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Economic power of e-retailers via price discrimination in e-commerce: price discrimination's impact on consumers' choices and preferences and its position in relation to consumer power

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MSc in Media and Communications

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**Economic power of e-retailers via price
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ABSTRACT

B2C online markets give e-retailers a wide range of opportunities for expressing symbolic power via their informational power (more particularly, by persuading people to pay discriminatory prices) and are thus a fascinating locus for studying consumers' preferences and analyzing consumer power. This study attempted to answer the research question '*How does online price discrimination influence the relationship between consumer power and economic power of online retailers?*' This was achieved via an examination of the main indicators that are used by e-retailers for the identification of price sensitive groups of consumers, via scrutiny of the changes in consumers' preferences when they are aware of price discrimination, and via analysis of the main factors that can influence consumers' attitudes towards online retailers that price discriminate.

An online questionnaire was designed and analyzed using the methods of paired comparisons and manually classifying respondents into three groups of consumers: people who stop buying online having been subject to price discrimination; people who do not stop regardless of whether they are obliged to pay higher/lower prices; and people who stop buying online only having been obliged to pay higher prices in comparison to other consumers. The final sample was viewed using three theoretical models regarding consumer power. The results showed that the model of discursive power is the most appropriate for examination of the relationship between consumer power and economic power of e-retailers in the context of online price discrimination.

INTRODUCTION

The issue of the online power of producers has been widely discussed, being mostly associated with social and cultural spheres of life via the 'power of constructing reality' (Bourdieu, 1991, 166). This perspective is used to examine internet power relationships through the prism of symbolic power that is concentrated on the internet or, via 'media power' (Couldry, 2000). In other words, according to this perspective, individuals (in this study – producers) can impose their own meanings and use different ways of persuasion directed at online users (consumers) via their informational power or, in other words, 'the ability to tailor Web-based messages to the individual who is surfing' (Leckie and Buschman, 2009, 114) and, therefore, harness symbolic power. However, as business-to-consumer e-commerce (B2C) sales continue to rise and are expected to reach 2.356 billion dollars in 2018 compared to 1.233 billion dollars in 2013 (eMarketer, 2014), one might consider economic power (producer power) in the context of the Internet as a particular expression of e-retailers' symbolic power (Mann, 1986) and informational power. In other words, Internet should be viewed as 'enlarging ... space for people ... to exercise control in ways that are empowering' (Mansell, 2010, 173).

According to Mann (1986), economic power can be defined by its ability to be used as a way to distribute transformed products of nature. In other words, in the context of information as an immaterial product, one should clarify that, via existing informational flows and by means of new technologies, the distribution of transformed products of nature to consumers may become possible and even more effective and, therefore, producers can express economic power over consumers. More particularly, it may be an important factor in one Internet application – e-commerce - which has enormous potential (Barfield, Heiduk & Welfens, 2003). According to RetailMeNot (cited in Econsultancy, 2015) an increase of 11.1% in Internet sales per shopper is expected in Europe in 2015, which can be considered as an example of the growth of producer power or the economic power of e-retailers via the widening of the channels of distribution. At the other end of the spectrum, an increase in Internet sales may also be regarded as an example of enhanced consumer power, as consumers are able to use their sanction and expert power and to be rational when buying products or services online (as in the consumer sovereignty model (Hutt, 1940) of a rational buyer).

Even though e-commerce is generally thought to be crucial in creating a competitive environment and positive changes in the shape of business (Nezu, 2000), according to

Daripa and Kapur (2001), some online firms can acquire too much power, which may lead to the lowering of market concentration. Therefore, the Internet can not only widen the channels of distribution for retailers, but can also make this distribution more effective for some producers (the ones who are considered by consumers to be ‘the most trusted’) and contribute to the increase of market power of some online retailers and, accordingly, to the decrease of choice in the market for consumers, because ‘only a handful of firms survive’ online (Daripa et.al, 2001, 207). This increase of economic power could be explained via the heterogeneity of product bundles (Daripa et.al, 2001) or via high levels of acquired trust among consumers (Brynjolfsson and Smith, 2000). In the context of e-commerce, this may result in the employment of the strategies of price discrimination by online companies that have acquired market power (or, in other words, monopoly power that is a way of the harnessing of economic power) or, in other words, in targeting consumers with different prices.

