an official document certifying education in the area. The registration is free of charge. Then one gets access to the entire content for a trial period. It is then up to a decision of an architect whether s/he wants to use the information presented on the platform. No obligations ensue from the registration except for complying with the arrangements of the registration terms. The platform does not allow an individual propagation of architects and ateliers through advertising to maintain independence and equal opportunities. For this purpose, there is a map of architects in the Czech Republic where it is possible to create professional data of the architects with links to their own work and presentations.

Placing an order is free of charge. A customer chooses in accordance with the demonstrations of current work and references, local availability, faster solving of tasks, equipment and background, suggested prices of services.

Further negotiations and payments between an architect and investor apparently go on without the platform.

B. Examples of platforms around the world

Transportation

Uber (<https://www.uber.com>)

see the description above - Examples of platforms that work in the Czech Republic

Blablacar (<https://www.blablacar.cz>)

see the description above - Examples of platforms that work in the Czech Republic

Zipcar (<http://www.zipcar.com/>)

A platform to share automobiles in the USA. The company provides its members with a possibility to book an automobile once they buy a monthly or annual membership, and it is for several hours or days through a mobile application. The company was founded in 2000.

Lyft (<https://www.lyft.com/>)

A platform that arranges transportation through a mobile application. Customers use the mobile application to order transportation from drivers who use their own cars. The company was founded in 2012 in the USA.

Sharoo (<https://www.sharoo.com/>)

The platform is about sharing cars among people. The company was founded in Switzerland in 2013. In 2018, it is assumed to have 10 000 members.

Atzuche (<http://www.atzuche.com/>)

Sharing cars among people in China. It was founded in Shanghai in 2014. At present, it has almost one million members and 30 000 registered cars.

JustPark (<https://www.justpark.com/>)

A website and an application which allows to reserve a parking lot on private premises. The website interconnects the owners of free premises to park and drivers of vehicles. There are currently 1,5 million drivers and over 40 000 parking lots for reservation, especially in the UK.

Cargomatic (<https://www.cargomatic.com/>)

A platform that serves to interconnecting the senders and transporters through a web and a mobile application. It helps transporters to expand their business and senders to monitor their item in real time. The company has been working in the USA since 2013.

Car2go (<https://www.car2go.com/US/en/>)

A company that operates shared cars in big world metropolises (the USA, Canada, China, France, Austria, Germany, Italy, the Netherlands, Spain). A customer can leave a hired car anywhere in the previously assigned area, which includes almost a whole city and often also the nearby areas. A position of a car, a condition of accumulators and cleanliness of exterior and interior is viewed for a customer in a mobile application or on a computer. If a customer wants to drive them, s/he must register in a Car2Go branch office and s/he has to pay a one-off charge in the amount of 19 euros. After that, s/he pays only for the time spent in a car. The company takes care of insurance, maintenance of vehicles, parking and petrol/energy.

GoMore (<https://gomore.dk/>)

Danish platform providing sharing cars and renting vehicles.

Accommodation and shared space

Airbnb (<https://www.airbnb.cz/>)

see the description above - Examples of platforms that work in the Czech Republic

Couchsurfing (<https://www.couchsurfing.com/>)

A community of travellers who look for accommodation and also let another travellers to sleep over on their sofas. The community currently has about 10 million members in 200000 cities of the world including the Czech Republic.

ShareDesk (<https://www.sharedesk.net/>)

Sharing office vacancies („Airbnb for offices“). The aim is to connect the unused offices with the people who look for a place where they could work or have a meeting. Business offices can be rented for hours, days or months. Currently, there are 440 cities in 70 countries including the Czech Republic where it works.

Onefinestay (<https://www.onefinestay.com/>)

They offer luxurious accommodation in nine countries of the world, for example London, New York, Paris and Los Angeles. The company representatives visit personally and check all accommodations. The company has a team in each town, which prepares the accommodation and welcomes visitors.

Warm Showers (<https://www.warmshowers.org>)

A community of cyclists and hosts who offer accommodation. It has almost 83 000 members in 161 countries of the world.

Homestay.com (<https://www.homestay.com/>)

The hosts offer not only accommodation in their homes but they also agree to spend time with their customers. The company was founded in 2013, and so far, more than 50000 accommodations have been arranged in more than 160 countries of the world.

Experiences

Vayable (<https://www.vayable.com/>)

They offer experience for travellers in a form of renting a guide around a city according to their interests - they can walk around a town with a historian, architect, farmer or similar. It also works in the Czech Republic.

