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## SHARING ECONOMY AS THE NEW PARADIGM OF THE ECONOMY OF THE FUTURE. RISK ANALYSIS

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*Sharing economy is cooperation and sharing based on providing the opportunity to access goods and services to those, who precisely need such a service. This paper attempts to organise the yet unsettled areas of sharing economy that today determine its risk and make it ambiguous, unequal, unfair and objectionable in the eyes of many a business environments. The aim of this article is to analyze the risk associated with sharing economy. To fulfil this aim the author has discussed: the paradigm of consumption and the common good in the context of the economy of the future, the etymology of the term of sharing economy and identification of risk that is linked with this phenomenon. The studies were divided into two parts: the first concerns theoretical risk analysis of the functioning of sharing economy based on subject literature; the second part is a practical analysis of the risk of the impact of sharing economy on the Polish labour market on the example of UBER application. The following research hypothesis was adopted in the paper: The risk of impact of sharing economy on the labour market in Poland is of little significance. The analysis allowed to identify the following risk types in the number of twenty, which are present today in sharing economy: Unequivocal and coherent concept, Data safety, Taxes, Law regulations, Quality, Service performance guarantee, Pursuing claims, Employees rights, Responsibility for clients, Grey market, Competitiveness, Relations: sharing – business, Licences and permissions, Employment relationship, Deflation, Consumer rights protection, Employment, Abuse, Mentality, Sales. A risk analysis of the effects of sharing economy on the Polish labour market showed that this phenomenon was of low significance in the analysed period.*

*The analysis was based on Bosworth, Dawkins, Stromback model. The research shall cover the period 2010 to 2016 (start of operations of the EUBR application in Poland as of 2014; worldwide: 2009) for sector H of PKD (transport and warehouse management, (for Poland – section: H49 PKD inland transport). The analysis concerns first of all the Polish market, but due to the short period of UBERA's activity in*

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*Poland – data for other economies in the world, where the application is already operating, were also compiled. The aim of such an approach was to find possible implications for the labour market – in countries where the application works longer – and to refer them to possible future implications for the Polish market. The analysis of the risk of the effects of sharing economy on the labour market in Poland showed that the risk of this phenomenon was of low significance in the analysed period. This assessment results from the fact that this phenomenon is new and dynamic on the Polish market. There are also no relevant legal regulations that would integrate this type of economy into the regulated labour market in Poland. However, risks should not be underestimated. In the long term, it may turn out that this type of economy will have a significant impact on the development of the labour market in Poland.*

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**Keywords:** sharing economy, risk, collaborative economy, economy of the future, common good.

## Introduction

Although nowadays, the common good is being rediscovered, becoming the object of numerous discussions and disputes on different levels, the phenomenon of sharing economy is not a new one, as people have cooperated closely from the beginning of time. Currently, it is an economic model based on the circulation of goods and services through sharing, exchanging, selling, lending or giving for free. Thus, it enables access, or the opportunity to meet one's needs without the need to own certain goods and as a result it reduces the waste of valuable resources, as one thing is used by a larger group of people. Owing to cooperation supported by technology communities can co-create, co-fund, co-design, borrow and lend, help and do many more useful activities that make an average person's life easier.

It is impossible to stop the growth of sharing economy. It is the beginning of business evolution around the world. It entails a lot of changes that will have an influence on the worlds' consumerism, economy as well as the development of enterprises and communities. The result of sharing goods today, is the number of globally recognised brands of taxi companies that do not own a single car. Hotel companies that do not have a single bed place. In order for the unavoidable process of sharing to be transparent, understandable, equal for everyone and fair, the accompanying risks should be identified first and then mitigated. Due to the high dynamics of growth of sharing economy, its impact on various aspects of life is more and more often analyzed: from the economic aspect of demand and supply for services and consumer goods, the labour market, to the social aspect (creation of social capital).

This paper attempts to organise the yet unsettled areas of sharing economy that today determine its risk and make it ambiguous, unequal, unfair and objectionable in the eyes of many a business environments. The aim of this article is to analyze the risk associated with sharing economy. To fulfil this aim the author has discussed: the paradigm

of consumption and the common good in the context of the economy of the future, the etymology of the term of sharing economy and identification of risk that is linked with this phenomenon. The studies were divided into two parts: the first concerns theoretical risk analysis of the functioning of sharing economy based on subject literature; the second part is a practical analysis of the risk of the impact of sharing economy on the Polish labour market on the example of UBER application. The following research hypothesis was adopted in the paper: The risk of impact of sharing economy on the labour market in Poland is of little significance. The analysis allowed to identify the following risk types in the number of twenty, which are present today in sharing economy: Unequivocal and coherent concept, Data safety, Taxes, Law regulations, Quality, Service performance guarantee, Pursuing claims, Employees' rights, Responsibility for clients, Grey market, Competitiveness, Relations: sharing – business, Licences and permissions, Employment relationship, Deflation, Consumer rights' protection, Employment, Abuse, Mentality, Sales. A risk analysis of the effects of sharing economy on the Polish labour market showed that this phenomenon was of low significance in the analysed period.

## **1. The paradigm of consumption and the common good and the economy of the future**

The basic assumption of modern paradigmatic neoliberal economics is the predominance of individual freedom over institutions (especially political and economic ones). Its foundations are two main theses of supply-side economics:

- predominance of production, which is the basic aim of economic system, as it provides an increasingly greater level of fulfilling needs;
- predominance of („an invisible hand”) of the market, as the most efficient mechanism of optimal allocation of resources (Zawojnska, 2006), (Jamka, 2014).

The changes occurring in the modern globalised worlds' economy force it to change the paradigm it has so far had. They are: dynamic development of technology and growing social demand in this respect (technology allows to lower transactional costs radically, making exchange cheaper, faster and easier, hence – available on a much bigger scale), recurrent economic recessions (that have caused changes in consumer attitudes, including a tendency to save), sociocultural transformations and changes within societies (such as an increase in mutual trust, the need of comfort and the sense of belonging to a community) as well as constant increase of consumption (a society focused on buying and having).

