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## TURNING CONSUMERS INTO PROVIDERS IN THE SHARING ECONOMY: EXPLORING THE IMPACT OF DEMOGRAPHICS AND MOTIVES

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#### Abstract

The sharing economy is an emerging industry with potential for ensuring sustainable economic growth since it is based on underused resources. The aim of this study is to explore the impact of demographic characteristics (age, gender, education and income) and motives (financial benefits, fun, meeting people and social responsibility) on turning a sharing economy consumer into a provider. Descriptive and multivariate statistical analysis has been carried out on data from a large survey conducted in twelve European countries on the state of the sharing economy. The empirical results show that men and individuals under 35 years of age are more likely to participate in the sharing economy as providers. Moreover, consumers who are more driven by altruistic motives and less by financial benefits are more likely to offer their services as providers. This research can be useful to policy makers and managers in exploring the

opportunities of supporting broader participation in offering services as providers in the sharing economy.

## Keywords: sharing economy, collaborative consumption, motives, binary logistic regression

#### 1. INTRODUCTION

The sharing economy, also referred to as 'collaborative consumption' (Botsman, 2013; Botsman & Rogers, 2010; 2011), 'access-based consumption' (Bardhi & Eckhardt, 2012), 'peer-to-peer marketplaces' (Cullen & Farronato, 2014), or, with the term preferred by the European Union, 'collaborative economy' (EU Commission, 2016), emerged as an answer to the hyperconsumption of the 20th century. Past literature shows that people are turned away from ethical consumption because of economical and institutional reasons (Bray, Johns & Kilburn, 2011; Eckhardt, Belk, & Devinney, 2010), yet with the development of new ways of consumption through the sharing economy some of these issues are addressed. Collaborative consumption has existed among friends and family for a long time, but platform-based information technologies and business models provide a wide scope for strangers from all over the world to share goods and services. The focus is on access over ownership (Belk, 2014a; 2014b; Grassmuck, 2012), enabling people to make use of what Benkler (2004) calls the "excess capacity of goods and services". "Collaborative consumption" or the "sharing economy" is the peer-to-peer-based activity of obtaining, giving, or sharing access to goods and services, coordinated through community-based online services, which can be considered as an appealing alternative for consumers (Albinsson & Perera, 2012; Belk, 2010; Botsman & Rogers, 2010; Gerwe & Silva, 2020).

The sharing economy offers a marketplace where individuals can share goods or services with one another in economic transactions. The potential of the growing sharing economy lies in the growth of the participants. These can be providers, who are offering their under-used resources on the supply side, or consumers, creating the demand side in the market. The offers on the supply side are very important, and the same is true for the demand side, as somebody needs to consume under-used properties and other services. Although there are many *non-profit* sharing initiatives (e.g. time banking or giveaway platforms), other sharing initiatives attract people to their platform exactly because they can earn an additional, a substantial or a necessary amount of money.

Definitions of the sharing economy differ based on whether the platform used for the exchange is commercial or non-commercial and, therefore, whether the exchanges involve monetary compensation (Edbring et al. 2016). Botsman and Rogers (2011) referred to it as collaborative consumption, Bardhi and Eckhardt (2012) as access-based consumption, and Lamberton and Rose (2012) as commercial sharing system. For our purposes, we rely on the recent overview by Gerwe and Silva (2020). They synthesized a considerable body of literature on the sharing economy and identified four key tensions. Firstly, there is disagreement about the *boundaries* of the sharing economy (i.e., which platforms are part of it and which ones are not). Secondly, opinions are divided on whether only *non-commercial and community-driven initiatives* should be considered to be part of the sharing economy or also the commercial ones. Thirdly, some existing conceptualizations limit the sharing economy to asset sharing, while others consider labour sharing as well. Fourthly and finally, the *vision* of the sharing economy and its impacts are seen variedly, either as rather positive and empowering or as mostly negative and exploitative. Trying to overcome these tensions and to provide a holistic understanding of the concept, the authors then define the sharing economy as "a socioeconomic system that allows peers to grant temporary access to their underutilized physical and human assets through online platforms" (Gerwe & Silva, 2020, p. 71). We follow this definition throughout our article.