Tripoto (<https://www.tripoto.com/>)

A platform which is aimed at creating travel itineraries from travel guides for travel guides. People create itineraries for not so well known places including maps, photographs and travel books of those who visited the places. It also works in the Czech Republic.

Triip.me (<https://www.triip.me/>)

When travelling to some country or a city, people can interconnect with the local people who are willing to share their knowledge of the places they live in. Over 800 guides in 60 countries in the world. It also works in the Czech Republic.

Products, design and author work

Etsy (<https://www.etsy.com>)

A platform founded in 2005 in New York, which makes it possible for creative people to sell the hand-made jewellery, clothes and various decorative items to those interested all over the world. A motto of

the website is

„Turn your passion into a business.“ A seller pays a charge for displaying his/her product and 3,5 % from the price of each product. It currently has over 1,8 million sellers and 30,6 million active buyers. It also works in the Czech Republic.

Instructables (<http://www.instructables.com/>)

A website where people answer the questions of their people about how to make various things in a form of manuals with added photographs.

99Design (<https://99designs.com/>)

99Design is an online market with graphic design. It interconnects more than a million of independent designers to people who demand graphic design. The company was founded in 2008 in Australia.

CoContest (<http://gopillar.com/>)

A platform interconnecting the interior designers with customers from all over the world. The company was founded in Italy in 2012.

Food

Restaurant Day (<http://www.restaurantday.org/en/>)

It enables people to open their own restaurant four times a year - on website restaurantday.org, people can register their restaurant, fill in details (menu, opening hours). It was founded in Finland in 2011.

TalkToChef (<https://talktochef.com/>)

Professional cooks offer personal consultations via video chat.

Plate Culture (<https://plateculture.com/>)

A community connecting the hosts who enjoy cooking with the guests who look for an authentic experience in a form of food in someone's home. It is working in 24 countries of the world.

Just Eat (<https://www.just-eat.co.uk/>)

A British website providing food delivery to customers from 24 000 registered restaurants.

Deliveroo (<https://deliveroo.co.uk/>)

A platform that arranges food delivery from various restaurants in 12 countries of the world. A customer can choose from a wide selection of cuisines, meals, restaurants. When choosing something, it is possible to see assessments from customers, too.

DoorDash (<https://www.doordash.com/>)

A platform that arranges food delivery in more than 300 cities in North America. A customer can choose food / restaurant according to his location, time of delivery or cuisine category.

Education

Khan Academy (<https://www.khanacademy.org/>)

A non-profitable organisation which provides the free-of-charge educational tutorials in a wide scale of subjects on a web page www.khanacademy.org. In the Czech Republic, it works on <https://khanovaskola.cz>.

TakeLessons (<https://takelessons.com/>)

It interconnects students and teachers to organise lessons in the area of music, languages, art, fitness, etc.

Interconnecting supply and demand

Gumtree (www.gumtree.com)

A British platform that offers people an opportunity to place various types of advertisements from sales, via job offers, offer of property, domestic animals etc. There are services for individuals as well as companies. Advertising is usually free of charge but the platform offers some bonus services for a charge (highlighting etc.).

OLX (www.olx.com)

An international platform that arranges purchasing and sales via publishing demand and supply. Transactions go on within local communities in many different countries (transactions are carried out offline).

Work

Upwork (<https://www.upwork.com/>)

A platform designed to support work from distance. It works as a database of freelancers and job offers which can be done from distance. There is a million of distance jobs advertised on the website every year. The company was founded as a start-up in the USA in 2005.

Amazon Mechanical Turk (<https://www.mturk.com/>)

It is an Internet market where individuals and companies demand some work which computers are currently not able to do completely. Employers advertise job offers here, which are called HITs (abbreviation of Human Intelligence Tasks). The company was founded in 2005 and at present, it is available for employers from 44 countries around the world.

TaskRabbit (<https://www.taskrabbit.com/>)

A platform which serves in order to find people with good manual skills like e.g. 'a one hour husband' in your local area. It connects people who demand work with those who offer services. First of all, a user demands work, then s/he receives offers from workers, who s/he can choose from. The company was founded in the USA in 2008.

ListMinut (<https://listminut.be/>)

An Internet platform which makes it possible for its users to connect with reliable private individuals on their local areas for housework. The users place an offer and a price they are willing to pay for the work. The company was founded in Belgium in 2013.