These phenomena and processes shape a new type of economy: gift economy, which denies both the predominance of individual freedom over institutions, as well as the predominance of production: relations between participants and their social and material status become the effect of goods exchange. A new paradigm of economy oc-

curs as the result of that – economy of the common good, an alternative „model of the economy of the future” (Felber, 2014), Botsman, Rogers, 2010).

Traditional market exchange consists in accessing goods by acquiring ownership rights. The pursuit of owing is an expression of customers' needs and desires. The consequence of owing a given thing is a specific consumer-object relation, regulating an individual's attitude and behaviour towards the owed object. Property means freedom to use the goods and being responsible for them. It also sets the boundaries for other individuals („non-owners”). The owner has the right to regulate other people's access to goods, the right to exclusive use, sale, lease, as well as the right to draw benefits from the goods (Rudawska, 2016).

Nowadays, as a result of an objection against neoliberal globalisation and the search of new ideas concerning society's organisation and management of goods – the idea of the common good takes on a new dimension.

According to M. Piechowiak: „the common good (see Figure 1) is – described on the ground of political community – the sum of conditions of social life enabling and facilitating – allowing to achieve integral development of all the members of a political community easier and to a greater extent” (Piechowiak, 2012).

According to the quoted definition the essence of the common good is development: integral, relating to all people and communities, stemming from proper, supportive living conditions. When further interpreted, this definition entails the prohibition to favour a certain type of social groups over others and to use the common good for the purpose of securing individual interests (Jamka, 2014).



**Figure 1. Common good components**

Source: own study on the basis of: (Jamka, 2014).

According to K. Strzelczyk (2009) the definition of the common good should determine its contents and constant elements as well as include an element that will allow to redefine the concept, confronting the constant with changeable forms and social conditions.

Ch. Felber (2014) emphasises that what „common good” actually is, is democratically determined by a given community. It can be a certain resource, a single commune, region, a whole country. What is more, values that are of a great importance to one community, can be totally insignificant to another. Hence, there is not a central list of common goods, as such goods occur wherever and whenever a community decides to manage resources in a collective way, taking into account equal access, usefulness and sustainable management.

On the grounds of economics, a significant influence on the revival of research activity and on the development of the concept of the common good was exerted by research results of a Nobel Prize winner Elinor Ostrom (1990), who, against the trend of conventional economics (Aleksandrowicz, ([http](#))), rebutted Hardin's objectives and undermined his thesis, according to which the only effective way of development is privatisation, proving the efficiency and effectiveness of community management systems. She showed that one should refer to much richer regulating institutional structures, as the idea of cooperation of local communities can often solve a part of problems (Noga, ([http](#))).

This revival is also supported by the activity of Muhammad Yunus (2013, ([http](#))), the winner of the Nobel Peace Prize, founder of Grameen Bank, called, not without reason, banker to the poor. Being an advisor to the European Commission, he made numerous public speeches in the European Union (EU) Member States as well as during World Economic Forum in Davos, where he presented social entrepreneurship solutions that have been verified in Asia, for instance. He also set out the models of social economy functioning in Europe as well as recipes for solving social problems, reducing the growing differences and effective cooperation between public and private capital (Ślodowa-Hełpa, 2015).

Also D. Bollier states in his works (2012, 2014) that the economy of the common good is in the embryonic stage of development and it is the challenge for the economists to notice the common good and find ways to protect and strengthen it. He claims that the essence of the common good is the practical paradigm of self-management, resource management and decent life. According to Bollier, the common good is:

- a social system of long-term care for resources, protecting the common values and identity of a community;
- a system of self-organisation allowing communities to manage resources (renewable and non-renewable) with a minimal or zero contribution of the state and market.
- collective wealth inherited or created together, which should be passed on, unimpaired, or even improved, to next generations;
- an area of economy creating new values with methods often considered trivial, often endangered by state-market system.

According to E. Ostrom (1990) the project of efficient management of the common good should include:

- 1) unambiguous definition of common good boundaries;

- 2) adjusting the rules of using the common good to local conditions;
- 3) collective creation of rules of managing the common good
- 4) supervision – monitoring the compliance with the rules by community's members or by external actors liable to the community;
- 5) gradable sanctions in case of rule breaking, taking into account incidental breach of the rules in the event of unexpected emergency conditions (e.g. severe weather);
- 6) effective and cheap mechanisms of conflict solving;
- 7) the system's independence – the institutions of common good management being accepted by external bodies (e.g. the government)
- 8) multilevel institutions creating bigger systems, coordination of the rules on different levels of the given resource's operation.

In the aspect of sharing economy size, proposed by F. Bardhi i G.M. Eckhardt (2012), one can characterise shared consumption through the prism of: anonymity level, consumption relation's duration, consumer involvement level, market mediation, type of available goods and ideological message.

Anonymity determines the relation between consumers of the shared good. It can be wholly anonymous in relation to other users of a given product (e.g. a car or a flat), devoid of interaction with them or involve social access within the meaning of public context of using goods and services. Consumers can use a given object together with other people (peer-to-peer sharing) or consume the goods together in dedicated places (e.g. gardens or libraries).

Another criterion according to which sharing economy is characterised relates to consumption's duration and the availability itself. The latter can be one-off (such as an incidental car renting) or long-term, fortified by membership in a given club.

In a similar way, we can diversify the time of using given goods, counting in hours (as in car sharing models) or years (as in leasing). In case of the latter, Strahilevitz and Loewenstein (1998) indicate that duration of use can be a factor in the creation of a „consumer – consumed object” relation, analogous to that, which is created in case of ownership.