In line with the differences in defining the sharing economy, the literature identifies distinct motives of sharing economy participants (Bucher, Fieseler, & Lutz, 2016; Hawlitschek et al., 2016). Providers are the lenders of their own resources to strangers, so it is important to explore the profiles of providers and the motives that push them into participation. For practitioners, especially platform firms, such insights are useful to recruit more providers and enhance offers on the platforms.

Researchers have been interested in understanding service providers in the sharing economy across many disciplines, with large focus on the analysis of demographics, such as age, gender, and race (Amaro, Andreu, & Huang, 2019; Bucher, Fieseler, Fleck, & Lutz, 2018; Deloitte, 2015; Eurobarometer, 2016; Farshad at., 2017; Godelnik, 2017; Hall & Krueger, 2018; PWC, 2016; Ranzini et al., 2017; Smith, 2016; Tamar & Regev, 2016; Yang, Tan, & Li, 2019). Such research on demographics as antecedent of sharing economy participation is mostly quantitative and survey based.

The literature on motives that drive sharing economy participation is still quite scarce. Broadly speaking, the findings can be divided in two groups. One group of researchers claims that economic motivations are dominant (Bardhi & Eckhardt, 2012; Bellotti et al., 2015) and individuals share in their community because it is economically advantageous or because it helps them either to save resources or to improve resource efficiency (Gurven, 2006). The other group of authors finds that environmental and social motivations are dominant drivers (Belk, 2010; Benkler, 2004; Botsman & Rogers, 2011; Gansky, 2010 Wittel, 2011).

The first aim of this study is to investigate the impact of demographic characteristics, namely age, gender, education, and income, on being a sharing economy provider or consumer. The second aim is to study how motives, such as financial benefits, fun, meeting people and social responsibility, might turn sharing economy consumers into providers. A comparison of user characteristics, or precisely, between users who are likely to be consumers with those who are likely to be providers, can be used to determine the likelihood of a successful transition from consumer to provider.

Descriptive and multivariate quantitative research is carried out on data from a large survey conducted in twelve European countries on the state of the sharing economy (Andreotti at al., 2017).

The rest of the paper is structured as follows:

Section 2 reviews the literature on sharing economy participation, presenting hypotheses about the impact of different demographic and motivational variables. Section 3 discusses the data and methodology. Section 4 presents the results. Section 5 concludes and discusses limitations of the study as well as implications for the sharing economy and sustainable innovation.

#### 2. LITERATURE REVIEW

The sharing economy has emerged across different industries (e.g. accommodation, transportation), enabling individuals to share access to excess capacity (Tussyadiah, 2015). It has changed tourism because it allows tourists and residents to share their homes, cars, meals and expert local knowledge (Guttentag, 2015; Sigala, 2014). Platforms like Airbnb and Uber are becoming attractive to individuals to become providers since they require no or limited investments to attain assets. The European Commission (2016) explains in its communication that the sharing economy "refers to business models where activities are facilitated by collaborative platforms that create an open marketplace for the temporary usage of goods or services often provided by private individuals". The Organisation for Economic Cooperation and Development (OECD, 2016) describes the sharing economy as "new marketplaces that allow services to be provided on a P2P or shared usage basis". As elaborated in more detail in the introduction, our definition of the sharing economy understands it as "a socioeconomic system that allows peers to grant temporary access to their underutilized physical and human assets through online platforms" (Gerwe & Silva, 2020, p. 71).

## 2.1. Factors explaining the impact of demographics on consumers to become providers in sharing economy

The literature has investigated the predictors of online participation across different contexts such as culture, business, politics, health and education (Lutz, Hoffmann, & Meckel, 2014). Research on online participation has stressed the importance of socio-economic factors, discussing the role of gender, education and income, and how they expose the existing structural inequalities (Correa, 2010; Hargittai & Walejko, 2008; Schradie, 2011). Studies on participation in the sharing economy, based on large-scale systematic surveys, showed that younger individuals are more likely to engage in the sharing economy compared with older ones (Eurobarometer, 2016; Smith, 2016; Yang, Tan, & Li, 2019). Industry reports showed similar findings (Deloitte, 2015; PWC, 2016). In Europe, individuals aged 25-29 are most familiar with the sharing economy. Similarly, in the Pew Survey presented by Smith (2016), a third of respondents in the 18-45 age groups had used sharing economy platforms in the past. Some studies carried out specifically on millennials further underline the role of the sharing economy among younger individuals (Amaro, Andreu & Huang, 2019; Godelnik, 2017; Ranzini et al., 2017; Bucher, Fieseler, Fleck & Lutz, 2018).