It is notable that online price discrimination is mainly possible because of the mechanisms of e-personalization (which are particular expressions of symbolic power combined with the informational power of e-producers), which allow the use of identity features and histories of previous online purchases (Vulkan, 2003) or identify location in order to analyze price sensitive groups of consumers. According to Hannak et.al, (2014), there are price differentials (of up to hundreds of dollars) on many hotels sites. Another striking example is the online travel agency, Orbitz, which targets Mac users with costlier prices in comparison to Windows users (Mattioli, 2012). Thus, price discrimination can be considered as a way of using symbolic power (or ‘...[imposing] symbolic meanings and forms as legitimate’ (Swartz, 2013, 83)) via e-personalization, which is possible because of the informational power of the Internet as through which the economic power of e-retailers is exercised by the means of new technologies. This, arguably, presupposes a lack of consumer power, meaning that consumers are unable to be forceful or to have ‘equal status with companies’ because of existing information asymmetries or, in other words, because of a lack of relevant information for consumers on agreements with companies (Pitt et.al, 2002, 7), or because individuals are only partly rational (Simon, 1957).

Therefore, on the one hand, combined with symbolic power and informational power, the economic power of service providers (or, in other words, producer power) who own the platform sites on the Internet (occasionally reaching a sort of monopoly power and, thus, the ability to dictate prices via price discrimination, especially if this does not meet resistance from consumers) could lead to the incapacity by society to use the economic advantages of Internet in the right direction (Mansell, 2004, 96), to lead to economic prosperity for all,

because of the relevant factors (e.g. heterogeneity of products or trust issues) that could stop consumers from gaining economic advantages from the Internet. However, on the other hand, consumers might stop buying products or services on e-commerce sites that employ price discrimination practices (if they are aware of such practices).

Such a possibility, were it to occur, would demonstrate the dominance of consumer power over the economic power of ecommerce providers or, in other words, e-retailers' inability to fully apply discriminatory pricing strategies. This means that 'perfect' online opportunities for charging different prices may be distorted in the case of individuals' awakening. Therefore, buyers' attitudes are a prevailing factor in the examination of the balance between consumer and producer (economic) power, because they have a direct impact on suppliers' strategies. Thus, this study aims to contribute to the understanding of the preferences of consumers for and against price discrimination, the indicators for the identification of price sensitive groups of consumers (more particularly, how they can be used by e-retailers) and the main factors that influence consumers' attitudes towards online retailers that price discriminate.

The primary objective of this dissertation is to examine the relationship between consumer power and the economic power of e-retailers. Moreover, this study will investigate the ability of consumers to resist the e-commerce firms' economic power (and, especially, the kind of monopoly/oligopoly power acquired by these firms), which is strongly influenced by producers' use of the web's symbolic and informational powers (via the practices of e-personalization). Therefore, this study, directly covering the issues of online 'media power' (symbolic power) and informational power (and its particular expression - economic power acquired by e-retailers), arguably, can be considered to fall within the field of communication studies.

Furthermore, it is noticeable that quantitative research on this issue, by the means of survey techniques (via examination of the preferences of online consumers), or investigation of the economic power of ecommerce firms via the employment of the strategies of price discrimination versus consumer power to withstand unequal price targeting in context of media economics, are lacking. To analyze this relationship between economic power of e-retailers (or producer power) and consumer power via changes in consumers' preferences, and, therefore, to fill the gap in the literature, this dissertation will be divided into three parts. Firstly, a literature review will examine the concept of online price discrimination, drawing on Pigou's work on price discrimination (1932) and by observing the practices of e-personalization. Moreover, in light of the review of literature, consumers' preferences when

experiencing price discrimination will be characterized, and the way in which the concepts of the economic power of suppliers or consumers apply to price discrimination, will be examined. This will allow the creation of a conceptual framework with which to understand the three main options regarding the examination of consumers' preferences and, therefore, to analyze the second part of the dissertation that will cover methodology issues and outline the research strategy and design. Finally, the results and main interpretations, including considerations for future research, will be expressed.

LITERATURE REVIEW

Price discrimination and e-personalization

According to the Pigou's theory (1932, 32), price discrimination implies two main conditions: 'no unit of the commodity sold in one market can be transferred to another market' and 'no unit of demand, proper to one market, can be transferred to another market' (in other words, it is impossible for one group of consumers to switch to the other group, or price elasticities of demand should be different among consumers (Carroll & Coates, 1999)). Based on the mentioned conditions, Pigou (1932, 32) identifies 'three degrees of discriminating power': to charge different consumers different prices that are 'equal to the demand price' (first degree), by second degree to distinguish a range of prices (e.g. price x or price y) and to target consumers in accordance with their demand price (e.g. if the price is 'less than x and greater than y [than to sell] at a price y') and, finally, to separate consumers into groups (third degree).