In another criterion – consumer engagement, we can observe the phenomenon of co-creation, or even assuming the role of an employee or an agent by the consumer (Frei, 2005). The users of the goods themselves perform activities considered as the service provider's responsibilities (as, for example, car refuelling, keeping it clean and in good technical condition, damage notification, etc.).

The fundamental criterion for sharing economy characteristics is the use of market as an agent. Consumption based on access can function on non-profit rules (it has been known for years in the form of libraries, and more recently in the form of city bike systems) or market rules. In such a case, the intermediary institution manifests economic motivations and usually collects fees from the participants of the created market, for the use and/or belonging to the group of users.

The last criterion for characterising consumption based on access is the extent to which ideology is involved. What is meant by this, is the use of market activity as the ground for stating certain convictions and treating consumer choices as tools in politics, in a way.

Hence, modern economists should be occupied with responding to the demand for practice in terms of the consumption of the common good. A growing interest in the common good is not only reserved to researchers representing different areas. Social movements based on this concept are growing around the world and numerous projects spontaneously assume the discourse of the common good as a structure organising their efforts. In this way, what is being created is a new paradigm of the economy of the future, which cannot be stopped and which is based on sharing economy.

## **2. Sharing economy – the term's etymology**

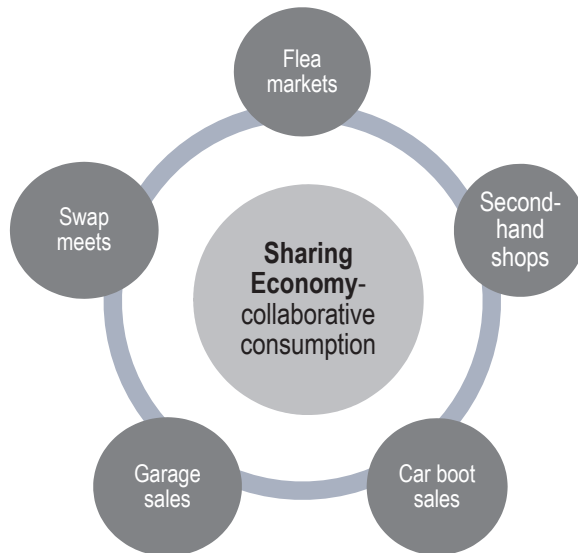
In the history of economy, the phenomenon of sharing resources by people is nothing new. Such a model of economic activity has been robust for many years around the world. In Poland it is a relatively new phenomenon, but one gaining popularity very quickly. Sharing economy is cooperation and sharing based on providing the opportunity to access goods and services to those, who precisely need such a service. The whole idea is based on the so-called „trust infrastructure” entailing sharing, borrowing, lending, exchanging goods and services by people. This principle is the basis for a growing number of Internet exchange websites, where the users offer their services without asking for money in exchange. Security is provided with opinions about the users, that either testify in favour or against a given person.

According to A. Stephany, sharing economy draws value from using assets that are not fully used and making them available on-line for a community, which leads to lessening the need for owning them. Defined in this way, sharing economy is based on five basic pillars: value, not fully used resources, on-line availability, community and decreased need for ownership (Stephany, 2015).

In Poland, this phenomenon has been called a „hurricane able to change the world's economy”, whereas Financial Times has called it „a completely new form of capitalism”. Without doubt, the growth of sharing economy entails a lot of changes that will have an influence on the world's consumerism, economy and enterprise growth. This phenomenon is based on people's tendency for cooperation, helping other people and sharing time and resources, which is reciprocated in different ways (material and non-material). Some time ago, such a form of cooperation was limited to a small circle of family, acquaintances and neighbours, but with mass production, growth of trade and services as well as greater migration resulting in multi-generation families being separated and losing acquaintances, this phenomenon was slowly becoming less important and its functions have been taken over by companies and institutions (e.g. public ones).

Another aspect of human nature, which is the will to compete and care for individual interests is the basis of classical economics, but in the conditions of market economy it sometimes leads to distortions (exploitation, fraud, etc.). Thanks to new technologies, cooperation economy is again gaining popularity and economic rationality. The catalyst of its dynamic growth was the financial crisis in 2008, as well as the need for saving, using resources in a better way and changing social relations. Sharing economy transforms well known capitalism into its new form – economy that is also based on money, but uses resources in a more efficient way. Its basic idea is the motto: „the more we share the more we have together”.

Late 20<sup>th</sup> and early 21<sup>st</sup> century have brought an increased interest in alternative ways of accessing goods with underlying strive for sustainability. However, the concept of shared consumerism is not at all new. A term similar to sharing economy – collaborative consumption (see Figure 2) was for the first time used in 1978 by Marcus Felson and Joe L. Spaeth in their article in „American Behavioral Scientist”. They described this form of consumption as a process, in which one or more people consume goods or services by engaging in different activities with others (Felson, Spaeth, 1978).



**Figure 2. Collaborative Economy**

Source: own study.

However, the term sharing economy was used for the first time only in 2008. It was the year that professor Lawrence Lessig (Lessig, 2008) used it to describe the transaction of borrowing goods and resources, which was in a way opposed to the transaction of buying.



The pioneers of study on the consumers' behaviour in the format of sharing are: Belk (2010) and Chen (2009). Their works have become a conceptual guide, explaining the phenomenon of mutuality in a consumer-consumer relation.