Hall and Krueger (2018) conducted a comprehensive analysis of the labour market for Uber driver partners in the US. Based on both survey and administrative data, they found that Uber driver partners are more educated and younger than the average workforce. To examine the impact of demographics on participation in the ride-sharing economy, Farshad al. (2017) analysed the Uber market based on large-scale data covering 59 million rides in a period of 7 months. They found that younger riders use Uber more frequently than older riders. In the same study, the authors found that the gender ratio among drivers is skewed, with 76% of the drivers being male. In the US, Smith (2016) found no significant gender differences in terms of sharing economy participation. In the comparative study of four sharing economy contexts (makerspaces, education/ start-up initiative, food swap, time bank) Schor, Fitzmaurice, Carfagna, Attwood-Charles and Potetat (2016), found male overrepresentation in the maker space and start-up case and female overrepresentation in the food swap and time bank case. The existence of a gender gap was analysed by a unique and large data set containing all eBay auction transactions of most popular products by private sellers in the period between 2009 and 2012, and the findings showed that women sellers received a smaller number of bids and lower final prices than equally qualified men sellers of the exact same product (Tamar & Regev, 2016).

Compared with age, gender differences seem to have a relatively small contribution to the sharing economy. In Europe, women are less familiar with the concept of the sharing economy than men (Eurobarometer, 2016).

Education is an important predictor of sharing economy participation and representative studies have found that individuals with higher levels of education are more likely to participate in the sharing economy (Eurobarometer, 2016; Smith, 2016). This is true for both paid and unpaid uses. Cansoy and Schor (2016) suggest that success among sharing economy participants also depends on education, as they found in their geographic analysis of Airbnb that areas with higher education levels correlated with more offers, more user reviews, and higher prices. Better-educated participants gain more from those platforms by offering access to personal assets (Schor, 2017). This finding is in line with the digital inequalities literature more broadly, as the benefits and outcomes from Internet use have become a topic of interest (Blank & Lutz, 2018; Van Deursen & Helsper, 2015).

In line with education, income as a key marker of socio-economic status is positively associated with sharing economy participation (Smith, 2016). Education can be considered as a door opener for sharing economy participation in general, thus income can also be in favour of providers on asset-oriented platforms such as Airbnb (Newlands, Lutz, & Fieseler, 2018). In the US, individuals with a household income of over 75,000 USD are most likely to rely on car-sharing and home-sharing platforms. Providers use sharing and gig economy platforms such as Airbnb and TaskRabbit for extra income (Schor, 2017). Consequently, those with smaller income and wealth migrate to labouroriented areas of the sharing economy (e.g., crowdwork), where less economic capital is needed but the economic gains are lower. Cansoy and Schor (2016) show how higher income areas in the US come with higher prices.

The findings of the prior studies will be used as the basis for the hypotheses to be tested, namely:

*H1. Age negatively affects the probability of turning a consumer into provider in the sharing economy* 

H2. Gender affects the probability of turning a consumer into a provider in the sharing economy

H3. Education positively affects the probability of turning a consumer into a provider in the sharing economy

*H4. Income positively affects the probability of turning a consumer into a provider in the sharing economy* 

# 2.2. Factors explaining the impact of motivation on consumers to become providers in sharing economy

Motivations can be differentiated as intrinsic or extrinsic (Self-Determination Theory SDT, Deci & Ryan, 1985), where intrinsic motivations arise from the value or enjoyment related to the given activity, and extrinsic motivations are related to external pressures, such as reputation and monetary gain. Lindenberg (2001) distinguishes two kinds of intrinsic motivations: enjoyment derived from the activity itself and value derived from acting appropriately, meaning conforming to norms. Complementary to Lindenberg's (2001) conceptualization, several studies also classified these motivations by the degree of association with other people (Lakhani & Wolf, 2005).