Handy (<https://www.handy.com/services>)

A platform that arranges housework including cleaning, interior painting, help with moving, assembly of furniture and other manual jobs and repairs. A platform offers services in the USA, Canada (Toronto, Vancouver) and Great Britain (London). In 2014, when entering the English market, it bought a local player - company Mopp.

Mopp

A platform that offered household cleaning services in England until 2014 - the platform was then transferred under a bigger owner, a company Handy.

Happy helper (<https://happyhelper.dk/>)

Danish platform providing cleaning services.

Freelancer (<https://www.freelancer.com/about>)

Platform that puts together independent professional individuals from various fields (design, graphic design, IT, marketing, business, law, research and development etc.) and makes it possible to hire a right professional for one's own project / work (searching in the field of work / specific skills / location).

Clickworker (<https://www.clickworker.com/>)

Platform which offers „knowledge of the crowd“ (crowdsourcing) – work for up to a million of independent contractors in very short time, where a task is assigned to a group of unspecified people as a general call.

Peopleperhour (<https://www.peopleperhour.com/>)

Platform which interconnects talented independent professionals from various parts of the world and various professions (design, web, social media, web and software development, audio and video etc.) with customers.

Crowdfunder (<https://www.crowdfunder.com/>)

This platform combines automated learning (machine learning) and „people in the field“ (humans-in-the-loop) in the only platform for the purpose of data scientific teams, who work on analysis of sentiment, relevance of searching and classification of business data.

Mybuilder (<https://www.mybuilder.com/>)

Platform which offers services of the self-employed from the construction field. A customer can hire a suitable worker for his/her building work on the basis of references.

Other

MuniRent (<https://www.munirent.co/>)

MuniRent is a platform which makes it easier for the public agencies to share heavy technical equipment within and between other agencies.

FireChat (<https://www.opengarden.com/firechat.html>)

Mobile chat application of company Open Garden which makes it possible for large groups of people to communicate free of charge and offline using radio frequencies, which make it possible to connect devices at a distance of up to 70 meters.

FUBLES (<https://en.fubles.com>)

An Italian start-up which makes it possible to find teammates especially for football but also other collective sports.

Attachment 2: Classification of selected platforms working in the Czech Republic according to their relationship to labour market

Segment	Name	Website	Area of business is for its character	Is an important component of work its part?	Estimate of classification considering
Babysitting and housekeeping	Hlídačky.cz	www.hlidacky.cz	Service	Yes A babysitter	2.
Renting accommodation	Airbnb	www.airbnb.cz	Service	Yes Cleaning and maintenance of rented	2/4
Sharing office space	ShareDesk	www.sharedesk.net	Service	Yes Cleaning rented space Secretarial services	4
Sharing office space	Flexiooffice.cz	www.flexiooffice.cz	Service	Yes Cleaning rented space Secretarial services	4
Sharing office space	CowoBrno.cz	www.cowobrn.cz	Service	Yes Cleaning rented space Secretarial services	4
Minor repairs of flats, houses,	Yuve.com	http://yuve.com/	Service	Ano Řemeslníci	2
Financing interesting projects from different areas	Nakopni.me	www.nakopni.me	Crowdfunding	Yes Project realizers	1
Financing creative projects	Hithit.com	www.hithit.com/cs/home	Crowdfunding	Yes Project realizers	1
Financing projects	Peněždroj	www.penezdroj.cz/	Crowdfunding	Yes Project realizers	1
Sharing photographs	FotoBanka.cz	www.fotobanka.cz	Service	Ano Fotografové	2
ICT services	Easytask.cz	www.easytask.cz	Service	Yes Orders realizers	2
Investments into stocks and shares	Fundlift.cz	www.fundlift.cz/#/	Investment crowdfunding	Yes business realizers	2
Advertise ment and	Marketing.n e jzona.cz	https://marketing.nejzona.cz/	Service	Yes Project realizers	2
Offer of craft products	NejŘemeslní ci.cz	https://nejremeslnici.nejzona.cz/	Service	Ano Řemeslníci	2