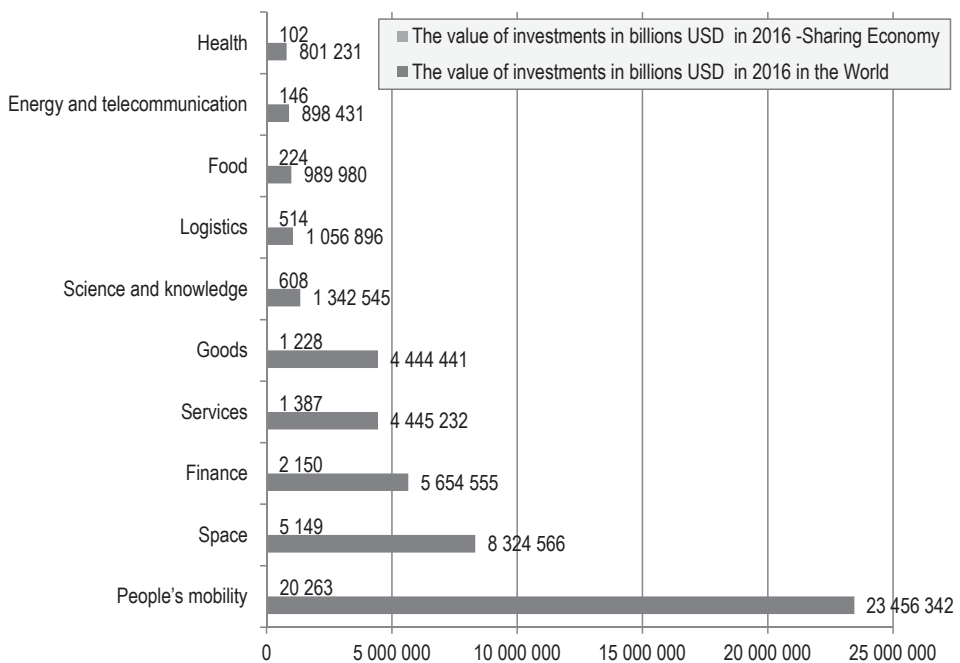
According to the report of PricewaterhouseCoopers „Share and rule. Sharing economy” – more than 9,000 companies around the world operate in this economy model. Those companies will achieve a 22-fold revenue increase – from USD 15 billion in 2014 to USD 335 billion in 2025 – and it is only in the five basis areas: transport, financial services, tourism, hotels and appointing the employed people. Table 1 presents examples of the most famous companies basing their strategy on the assumptions of sharing economy together with a short characteristics of their activities.

**Table 1. Companies operating on the basis of sharing economy business model as of 31/12/2015**

Company Name	Description of activity
Airbnb	a global website enabling people to rent private flats
bag4rent.pl	renting luxurious women's bags
Blablacar	transport of people on long distances with additional passengers to reduce the cost
Cookisto	cooking meals together
Couchsurfing	a website for offering a bed space (a couch) for foreign tourists
Deezer	sharing music within one's subscription
Dogvacay	a website allowing users to look for each other's pets while their owners are on holiday
Finansowo.pl	social loans
Flightcar	renting cars left by their departing owners at airports
GoGet.pl	sharing bikes and cars
Green coffee	a chain of coffee shops offering a coffee in exchange for a book
iParkomat	offering parking spaces
JadęZabiorę	a website of express packages, sent also abroad
Kickstarter	a website allowing one to support projects proposed by Internet users
Lyft	transport of people and goods
Netflix	making films available online
Nextbike	renting city bikes
planetazabawy.pl	renting children's toys
Polakpotrafi	social financing of business projects
SirLocal	access to professionals of different areas
Skilltrade	a website for exchanging skills/work
Spotify	a website for sharing music in exchange for a subscription fee
Systemy Rowerów Publicznych	city bike rentals
Taxi2	sharing taxi fee costs in connection with co-passenger choosing (e.g. women choose only other women)
TrustCloud	managing standards of project trust (aggregating reputation)
Uber	taxi and transport services
UlaLa Chef	booking private chefs
Wooloo.pl	a website for exchanging services in the form of a given type of work
wymiennik.org	a website for exchanging goods and services
Zilok	renting car – campers
Zipcar	sharing cars

Source: own study on the basis of (*Współdziel i rządź...*, Zgiep 2014; Zysk, 2016).

As can be seen in table 1, sharing economy works in at least four general models: C2C (*consumer to consumer*, i.e. on-line area of business in relation to private persons), B2C (*business to consumer*, i.e. business relation between a company and a final customer, initiated by the company), C2B (*consumer to business*, i.e. a category of e-business, reversing the traditional mode of sales, involving customers' placing offers on-line on special websites) and B2B (*business to business*, i.e. trade relations between companies, the so-called *e-commerce*). The described enterprises have an established position on many markets. Airbnb for instance – with a value of over USD 20 billion – has over 11 thousand advertisements on its Polish website ([www.airbnb.pl](http://www.airbnb.pl)), being over 10% of Polish hotel base. The creator of this business idea is – Brian Chesky, who has already earned more than USD 2 billion. During just one year – between 2014 and 2015 – the value of loans granted in sharing economy model rose sevenfold, from USD 9 billion to USD 64 billion (<http://www.pwc.pl>). Netflix, offering access to films on-line has over 74 million subscribers in 190 countries. Uber – with the value of USD 18 billion – is currently operating in over 400 cities around the world (Zysk, 2016). Global investments' worth in sharing economy in 2015 was: USD 31,771 million (see Figure 3).



**Figure 3. Global investments' in the World and Sharing Economy**

Source: own study on the basis of: Sharing economy in Poland in 2016.

Sharing economy model is becoming increasingly popular among people and institutions, including Polish and European government bodies. Between 25 September 2015

and 6 January 2016 the European Commission performed first public consultations on the subject of sharing economy (Dervojeda, 2013). At the beginning of 2016, Commissioner for Internal Market and Services of the EU – E. Bieńkowska – announced that the European Commission will develop detailed guidelines for EU Member States, pointing out the regulating rules of the EU's area of sharing economy, as the present legal framework is incompatible with this modern sector. On 2 June 2016, European agenda for sharing economy was published. European Commission wants sharing economy to become one of the driving forces of EU economies. The adopted agenda supports consumers, entrepreneurs and state authorities in „bold participation” in sharing economy. In further perspective, EU plans to observe and analyse the situation in different countries, yet, without interventions in the form of laws, in order to avoid losing competitiveness with other regions of the world, remembering that a lot of business models function within the phenomenon of sharing economy and it is difficult to provide a single framework for them.