In the case of ecommerce, one can notice that the condition of non-transferability of goods cannot be fulfilled because of the opportunities provided by online platforms for the reselling of goods (e.g. via eBay). Thus, online price discrimination in most research (Bailey, 1998; Brynjolfsson & Smith, 2000; Clay & Tay, 2001) is associated with non-transferable services (e.g. booking hotels) or with general retail on initially inexpensive goods (such as books or CDs), which are not suitable for reselling on online auctions. The research of Erramilli et.al, (2013) showed that price difference is progressively eliminated as products become more expensive (starting from \$100).

According to Shapiro et.al (1999), in comparison to other media, the Internet offers unique marketing tools aimed at using personalized pricing. In the context of online price discrimination, one could mention that the Internet makes it possible to fulfil another

condition of price discrimination: to identify and 'to sort customers according to the intensity of their demand' (Philips, 1981, 16). This enables, to a varying degree, all three types of discrimination. It is notable that many researchers (Bailey, 1998; Tang & Xing, 2001; Ancarani & Shankar, 2003; Baye et.al., 2004) found high levels of price dispersion by online retailers in comparison to traditional stores.

Therefore, it is important to scrutinize the concept of personalization that makes it possible to discriminate (Lee & Lin, 2005). According to Bichler (2001, 56), even if only theoretically, e-personalization means that firms are informed of 'customers' willingness-to-pay' and can exercise first-degree discriminating power. Practically, this is not possible in the case of a large number of consumers. Thus, Bichler (2001) and Shapiro et.al (1999), in the context of ecommerce, mainly consider third-degree discrimination (as a 'group pricing') that is possible via online registration, involving the necessity to provide personal information or by using cookies or IP addresses. As for second-degree price discrimination, Mills (2002) clarifies that Pigou did not make a distinction between the involuntary identification of a customer group and the process of self-selection that is crucial for contemporary business and should be considered, according to Faratin (2004), as second-degree discrimination.

A striking example of second-degree price discrimination is the differences in airline fares based on the number of days tickets are bought in advance and the quality of flights (Belleflamme & Peitz, 2010). Thus, it may be more appropriate to consider mainly third-degree price discrimination via 'group pricing' as representing consumer power in this study. This is because self-selection (second-degree discrimination) does not mean the direct intrusion of online sellers into the personal lives of individuals and it is this direct intrusion that presupposes the use of the private characteristics of consumers (which should actually be hidden because of privacy concerns, but which are indeed not) that will be used in this dissertation for the examination of consumer power.

Shapiro and Varian (1999) state that one of the main reasons behind discriminatory pricing lies in price sensitivity (e.g. individuals in poorer countries cannot afford to pay higher prices). Thus, in accordance with recent empirical research (Erramilli et.al, 2012; Erramilli et.al, 2013), the location of the buyer (country of origin) can strongly influence the price and, for example, consumers from such advanced countries, such as Finland, are never targeted with cheaper prices by clothes retailers, as individuals from poorer countries are. (It is important to take into account that this has nothing to do with transportation costs, taxes or other costs). Furthermore, Sirvanci (2011) argues that price knowledge and lower incomes are important characteristics of consumers that are more sensitive to price. Analyzing the

indicator of price knowledge, one should, arguably, refer to issues of trust. Garbarino and Lee (2003) mainly investigated the influence of benevolence trust (meaning consumers' interests should be regarded by a company as a dominant force in comparison to its own interests (Singh Sirdeshmukh, 2000; cited in Garbarino et.al, 2003)) on overall trust before and after using 'the dynamic pricing scenario'. According to their research, both being targeted by lower or higher prices leads to a reduction of the mean benevolence trust (together with an increase in its importance in the formation of trust) that, consequently, negatively affects the mean levels of overall trust. Therefore, price knowledge can strongly influence the level of trust in a company. Thus, these characteristics may be used by e-retailers to define groups of shoppers and to price discriminate.