Economic motivations are found to be fundamental in sharing (Belk, 2009) and cost benefit of sharing is a key determinant of using sharing economy platforms (Böckmann, 2013; Lamberton & Rose, 2012). The home sharing studies were mostly focused on Airbnb as a pioneer in this industry. In the survey-based study of Van de Glind (2013), Airbnb hosts said that the main reason to use Airbnb is to make money. More than half of the respondents stated

that "financial gains were the reason for starting the sharing economy service." The relatively low price of Airbnb is a key factor for consumers to use it, and Airbnb has had a huge impact on the traditional hotel industry (Guttentag, 2015). Although Airbnb strongly emphasizes consumer experiences, rather than cost savings, in its communication, many studies still point to economic benefit as an important factor in using Airbnb (Guttentag et al., 2018).

Ikkala and Lampinen (2015) conducted a qualitative study with 12 Airbnb hosts in Finland. They found that economic motivations were the primary reason to take part in such hospitality exchange processes. Economic incentives are even more important for car-sharing platforms, as found by Bardhi and Eckhardt (2012).

Botsman (2013) points out that the social aspects and the possibility of social relationships in the sharing economy can also promote economic participation. Airbnb is positioning itself as a leading community-oriented brand, focusing on connecting people through travel experiences (Botsman, 2011). Crompton (1979) identified one of the motivations in pleasure travel to be the desire to interact with locals. Social interaction is the most important factor in the Airbnb business model and has a great impact on customer experience and satisfaction (Priporas et al., 2017). Tussyadiah and Pesonen (2016, p. 1034) also elaborate that the main reason why travellers use P2P accommodation is the "desire for social relationships with local community" and meaningful interaction with the host. Bellotti at al. (2015) found that social connections can enhance the overall value of sharing economy services that provide accommodation for travellers. Making money is a key factor for participation, but the social aspect is the other key factor that keeps hosts involved supposing that social relationships will have a positive effect on the attitudes of consumers and providers (Ikkala & Lampinen, 2015).

Enjoyment is found to play an important role in attitude formation and intention to use the platforms (Hamari, Sjöklint & Ukkonen, 2016). Widlok (2004) states that "sharing food with neighbours, relatives, or anyone who happens to be around at the time is done for the sake of shared enjoyment of whatever it is that is being shared" (p. 61). Enjoyment is also an important factor in travelling and travellers expect unexpected but positive surprises during their travel (Ritchie, Tung & Ritchie, 2011). Therefore, tourism operators look for ways to improve the customer experience through unexpected surprises. That is the reason why Airbnb provides a variety of visual incentives with funny imagery. Tussyadiah (2016) found that enjoyment has a positive effect on satisfaction and intention to use P2P accommodation. Users who use sharing economy services are attracted by interesting and engaging experiences (Bellotti at al., 2015). Airbnb hosts should therefore provide pleasant and unusual experiences (Stollery & Jun, 2017).

The paradigm shifts from ownership to sharing will reduce the demand for consumer goods and the emergence of a new economy can solve problems such as pollution and excessive energy use (Prothero et al., 2011). Sharing lifestyles can combat excessive consumerism, improving social cohesion and minimizing resource use (Heinrichs, 2013). In addition, collaborative consumption can help the environment by reducing the waste of resources (Trivett & Staff, 2013). Thus, sustainability is an important driver and motivation to participate in cooperative consumption (Hamari et al., 2016). Collaborative consumption was motivated by the desire to become a more responsible guest in environmental terms (Tussyadiah, 2015). Bellotti et al. (2015) in their study concluded that providers focus on idealistic motivations that promote sustainability.