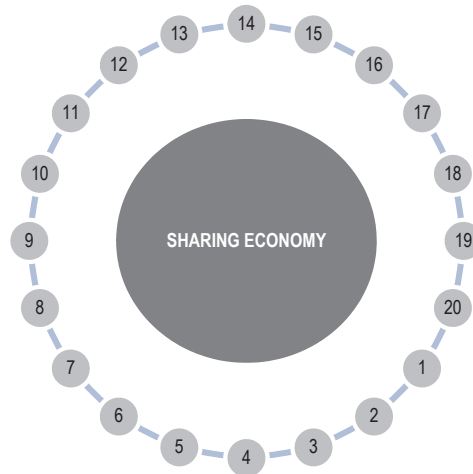
### **3. Risk in sharing economy**

As has been stated earlier – the lack of transparency and organisation in sharing economy today makes all its aspects corresponding to this disorganisation determine its risk. It is worth identifying those areas and analyse the risk they generate – and in consequence trying to mitigate it. Only then, will sharing economy process be unambiguous, understandable, coherent and equal for everyone. The main risks (20) identified by the author are included in Figure 4.

(1) – Unequivocal and coherent concept – lack of an unequivocal definition describing the scope and status of sharing economy.

(2) – Data safety – the development of network communities, mainly due to Internet, has shown that property right does not guarantee ontological safety any more and that it does not provide a sense of independence. Accumulating a lot of information by technological companies does not promote the confidentiality of our data. Actually, it excludes this confidentiality. There is also the lack of legal regulations related to collecting personal data and the possibility to commercialise them.

(3) – Taxes – varying ways of regulating creditors by entities in the area of sharing and traditional economy. As the result the entities of the first group weaken competitors that are subject to charges, and hence – more expensive on the one hand, and on the other hand they lower budget income. They do not pay PIT, social insurance nor CIT. Another problem is related to people who misuse the possibility of joint journeys offered by BlaBlaCar, for instance, using company cars for taking passengers. Thus, they become tax-free service providers.



**Figure 4. Risks identified in Sharing Economy: (1) – Unequivocal and coherent concept, (2) – Data safety, (3) – Taxes, (4) – Law regulations, (5) – Quality, (6) – Service performance guarantee, (7) – Pursuing claims, (8) – Employees' rights, (9) – Taking responsibility for clients, (10) – Grey market, (11) – Competitiveness, (12) – Relations: sharing – business, (13) – Licences and permissions, (14) – Employment relationship, (15) – Deflation, (16) – Consumer rights' protection, (17) – Employment, (18) – Abuse, (19) – Mentality, (20) – Sales.**

Source: own study.

(4) – Law regulations – modern law cannot keep up with economy growth. „Traditional” entrepreneurs are worried by the fact that law accepts unequal treatment of different market participants. The law lacks clear regulations that would result in the fact that services provided as part of traditional and sharing economy are performed on equal terms by all entities, respecting the rules of fair competition. It pertains both to business risk (divided between the user, the lender and the website's owner) and to the risk related to conducting business and social protection provided to people who work like that. Providing services as part of sharing economy is subject to different laws in different countries. Legal and tax systems were not prepared for the development of this kind of services, which results in protests of companies operating within traditional economy. European legal framework is inadequate in relation to new business models.

(5) – Quality – lack of norms and standards.

(6) – Service performance guarantee – lack of it, the clients can do as much as to give a negative opinion for service that was incompatible with their expectations or for unethical practices.

(7) – Pursuing claims – in fact, the issue claims related to improperly performed service as part of sharing economy is not undertaken by law. Clients can do as much as to give a negative opinion for service that was incompatible with their expectations or for unethical practices.

(8) – Employees' rights – lack of them, as there are no civil law contracts nor a relationship between an employee and service provider.

(9) – Taking responsibility for clients – lack of responsibility as there are no civil law contracts nor a relationship between an employee and service provider.

(10) – Grey market – resulting from the lack of payment settling by entities in sharing economy.

(11) – Competitiveness – lack of legal regulations related to competition. Sharing economy new model, expressing the effect of one of the so-called Porter's Five Forces, i.e. danger posed by substitutes. There are new players in the market acting according to the new business model, which becomes a danger for the already existing solutions.

(12) – Relations: sharing – business – resulting from the lack of unequivocal definition describing the scope and status of sharing economy, the latter is being distorted. We can talk about sharing economy when we deal with exchange groups with close relations between individuals. If this is a purely commercial relation, then it is taking advantage of the trend for business purpose, which should be regulated by law. Hence, there should be a clear division between grassroots projects based on sharing economy, such as object exchange groups, and companies using this trend for business purposes. An indispensable condition for sharing consumption is maintaining close relations between people. If there are no close relations, it is pure business. It is very difficult to distinguish between those who operate on the principle of barter, good exchange and those who do it for profit. Making such a distinction seems impossible.

(13) – Licences and permissions – lack of clear regulations results in the fact that participants of sharing economy do not have: a proper licence, cash registers in cars, a clear price list in cars, social insurance. Individuals who conduct business on „traditional” market are obliged to meet standards determined by a given industry, e.g. finish certain trainings, pass exams, have appropriate certificates, comply with safety, buy insurance covering damages incurred for conducting certain business. In case of people offering their services or goods as part of sharing economy, those are not required, as there are no appropriate regulations that would correspond to the development of new technologies and to social and economic changes it entails.

(14) – Employment relationship – business practice as part of sharing economy leads to employment relationship and work ethos being made precarious. Legal solutions in terms of labour law are not adjusted to „serve” sharing economy and the state finds it difficult to play the regulating role.