Moreover, the research of Hannak et.al (2014), which follows the research of Erramilli et.al (2012, 2013) and improves on it through the usage of control techniques that allow the avoidance of inconsistencies in search results that are not related to personalization, examines the practical application of price discrimination by online retailers. More particularly, according to the findings of this research, Cheaptickets and Orbitz travel sites discriminate among their consumers depending on their logged-in status, Travelocity uses the modification of prices for iOS users and the HomeDepot general retail site targets higher prices for Android users (even if the difference is not significant). Thus, one can, arguably, state, based on the research in the area of online price discrimination, that online retailers have obtained a significant level of economic power (or a kind of monopoly/oligopoly power to have exclusive opportunities for setting different prices for different groups of consumers that leads to price dispersion) via the Internet. However, to fully analyze the balance between producer power (or economic power) of e-retailers and consumer power, one should scrutinize buyer attitudes as opposed to supplier strategies, because buyer attitudes are a dominant factor that can turn around producer online strategies.

Consumers' preferences in case of experiencing online price discrimination and consumer power

Different theorists have addressed the employment of dynamic pricing strategies that do not strongly influence consumers' behaviour if they are implemented 'carefully and transparently' (e.g. via the usage of self-selection techniques) (Kannan & Kopalle, 2001, 79). However, this is mainly applicable to second-degree price discrimination. In the case of examining third-degree price discrimination, one can mention another group of researchers who explain consumers' acceptance of price discrimination techniques through the reasons of buying online. According to Daripa and Kapur (2001) even if products sold online are mainly

homogeneous, 'the accompanying product bundle is heterogeneous' (Stigler, 1961) (meaning the set of services that defines 'the quality of the 'online shopping experience''), and this will result in price dispersion. A striking example, according to Brynjolfsson et.al (2000), is Amazon.com, which is the market leader in selling online books and one of the leaders in the online market of CDs. However, there are other retailers that sell these commodities at lower prices (e.g. Books.com). Brynjolfsson et.al (2000) note that this comes into contradiction with Salop and Stiglitz's model of asymmetrically informed consumers (1977), by which informed consumers should buy from the stores with the lowest prices. Daripa et.al (2001) explain the popularity of Amazon (and thus the contradiction mentioned above) through the heterogeneity of services and, more particularly, through the personalized recommendations for users that are provided by the company and based on purchase histories.

In contrast, Brynjolfsson et.al (2000) do not consider 'artificial-intelligence-based suggestion tools' and other observed services (e.g. return policy) as strongly influencing consumers' behaviour. They propose an examination of one of the unobserved retail features – trust – along with other researchers who examine the quality of e-commerce (Loiacono et.al, 2002; Kim & Stoel, 2004). According to the research of Jarvenpaa et.al (2006), the following hypothesis 'higher consumer trust toward an Internet store will generate more favourable attitudes towards shopping at that store' was proven, drawing on the examples of Israeli and Australian consumers with whom a level of trust explained a large proportion of the variance in their willingness to pay. According to Garbarino and Maxwell (2010), a prior level of trust should be regarded as a buffer against the effects of norm breaking that results in higher perceived fairness of dynamic pricing event and higher levels of purchase. \

This means that individuals are ready to be targeted with higher prices by trusted e-commerce websites and online price discrimination would, therefore, not result in diminished trust. In other words, online retailers obtain significant market power and can set any possible prices, because consumers will not punish them for this (or use sanction power). Thus, online price discrimination may not change consumers' preferences and, therefore, individuals do not stop buying services or products online. This view is closely related to Valor's examination (2008, 323) of consumers' incapability to buy responsibly (to express consumer power) because of market failures (a situation when resources are allocated inefficiently because of the existing price mechanism that is not beneficial for another party (Varian, 2003)) and, especially, because of 'the limited, fragmented, incomplete and sometimes contradictory information ... [consumers] gather'. More particularly, consumers lack expert power because of information asymmetries (that may arise because of the e-retailers' ability to use the strategy of price discrimination), sanction ('the ability to punish or reward brands') and legitimate ('the ability to influence corporate policies') powers due

power asymmetries (when significant market power is held by a few e-retailers) (Valor, 2008, 321). Grønmo (1987, 43) predicted 'the strategic position of consumers will be weakened' in comparison to 'the strategic position of the most powerful commercial and institutional actors'. Thus, a situation in which consumers are not capable of stopping buying services or products online, even if they realize that they are obliged to pay higher prices, is associated in the literature with the lack of consumer power and the dominance of the economic power of e-retailers, made possible by information and power market asymmetries. These convictions regarding consumer power correspond to the postulates of the cultural power model (Knott et.al, 2010) that regards consumers as passive subjects due to the authoritarian position of the market and e-retailers.