Sale of crafts and artistic goods	Fler.cz	www.fler.cz/	Sale of products	Ano Prodejci	2
Interconnecting	Poptavej.cz	www.poptavej.cz/	Service	Yes	
Transportation of people in cars	Uber	www.poptavej.cz/	Service	Ano Řidiči	2/4
Sharing accommodati	Couchsurfing	www.couchsurfing.com/	Service	No	1
Transportation of people in cars	Liftago	www.liftago.com	Service	Ano Řidiči	4
Sharing means of	Ajo	www.ajo.cz/	Service	No	4
Sharing bicycles	Rekola.cz	www.rekola.cz/	Service	Yes Maintenance of bicycles, mechanics	4
Spolujízda	Blablacar.cz	www.blablacar.cz	Service	No (*drivers are not professionals)	1
Design and graphic work	Top designer	www.topdesigner.cz	Service	Yes Designers, grphic	2
Household cleaning services	Lidská síla	www.lidskasila.cz/	Service	Ano Uklízeči/ky	2
Food delivery	Dáme jídlo	www.damejidlo.cz/	Service	Ano Řidiči	4
Education	Khan Academy	www.khanovaskola.cz	Service	Ano Odborníci	1
Sale / renting property	Bez realitky	www.bezrealitky.cz/	Service	No	2
Sale of goods	Aukro	www.aukro.cz/	Sale of goods	Yes, in case of professional sellers	2
Interconnecting supply and demand of	Super soused	www.supersoused.cz/	Service	Yes Manual workers / DIY work	2
		-			

*division of shared economy into four quadrants in relation to a need of regulatory interventions – see picture 1 in chapter I.1

1 = the so-called. „true“ sharing which is not carried out for the purpose of financial profit and exists among physical persons. This area does not bring any controversions or a need of regulation.

2 = commercial activities provided for the purpose of profit on the P2P principle.

4 = commercial B2B platforms which use innovative way to put into practise the already existing business models using modern communication technologies and the INternet.

Attachment 3: Unconditional income

Unconditional income should be paid in the same amount to all people and each person should be entitled to receive it no matter whether s/he works or not and what is his/her social situation.

The main reason for the implementation of unconditional income is stated to be **supporting workers' securities** in the conditions of the existing faster and faster changes on labour market, where the jobs become less stable, workers change employment more often or have a time period without employment more frequently, there are new forms of employment that leave traditional legislative frameworks, there are still more workers who are not covered by the traditional system of social insurance, there is a risk of the prekarization of work. Unconditional income should create conditions for more flexible shifts and decision making of the workers themselves to do with changing employment whether it is voluntary or forced or employers to do with dismissing workers or reorganisation of positions at work.

Unconditional income should be paid in the same amount to all people and each person should be entitled to that no matter whether s/he works or not and what is his/her social situation. Income should be paid to every inhabitant irrespective of age, otherwise there would be too big inequalities in families with children and without them. A fair case would not be fair at all.

At present, it makes expenses to social benefits, which are assigned only for specific groups of inhabitants, and for pensions around 12,5 % GDP a year. The main problem of the system of unconditional income is the **costs of providing the income to all inhabitants**. If the unconditional income should replace all social benefits and contributions including the living allowance, it would have to come to at least 8 000 CZK per person. Payment of the contribution to 10 546 000 inhabitants of the Czech Republic¹⁹³ (the number is from 31 December 2015) would come to approximately 20 % of GDP a year. It is almost twice as much as in the existing social security system. Just for comparison - expenses on education in the Czech Republic come to about 4,5 % of GDP.

Those who propose to implement the system of unconditional income argue that it could **save the costs of public administration**, as there would be no proving and testing the eligibility to social support, which is connected with quite a high number of state apparatus for approvals and payments of social contributions. Such saving of the expenses paid from state budget could be significant, however, it would lead to a decrease in the number of jobs. It would be necessary to calculate how many jobs it would apply to and how much could be saved by the system. According to an approximate estimate, the saving could be around 0,16 % GDP, which is a very low number compared to the costs of the fair income.

There is also an argument that the unconditional income could **divide incomes more equally** considering that the uniform amount will show more significantly in the groups with low incomes, where it can constitute as much as 20 to 40 percent of net income, rather than groups with high incomes. This argument will, however, not be enough because this function has already been fulfilled by the current social security system and even much more than the unconditional income ever could.

¹⁹³ Children were then suggested a one third income in a similar way as in the Swiss proposal, recently declined in a referendum.

A great disadvantage and also an undesirable impact of an implementation of the system could be discouraging of some groups of population from active searching for work as well as permanent inactivity and low incomes with well-known negative social impacts, such as surviving from social income, dependancy, criminality and similar.

In conclusion, it is possible to summarize that it would be better to provide rssources which could be used on payments of unconditional income, investments into the future, that is e.g. higher quality of education, better assessment of pedagogic workers or creating new positions in public services, the saturation of which does not reach a level of advanced European countries in the Czech Republic.