Based on this overview of previous literature, we can distinguish the following primary motivations for participating in the sharing economy: financial benefits, social interaction as fun and meeting people, and sustainability as social responsibility. Among these motivations, extrinsic benefits (financial benefits) and egocentric benefits (fun) should negatively affect the transition from consumers to providers, while more intrinsic and other-directed benefits should affect this transition positively. We thus set our last four hypotheses:

*H5. Financial benefits negatively affect the probability of turning a consumer into a provider in the sharing economy* 

*H6. Meeting people positively affects the probability of turning a consumer into a provider in the sharing economy* 

*H7. Fun negatively affects the probability of turning a consumer into a provider in the sharing economy* 

H8. Social responsibility positively affects the probability of turning a consumer into a provider in the sharing economy

#### **3. RESEARCH METHODOLOGY**

#### **3.1.** Data and Sample

The research is based on a large survey in 12 European countries on the state of the sharing economy (Andreotti et al., 2017; Newlands, Lutz, & Fieseler, 2017). The survey targeted both users and non-users of the sharing economy. Accordingly, the survey was designed to filter respondents into four categories, based on their exposure to the sharing economy. Namely, the first category, 'providers', refers to respondents who have used sharing economy platforms to offer their goods or services. The second category, 'consumers', refers to respondents who have used sharing economy platforms to receive goods or services. Due to the expected imbalance in numbers between providers and consumers, respondents who had used sharing economy platforms as both a provider and a consumer were directed towards the provider category and requested to answer the survey as a provider. The third category, 'aware non-users', refers to respondents who are aware of sharing economy services but have

never used them as either providers or consumers. Finally, the fourth category, 'non-aware non-users', refers to respondents who have not heard of the sharing economy and have not used sharing economy services. The questionnaire was divided into four sections with regard to these four categories (providers, consumers, aware non-users, non-aware non-users). The first section of the questionnaire addressed all four groups and focused on demographic information, personality traits, and self-reported Internet skill. The second section addressed only users, further divided as providers and consumers, and included a variety of questions about their participation in the sharing economy (e.g., frequency of use, most frequently used platform). The third section focused on privacy concerns. The fourth section focused on perceived power dynamics in the sharing economy. Like the second section, the third and fourth section addressed only users.

For the purpose of this study, only the first section of the existing crossnational questionnaire constructed to explore the prevalence, antecedents, and outcomes of participation, privacy, and power in the European sharing economy, that involved more than 6000 individuals across 12 European countries (Andreotti at al., 2017), was used and addressed to all four groups focusing on demographic information, personality traits, and self-reported Internet skills.

#### 3.2. Variables

The variables used to assess the demographic information were age (years), gender (male, female), education based on the ISCED categories and yearly gross household income divided in four categories (quartiles). The questionnaire explored four motives for participation in the sharing economy that are most frequently discussed in the literature and reflect H5-H8: financial benefits, social responsibility, social interaction/meeting people, and fun (Belk, 2014a; Bellotti et al., 2015; Bucher et al., 2016; Möhlmann, 2015). Users of sharing economy platforms (both providers and consumers) were asked about their motives for participation and non-users about what benefits they would expect from using sharing services. Users were asked to rate the importance of four potential benefits of sharing services on a Likert scale (1-not at all, 2-to a small extent, 3-to a moderate extent, 4-to a large extent, 5-very much).

#### 3.3. Methodology

With the aim of analysing the survey data described earlier (in sections 3.1. and 3.2), descriptive analyses, one-way ANOVA and binary logistic regression were conducted. Firstly, descriptive statistics (mean and standard deviations for providers and consumers) were analysed based on statistically significant differences between providers and consumers.

Secondly, logistic regression was employed to find the predictive influence of the independent variables on the likelihood of being a provider or

consumer in the sharing economy. As the dependent variable is binary (dichotomous) and the aim of this research is to explore the relative influence of the independent variables on the likelihood of being a provider or consumer in the sharing economy, binary logistic regression was performed. Specifically, binary logistic regression generates predicted probabilities of a case being in the category- labelled 1, and is predicting the logit, i.e., the natural log of the odds of having used sharing economy services. This can be represented with the following equation:

$$\ln(ODDS) = ln\left(\frac{\hat{\gamma}}{1-\hat{\gamma}}\right) = a+bX$$

where  $\hat{\gamma}$  is the predicted probability of the event which is coded with 1 (provider) rather than with 0 (consumer),  $1 - \hat{\gamma}$  is the predicted probability of the other decision, and X is the predictor variable.