In contrast, the study of Lee and Lehto (2010) shows that even if personalization (which was considered by other researchers as a justification of pricing strategies by consumers) along with privacy have both a significant influence on purchase intentions, privacy features should be put at a higher value. A range of researchers (Zeithaml et.al, 2000; Yang, 2001; Yang & Jun, 2002) mention that the quality of e-service should be strongly associated with privacy and security features. Odlyzko (2003, 355) argues that price discrimination strategy 'arouses strong opposition from the public' because of privacy concerns. Thus, consumers could stop buying online because of the infringement of privacy rights. Beyond the violation of their privacy, according to Turow (2003), buyers do not appreciate differential treatment (different prices) in comparison to other consumers. Moreover, most research in the area of consumers' preferences regarding online price discrimination is concerned with the issues of trust (however, not as pre-existing trust, but as acquired after particular events) and the unethical breaking of norms (Grewal et.al., 2004; Garbarino, Lee, 2003).

Thus, it is most commonly accepted that online price discrimination leads to the diminishing of trust, deterioration of the quality of the services (because of the privacy intrusion) and, therefore, companies should contemplate their pricing strategies with great care in order not to lose their consumers. In the context of consumer power, this means that the web has opened up opportunities for readdressing the power from producer to consumer (Kucuk & Krishnamurthy, 2007) because of a range of proposed options of actions for consumers and provided vast freedoms (Denegri-Knott, 2006). Moreover, this means that established companies (e.g. those with a background in print media), by losing their unprecedented in the past (when they used traditional markets to distribute products/services) economic power (a kind of monopoly/oligopoly power because of, for example, their well-established traditional distribution channels in comparison to other companies) should adapt to modern consumers (Carpenter, 2013). According to Rezaabakhsh et.al, (2006, 3) and Kucuk (2012), consumers in the era of online retailing are able to 'band together against companies and

impose sanctions via exit and voice' (to express reward and coercive power (French & Raven (1959); cited in Rezapakhsh et.al, 2006) that constitutes sanction power via losing trust and stopping buying online on websites that practice price discrimination). Moreover, consumers can 'influence products and prices according to individual preferences'(express legitimate power) and 'overcome most information asymmetries'(express expert power) (Rezapakhsh et.al, 2006). Thus consumers' behaviour in this case may be scrutinized via the consumer sovereignty model (Knott et.al, 2010) of a rational buyer that can understand the production process and withstand producer power (Rha & Widdows, 2002).

One more option, in the context of consumers' preferences that has not been widely examined, is associated with different buying strategies in the case of paying higher or lower prices. In other words, individuals may not be concerned about ethics and may stop buying online only if they are obliged to pay higher prices. According to Garbarino et.al (2003), online price discrimination in the case of targeting higher prices, if to compare this with the case of targeting lower prices, results in a larger lowering of the overall level of trust in the company. Thus, higher prices lead to a larger reduction in the overall trust in comparison to lower prices. This, arguably, means that some consumers may feel that price discrimination is justified if they are targeted with lower prices.

In the context of consumer and economic power, this means that individuals can partly express sanction power by exiting in the case of higher prices and by rewarding e-retailers in the case of lower prices and, therefore, express legitimate power by influencing the policies of companies. However, when expressing this legitimate power, individuals may reinforce companies' use of online price discrimination techniques, meaning that the economic power of retailers is still strong. Thus, consumer and economic power may be balanced. In other words, individuals 'are involved in neither a revolutionary digital era' (or an era of unprecedented consumer power) 'nor in an era of straightforward incremental change and continuity with the past' (Mansell, 2010, 180) (when the economic power of retailers was, arguably, strongly dominant). Consumer power here could be analyzed through the prism of the discursive power model, which posits the existence of mutual influence between producer and consumer (Knott et.al, 2010).