(15) – Deflation – Bigger tendency to share can theoretically lead to decreased sales within an economy, and even to deflation and unemployment.

(16) – Consumer rights' protection – lack of consumer protection against unfair market practices. If the service is not provided – the consumer can only hope for the refund of commission or part of payment. Buying a new product makes consumers in „traditional” economy more protected by specific laws, e.g. the act on conformity of goods

with the contract. It provides consumers with a range of rights, for example the seller has to repair or exchange goods. In case of exchange or sharing, the person liable for damages caused by this product is not identified.

(17) – Employment – so far, sharing economy does not entail employing people full-time. They are rather independent service providers or entrepreneurs. The possible need of employing cooperators can be a big problem for companies within sharing economy. What is more – less demand for cars resulting from sharing them to a greater extent will cause a quick decrease of employment in automotive industry and maintenance services. Advanced systems will replace or oust employees from different positions, which will mean: letting off.

(18) – Abuse – for instance, when people having a few immovables rent them throughout the whole year to tourists, or when sales representatives going on business trips take a few passengers in their company cars.

(19) – Mentality – sharing economy requires social trust. However, the following statement often occurs: „I will not exchange, because he will destroy it”.

(20) – Sales – as a result of discrepancy between regulations relating to entities functioning within traditional and sharing economy, there is a decrease of turnover of the entities operating within the boundaries of law (e.g. „traditional” hotels are confronted with apartments rented occasionally for less money and with less business costs).

## **4. Assumptions, method, research results and conclusions**

### **4.1. Assumptions and method**

The point of reference for conducted empirical research is the analysis of the risk of the impact of sharing economy on the Polish labour market on the example of UBER application. The choice of research area was dictated by the controversies raised by this application in many countries (e. g. UBERA's entry into Poland triggered protests by traditional taxi operators). There was also a discussion on the „bright and dark” sides of American application activity in Poland. This is an example of a collaborative economy, which is common in many EU and global countries. UBER is also the longest running example of sharing economy in international business (currently operating in 632 cities, 82 countries and 1 billion connections operate). For the purposes of the analysis, the aspect of meeting the formal requirements that must be met in order for this form of business model to function in the territory of a given country has been omitted. In many cases these requirements have been omitted by the UBERA, hence the controversy on this subject mentioned earlier (the opponents of the UBER claim that it is not sharing economy). UBERA's influence on the local labour market was analysed, with particular emphasis on the Polish labour market. The research shall cover the period 2010 to 2016 (start of operations of the EUBR application in Poland as of 2014; worldwide: 2009) for

sector H of PKD (transport and warehouse management<sup>2</sup>, (for Poland – section: H49 PKD inland transport). The analysis concerns first of all the Polish market, but due to the short period of UBERA's activity in Poland – data for other economies in the world, where the application is already operating, were also compiled. The aim of such an approach was to find possible implications for the labour market – in countries where the application works longer – and to refer them to possible future implications for the Polish market. This analysis is the starting point for next research on sharing economy.

The following research related to consumption were used in the conducted research: it was assumed that consumption in a balanced state was,  $\hat{C}$  depends on current income  $Y$ :

$$C_t = \alpha_0 + \alpha_1 Y_t \quad (1)$$

The following consumption function with a single delay corresponds to two findings: firstly, that an aggregate consumption model can be built and, secondly, that the reaction of consumption to current income is weak. Assuming that only a certain part,  $\beta_1$  of the difference  $\hat{C}_t - C_{t-1}$  is realised in year  $t$ , is obtained:

$$C_t - C_{t-1} = \beta_1 (C_t - C_{t-1}) = \beta_1 (\alpha_0 + \alpha_1 Y_t - C_{t-1}) \quad (2)$$

It follows from this that:

$$C_t = \beta_1 \alpha_0 + \beta_1 \alpha_1 Y_t + (1 - \beta_1) C_{t-1} \quad (3)$$

In order to avoid possible autocorrelation of random components, the analysis will then relate to the equation:

$$\Delta C_t = \beta_1 \alpha_1 \Delta Y_t + (1 - \beta_1) \Delta C_{t-1} \quad (4)$$

where:

$C_t$ , National income,

$Y_t$ , Variables depending on private investment expenditure  $I_t$ ,

deduction of taxes,  $(1-\tau) Y_t$ , where:  $\tau$  is the tax rate, and consumption expenditure of the previous year,  $\beta_i^* = (1-\tau)\beta_1$ .

The analysis was based on Bosworth, Dawkins, Stromback (1996) that the labour market is a place where employers' demand for labour is „meeting” with the labour supply reported by employees. This market determines the labour price, i. e. the rate paid as an equivalent for the work done. In the case of conducted research, the partici-

<sup>2</sup> According to the International Labour Organisation classification (ILO).

pants in sharing economy are persons conducting business activity consisting in offering transport services to individual customers thanks to the Uber platform. The development of sharing economy as a profit-oriented business model has a significant impact on the labour market. Therefore, the analysis will focus on this group of sharing economy participants. It will be conducted on the basis of a popular communication application [www.uber.com](http://www.uber.com) (Polish version). According to the declarations of both application owners and drivers, drivers are independent self-employed in this model of cooperation. They do not receive a fixed wage. Their remuneration depends on the number of completed courses and kilometres travelled, or alternatively on the provision of additional services (e. g. instructions and persuading the next partner to cooperate). They bear the full risk for their activities. They are also owners of car equipment.