The probability in the binary logistic regression is expressed as an odds ratio. Moreover, the odds are, for the purpose of the analysis, transformed into log odds. These transformations solve the problems that OLS regression is facing when applied to data where the dependent variable is binary. The goal is still to find the coefficients that will produce the logits (and thereby the predicted probabilities) that will most accurately place cases in their actual category, i.e. to minimize the discrepancy between a case's predicted category and its actual category. A log likelihood function is used to calculate the predicted probability and the actual category for all cases, given different coefficient values. The coefficients that maximize the value of this function are the ones that are finally selected as the logistic regression coefficients.

#### 4. EMPIRICAL ANALYSIS AND RESULTS

Firstly, the survey data on respondents that declared participation in sharing economy (n= 1699), were extracted out of N=6000 respondents. The participants were divided into providers and consumers. The demographic profile of the providers (age, gender, income, and education), in comparison to the consumers, is shown in Table 1.

ANOVA was employed to find statistically significant differences between providers (n=1143) and consumers (n=556) in terms of their demographic profile. We found statistically significant differences between providers and consumers in terms of age and gender at 1% significance level and in terms of income at the 5% significance level. Providers are younger and more likely to be male. Providers are also less wealthy and less educated.

#### Table 1

Descriptive statistics of age, gender, income and education between the providers and consumers and total

	Consumer (n=1143)		Provider	: (n=556)	Total (N=1699)		
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	
Age band***	2,76	1,29	2,54	1,19	2,69	1,27	
Gender***	1,48	,50	1,59	,49	1,52	,50	
Income**	2,41	1,01	2,33	,98	2,38	1,00	
Education	4,78	1,03	4,73	1,14	4,77	1,06	

Note: \*\*\* denotes statistical significance at p<0,01; \*\* denotes statistical significance at p<0,05

The analysis of motives for participation in the sharing economy is shown in Table 3. Participants were asked to rate the importance of four potential benefits of sharing services on a scale from 1 to 5. ANOVA showed statistically significant differences in financial benefits, meeting people, fun and social responsibility between providers and consumers. Both providers and consumers are mostly motivated by financial benefits. Taking into consideration that most of the users (73%) declared that they were using Airbnb, Uber and BlaBlaCar, or profit-oriented platforms, financial motives for participation in sharing economy are obvious. While consumers are looking mostly for financial benefits, providers are more motivated by meeting people, fun and social responsibility. Consumers especially stated using Airbnb and Uber. Among consumers, financial benefits clearly outrank other benefits, such as fun, social responsibility, or social interaction. In the case of providers, financial benefits also emerge as the primary motive for participation in the sharing economy, yet other motives rank closely behind. Moreover, the priorities differ from consumers, with social responsibility as the second most important motive, followed by meeting people and fun.

Table 2

	Consumer (n=1143)		Provider (n=556)		Total (N=1699)	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Financial benefit***	3,68	1,07	3,29	1,18	3,55	1,12
Meeting people***	2,38	1,13	2,90	1,16	2,55	1,16
Fun***	2,70	1,12	2,88	1,12	2,76	1,13
Social responsibility***	2,49	1,11	3,04	1,18	2,67	1,16

Descriptive statistics on motives of providers and consumers and total

Note: Likert scale is used, namely 1-not at all, 2-to a small extent, 3-to a moderate extent, 4-to a large extent, 5-very much;\*\*\* denotes statistical significance at p<0.01

Furthermore, a binary logistic regression was performed. In general, the model fit was satisfactory as demonstrated by the Hosmer-Lemeshow test of (table 3). The goodness-of-fit tests indicated the appropriateness of the model (p>0.05 indicates that the model fits the data well). The predictive accuracy of the

model can be presented in a classification table, where the predicted outcome (1/0) is compared to the actual outcome (1/0). The hit ratio in classification table shows that 71% of all the outcomes were correctly predicted by the performed model (table 4).