#### **4.2. Research results and conclusions**

Undoubtedly, the number of observations for Poland is insufficient to conclude at present on sustainable trends in the labour market. It can only be verified whether in the analysed period of 2014–2016 disproportions occurred in changes on the Polish labour market. In 2014–2016, the number of employees in the national economy increased by 1.02%. (see Table 2). In the same period the number of persons conducting business activity in section H of PKD increased by 1.09%. The number of entrepreneurs conducting business activity in section H49 of PKD increased by 1.28%. The share of persons employed in the PKD H sector in the total number of employees increased slightly from 5.7% to 6.0%. Also, employment in section H49 of PKD in the total number of employees increased slightly: from 0.02% to 0.03%. The share of persons employed in section H49 of PKD in the number of persons employed in section H of PKD increased from 3.5% to 4.2%. It was also a modest increase. In Poland, the number of people working for UBER reached to 41 thousand at the end of 2016 (see Table 2).



**Table 2. Number of persons employees in the economy and transport (land) sector in 2010–2016 (in thousands) for UE-28**

Country/ Indicator	2010	2011	2012	2013	2014	2015	2016
AT	3344/989/12	3403/991/18	3427/990/21	3449/998/21	3472/999/22	3512/989/21	3565/998/20
BE	3853/1054/20	3894/1005/19	3881/991/20	3870/1009/21	3803/1100/22	3913/1121/24	3978/1134/25
BG*	3024/878/0	2974/798/0	2952/800/0	2932/807/0	2990/678/17	3062/998/20	3006/900/20
CY	395/12/5	398/19/3	385/20/5	365/20/6	363/21/6	358/21/7	367/23/7
CZE*	4864/899/0	4885/989/0	4917/900/0	4958/1000/16	5017/1003/17	5076/1009/18	5187/1100/19
DK	2647/565/9	2639/601/8	2619/600/9	2614/600/9	2673/656/8	2704/698/10	2746/700/11
EE	590/21/6	609/17/6	615/22/7	616/23/8	630/26/9	639/26/9	638/28/9
IE	1857/787/5	1845/766/6	1844/797/6	1903/777/7	1932/789/8	1978/801/9	2045/810/9
EL*	4194/991/0	3815/1001/0	3547/1002/0	3470/1009/0	3484/1109/0	3635/1001/10	3637/1102/11
ES	18408/2000/3	17808/1989/5	16957/1780/4	17135/1899/5	17569/1981/6	18094/1999/6	18508/2002/6
FI	2397/656/4	2411/665/3	2413/709/4	2409/700/5	2413/712/5	2387/750/6	2421/790/6
FR	26965/1231/22	26965/1299/23	27206/1301/24	27332/1315/25	27418/1399/27	27595/1412/30	27799/1423/32
GE	41252/1898/30	41763/1995/32	42163/1990/33	42393/1997/39	42715/1999/42	43237/1965/46	43822/2001/50
HU*	3722/878/0	3758/879/0	3814/883/0	3986/893/0	4126/899/16	4239/900/17	4400/915/18
HR*	1528/354/0	1479/340/0	1402/376/0	1387/350/0	1552/349/0	1584/354/15	1579/361/16
IT	22598/899/20	22584/902/21	22397/900/22	22176/901/22	22383/904/23	22560/909/24	22581/910/26
LV*	862/21/0	877/24/0	893/25/0	900/27/0	882/25/0	900/26/7	890/26/8
LT*	1276/770/0	1259/770/0	1269/775/0	1299/776/0	1322/779/0	1339/780/7	1358/782/8
LU	360/11/6	371/12/7	379/13/5	386/15/6	396/15/7	407/16/8	420/16/8
MT	147/4/2	151/6/3	153/7/3	159/7/3	165/8/4	174/9/6	184/9/6
NL	8297/565/12	8337/677/15	8325/690/16	8214/645/17	8258/644/15	8310/640/17	8487/639/18
PL*	15557/891/0	15613/890/0	15636/895/0	15713/923/0	<b>16018/913/32</b>	<b>16280/955/38</b>	<b>16325/972/41</b>
PT	4690/545/12	4523/500/13	4303/498/14	4369/499/15	4398/499/15	4481/500/15	4567/502/15
RO*	4102/776/0	4172/776/0	4312/777/0	4328/777/0	4423/778/0	4571/780/22	4733/779/24
SL*	818/21/0	817/20/0	792/21/0	791/19/0	799/20/21	803/21/22	824/21/23
SK*	2339/754/0	2316/750/0	2314/750/0	2327/753/0	2391/753/28	2452/755/30	2513/758/31
SE	4573/1235/2	4645/1252/3	4687/1276/3	4723/1289/5	4810/1291/7	4871/1299/8	4944/1301/9
UK**	28491/1899/45	28472/1902/46	28909/1765/49	29269/1787/50	29875/1877/52	30339/2045/58	30636/2050/62
<b>Poland</b>							
<b>1. Employees in the economy, total number of thousands</b>							
<b>2. Employees in the land transport sector – transport services, in thousands [H PKD]</b>							
<b>3. Employees in the land transport sector, based on the UBER application in thousands [H49]</b>							
Total 1	15557	15613	15636	15713	16018	16280	16325
Total 2	891	890	895	923	913	955	972
Total 3	0	0	0	0	32	38	41
Share 2 in 1 (1PL)	5.7%	5.7%	5.7%	5.9%	5.7%	5.9%	6.0%
Share 3 in 2 (2PL)	0%	0%	0%	0%	3.5%	4.0%	4.2%
Share 3 in 1 (3PL)	0%	0%	0%	0%	0.02%	0.02%	0.03%

Table 2 continuation.

1. Employees in the economy, total number of thousands							
2. Employees in the land transport sector – transport services, in thousands [H PKD]							
3. Employees in the land transport sector, based on the UBER application in thousands							
Total 1	213150	212783	192353	213473	216277	219500	214521
Total 2	20895	22835	21553	21815	22226	22779	23052
Total 3	215	231	245	280	409	460	538
Share 2 in 1 (1UE)	9.80%	10.70%	11.2%	10.20%	10.30%	10.40%	10.70%
Share 3 in 2 (2UE)	1.03%	1.01%	1.14%	1.28%	1.84%	2.02%	2.33%
Share 3 in 1 (3UE)	0.10%	0.11%	0.13%	0.13%	0.19%	0.21%	0.25%

Explanations:

1/ AT – Austria, BE – Belgium, BG – Bulgaria, CY – Cyprus, CZE – the Czech Republic, DK – Denmark, EE – Estonia, IE – Ireland, EL – Greece, ES – Spain, FI – Finland, FR – France, GE – Germany, HU – Hungary, HR – Croatia, IT – Italy, LV – Latvia, LT – Lithuania, LU – Luxembourg, MT – Malta, NL – the Netherlands, PL – Poland, PT – Portugal, RO – Romania, SL – Slovenia, SK – Slovakia, SE – Sweden, UK – the United Kingdom.

\* Start of UBER application operation in the country.

\*\* Due to contradictory information regarding the date of Britain's final exit from the EU, the analysis did not delete the UK.

Source: own study.

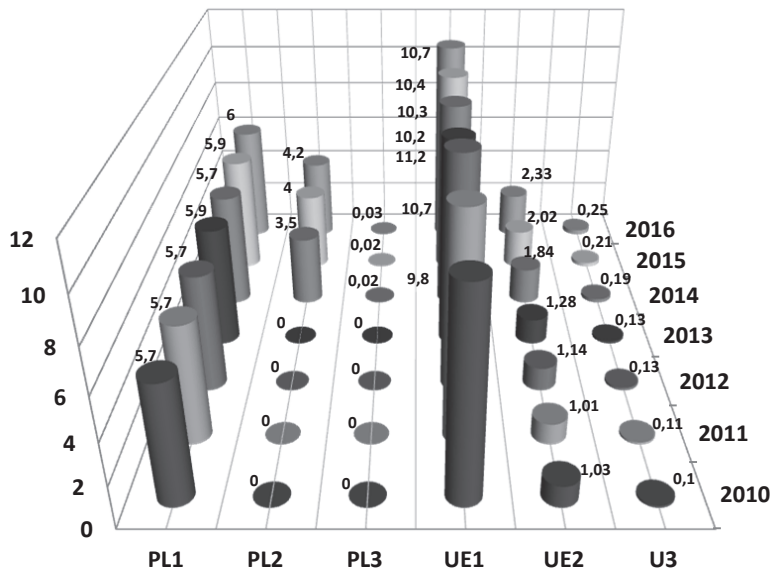


Figure 5. Employees in the land transport sector– in the EU-28 and Poland 2010–2016

Employees in the land transport sector – transport services / Employees in the economy, total number; Employees in the land transport sector, based on the UBER application / Employees in the land transport sector – transport services; Employees in the land transport sector, based on the UBER application / Employees in the economy, total number – in the EU-28 and Poland 2010–2016.

Source: own study. The author's own development based on Table 2.

Uber's entry into the Polish market did not bring about any changes in the local market. For the time being, it is not possible to talk about the risk of this application functioning for the labour market in Poland. However, this may mean that despite the large number of registered entities, for a significant part it is not a primary occupation. Therefore, even if the activity is carried out fully legally, it is not included in official statistics of sector H of the PKD. The entry of Uber into the Polish market was also not associated with a noticeable decrease in the number of people employed or doing business in a traditional manner in section H49 (see Table 2 and Figure 5).

On the other hand, the share of Poland's indices in relation to the European Union is noticeable. At the end of 2016, indicators PL1 and EU1 as well as PL2 and UE2 were relatively similar. They amounted to 6.0% and 10.70%, as well as 4.2% and 2.33%, respectively (see Table 2 and Figure 5). This may be an indication of a great interest of the Polish market among other EU countries by the UBER application owner – especially in 2015–2016 (during this period, the application was introduced into the new 11 countries, also in Poland) – see Table 2 and Figure 5.

## Conclusions

The aim of this article was to analyze the risk associated with sharing economy. The aim of the study was achieved. The analysis allowed to identify the following risk types in the number of twenty, which are present today in sharing economy: Unequivocal and coherent concept, Data safety, Taxes, Law regulations, Quality, Service performance guarantee, Pursuing claims, Employees' rights, Responsibility for clients, Grey market, Competitiveness, Relations: sharing – business, Licences and permissions, Employment relationship, Deflation, Consumer rights' protection, Employment, Abuse, Mentality, Sales. Accepted research hypothesis: The risk of impact of sharing economy on the labour market in Poland is of little significance – it has been realised. The analysis of the risk of the effects of sharing economy on the labour market in Poland showed that the risk of this phenomenon was of low significance in the analysed period. This assessment results from the fact that this phenomenon is new and dynamic on the Polish market. There are also no relevant legal regulations that would integrate this type of economy into the regulated labour market in Poland. However, risks should not be underestimated. In the long term, it may turn out that this type of economy will have a significant impact on the development of the labour market in Poland.

The analysis carried out shows that the economy of sharing avoids previous definitions and institutional arrangements concerning the labour market. Users of this business model cannot easily be qualified to any of the working groups described by existing institutions and regulations regulating labour relations. The development of sharing economy indicates that new arrangements for defining labour market participants are necessary. The current division between employed and self-employed workers is insuf-

efficient. Furthermore, the definition of institutional working conditions needs to be redefined, including the rules on taxation and social security for work carried out as part of the sharing economy. Further research in this area is therefore needed.

In the context of performed analysis and identified risk factors, it has to be stated that it is an urgent issue for theoreticians and practitioners of sharing economy to find new legal structures, institutional forms and social practices that will allow different kinds of common goods to function on a bigger scale. We need innovations in terms of law, social policy, self-government, culture and social practice building an outlook different from the one which is dominant in systems based on state and market. European Union sees a chance offered by sharing economy, to provide Member States with an important growth stimulus. It seems that sharing economy will continue to grow. In further perspective it can contribute to decentralisation of capital and authority in the world, becoming the new economy of the future.

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