#### Table 3

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Hosmer and Lemeshow Test of goodness-of-fit of the binary logistic regression analysis

Step	Chi-square	df	Sig.
1	4,159+	8	,844

Note: The cut value is ,500

Table 4

#### Classification Table of the binary logistic regression analysis

observed		predicted		
		0	1	correct %
consumer	0	1025	103	90,9
provider	1	390	165	29,7
	overall percentage			70,7

In the binary logistic regression, the predicted dependent variable – provider in the sharing economy – is a function of the probability that a particular respondent will be in one of the categories: provider or consumer (for example, the probability that a respondent will be a provider in the sharing economy, with a given set of scores on the predictor variables). Statistical significance of individual predictors is tested using the Wald chi-square statistic. Predictors with p-values smaller than 0,05 are considered to be statistically significant. The results of the analyses are shown in table 5 and highlight that six out of eight hypotheses are supported.

Table 5

	В	S.E.	Wald	df	Sig.	Exp(B)
Age	(,114)	,045	6,433	1	,011	,892
Gender	,440	,112	15,387	1	,000	1,553
Income	(,063)	,059	1,131	1	,287	,939
Education	(,062)	,053	1,350	1	,245	,940
Financial benefits	(,409)	,052	61,422	1	,000	,664
Meeting people	,374	,067	30,850	1	,000	1,453
Fun	(,198)	,066	8,947	1	,003	,820
Social responsibility	,380	,061	39,102	1	,000	1,462
Constant	(,706)	,402	3,089	1	,079	,494

Results of binary logistic regression

Demographic characteristics do matter, as gender (p < 0.05) and age (p < 0.01) are both statistically significant predictors of being a provider in the sharing economy. However, income and education are not statistically significant predictors of being a provider. Hypotheses 1 and 2 are thus supported. More specifically, if a consumer is younger than 35 years, the probability of becoming a provider in sharing economy platforms increases (H1). Male consumers are more likely to become providers in the sharing economy than female consumers (H2).

The analysis of the four motives that drive providers to offer their underused property and services showed that all are statistically significant predictors. Hypotheses 6 and 8 are positively supported, while Hypotheses 5 and 7 are supported with inverse impact. Altruistic motives like meeting people and social responsibility are significant predictors of becoming a provider, while financial motives and fun inversely predict consumers' participation in the sharing economy as a provider. This means that consumers who are not driven by financial benefits, but by social responsibility and social interaction are more likely to become providers.

#### 5. DISCUSSION AND CONCLUSION

The sharing economy has become an ever more important phenomenon around the world. Considering the importance of the sharing economy for sustainable economic growth, we explored the impact of demographic characteristics and motives on transitioning from a provider to a consumer of sharing economy services. We used data from an existing large survey on the state of the sharing economy in twelve European countries (Andreotti et al., 2017). For the purpose of this study, only the data of 556 providers and 1143 consumers (out of 6000 respondents) were analysed. One-way ANOVA showed statistically significant differences between providers and consumers in terms of age, gender and income. No significant differences in terms of education were found. Additionally, our analysis showed statistically significant differences in all four analysed motives. Financial benefits are more important for consumers, while altruistic motives are more important for providers. Binary logistic regression was performed to test eight hypotheses derived from previous research on participation in the sharing economy, including demographic (Eurobarometer, 2016; Smith, 2016; Yang, Tan, & Li, 2019) and motivational predictors (Bellotti et al., 2015; Bucher et al. 2016; Hawlitschek et al., 2016; Tussyadiah, 2016). However, our analyses went beyond existing research, as previous studies on demographic and motivational predictors have focused on either providers or consumers but have not compared the two groups systematically. More specifically, our study shows which factors predict whether someone participates in the sharing economy as primarily as a provider or consumer. The results indicate that male consumers and individuals under 35 are more likely to participate as providers (rather than consumers) in the sharing economy. Consumers who are more driven by altruistic motives, such as meeting people

and social responsibility, and less by financial and hedonic benefits are more likely to offer their services as providers. Overall, our findings point to pronounced differences between providers and consumers, showing digital inequalities at play in a young and dynamic sector. Sharing economy participants can gain considerable monetary and social advantages through their participation. At the same time, not everyone has the necessary resources and skills to become a sharing economy participant, especially at host level, where, in many cases, the pre-requisite is to own assets such as a flat or a car. In an economically difficult time, our findings suggest that those who are already in an advantageous position due to their demographic profile might disproportionally benefit from the sharing economy. Thus, our research aligns with research on the third-level digital divide that investigates who profits and suffers most from the use or non-use of digital technologies (Blank & Lutz, 2018; Lutz, 2019; Scheerder, Van Deursen, & Van Dijk, 2017; Van Deursen & Helsper, 2015).

Beyond the theoretical implications, our research has practical and managerial implications. The results can be helpful to policy makers and managers in supporting broader participation in the sharing economy. Particularly, the findings could help sharing economy platforms in their segmentation and targeting efforts. Our analyses suggest that sharing platforms such as Airbnb should rely both on demographic and psychographic data when trying to recruit new providers. Policy makers and social justice advocates might find the results helpful when designing new inclusiveness programmes that foster sharing economy accessibility. In that regard, the programmes should specifically focus on those who might otherwise miss out on the benefits of sharing, especially as a provider. According to our findings, older, female and extrinsically motivated target groups should be considered as a priority for such programmes, for example by lowering potential discrimination (Edelman & Luca, 2014), having strong insurance and refund policies for hosts (Boland, 2020), limiting privacy concerns (Lutz, Hoffmann, Bucher, & Fieseler, 2018; Teubner & Flath, 2019), and making hosting more economically attractive (Holmes, 2020).

There are several limitations of this research. First, the survey used in the empirical analysis is cross-sectional and thus it does not allow making temporal and strong causal claims. In future research, longitudinal data with the aim of studying providers and consumers' demographics and motives over longer periods of time should be used to map the differences in adoption of hosting or using sharing economy across different industries. Second, while the survey covers twelve European countries and thus provides a relatively comprehensive overview, it has specific regions that are under-represented. Particularly, Poland was the only country in Eastern Europe (sometimes considered Central Europe though) in the survey and there was a notable absence of countries in Southeast Europe. Future research should consider a broader set of countries and look at sharing economy participation in Southeast Europe, including Croatia. Third and final, due to the operationalization in the survey, the distinction of providers and consumers was binary, neglecting that certain users are using sharing economy platforms both as providers and consumers or that there is a blurry category of users-by-proxy (Newlands, Lutz, & Hoffmann). Future research could study sharing economy participation more holistically and look at how non-users transition into users-by-proxy, consumers, providers, consumer-providers (i.e., those who used sharing economy platforms as both providers and consumers), and ex-users (i.e., those who decided to stop using sharing economy services). Qualitative and interpretative approaches such as semi-structured interviews and focus groups would be particularly suitable to explore such transitions.

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## PRETVARANJE POTROŠAČA U DAVATELJE USLUGA U EKONOMIJI DIJELJENJA: ISTRAŽIVANJE UTJECAJA DEMOGRAFIJE I MOTIVA

#### Sažetak

Ekonomija dijeljenja industrija je u nastajanju i ima potencijal za osiguranje održivog gospodarskog rasta s obzirom da se temelji na nedostatno iskorištenim resursima. Cilj je ovog rada istražiti utjecaj demografskih karakteristika (dob, spol, obrazovanje i prihodi) i motiva (financijske koristi, zabava, susreti s ljudima i društvena odgovornost) na pretvaranje potrošača u pružatelja usluga u ekonomiji dijeljenja. Provedena je deskriptivna i multivarijatna statistička analiza na podacima velikog anketnog istraživanja provedenog u dvanaest europskih zemalja o stanju ekonomije dijeljenja. Empirijski rezultati pokazuju da je vjerojatnije da će muškarci i pojedinci mlađi od 35 godina sudjelovati u ekonomiji dijeljenja kao davatelji usluga. Nadalje, potrošači koje više pokreću altruistički motivi, a manje financijska korist, vjerojatnije će ponuditi svoje usluge kao pružatelji usluga. Ovo istraživanje može biti korisno kreatorima ekonomske politike i menadžerima u istraživanju mogućnosti podrške širem sudjelovanju u ponudi usluga u ekonomiji dijeljenja.

Ključne riječi: ekonomija dijeljenja, zajednička potrošnja, motivi, binarna logistička regresija.

JEL klasifikacija: D10, D16.