Conceptual Framework and Research Objectives

This paper investigates the relationship between economic power (or, in other words, producer power as a particular expression of the symbolic and informational power of e-retailers (occasionally reaching monopoly/oligopoly power)) and consumer power in the context of the changes in consumer preferences in the case of price discrimination. Thus, an economic framework is used here to study power relations. Moreover, the foundations of the

three main models for the examination of consumer power (Knott et.al, 2010) will be used here for the examination of consumer power versus the economic power of e-retailers: the consumer sovereignty model (Hutt, 1940) of a rational buyer, the cultural power model (Knott et.al, 2010) and the discursive power model. It is notable that previous research has mainly examined the issues of loss of trust in online companies and of the overall negative impact of online price discrimination on consumer behaviour. Moreover, most research accepts the dominance of consumer power over the economic power of online retailers. However, one can envisage a reversing of these dominance positions based on the varying consumer attitudes towards price discrimination.

Thus, the following research will be based on three main options regarding consumers' preferences, augmented by the analysis of consumer power proposed in the literature:

- 1) Consumers could stop buying products or services when either paying lower or higher prices and stop using these online services. This would, arguably, suggest that consumers are able to escape from the dominance of online retailers as in the consumer sovereignty model of a rational buyer (Hutt, 1940) and e-retailers would not be able to construct symbolic meanings (to use symbolic power via e-personalization) that could persuade consumers to pay at a discriminatory rate.
- 2) Consumers could continue buying products online even when paying higher prices. This would, arguably, suggest that consumers are not concerned with 'liberation and emancipation actions' (Kucuk, 2012) as in the cultural power model and e-retailers would not be able to construct symbolic meanings (to use symbolic power via e-personalization) that could persuade consumers to pay at a discriminatory rate.
- 3) Consumers could stop using online services only in the case of paying higher prices and they would not criticize online companies for price discrimination being in the consumer segment of lower prices. This would, arguably, suggest that the economic power of online retailers and consumer power are balanced as in the discursive power model and e-retailers could only partly construct symbolic meanings (to use symbolic power via e-personalization) that could persuade consumers to pay at a discriminatory rate.

Two main directions of research will be used here as a conceptual framework for the investigation of the confrontation of consumer and producer power. The first surrounds the analysis of the consumers' behaviour in cases when buyers are unaware and aware of price

discrimination. The first objective is to establish the main trends among consumers in the case of awareness/unawareness and to determine which of the proposed options regarding consumers' preferences are more applicable to these consumers. One more objective is to analyze the indicator of price sensitivity, or how e-retailers could harness economic power using the mechanisms of e-personalization (analyzing the main identity features and histories of previous online purchases and, therefore, identifying the level of income and price knowledge of consumers).

The second direction of the research pertains to an examination of the changes in consumer preferences in two main cases of price discrimination: being targeted with higher or lower prices. Other objectives are to determine whether concerns towards privacy invasion, strong adherence to ethical standards, established buying habits regarding the choice of company, the level of trust in online companies or prudence towards cost-cutting, form specific attitudes towards pricing strategies. Finally, one can draw conclusions regarding the relationship between consumer power and the economic power of e-retailers based on the scrutiny of consumers' preferences, possible ways of identifying price sensitive groups of consumers and the main factors that can influence consumers' attitudes towards online shopping when consumers are subject to price discrimination.

Thus, the central research question to be investigated in this study is:

How does online price discrimination influence the relationship between consumer power and the economic power of online retailers?

To analyze the main research question, three other questions will be addressed:

- 1) How do the preferences of consumers change in the event of the occurrence of price discrimination and, consequently, the payment of 1) lower or 2) higher prices?
- 2) Which indicators for the identification of price sensitive groups of consumers (via e-personalization as a way of exercising symbolic power) could be used by e-retailers in the context of price discrimination?
- 3) Which factors influence the attitudes of consumers towards online retailers that price discriminate and their willingness to use these online services?

METHODOLOGY

Rationale for Research Design

As the main goal of this study is to analyze attitudes towards online price discrimination and to examine behavioural patterns, then the most appropriate way is to involve consumers and to ask them directly about their preferences. Thus, one should consider whether to choose interviews or survey techniques for conducting this research. According to Oskamp and Schultz (2005), the open-ended questions, of which interviews are almost fully composed, are unreliable for scoring or coding and, therefore, should not be used for making the comparisons among different groups of consumers that is necessary for this study. In contrast, the use of survey tools will allow scrutinizing 'in depth the relationship among variables' and, furthermore, analysing these variables simultaneously (Miller et al, 2010, 99).

Moreover, in-depth interviews are limited in terms of the number of respondents, because it is too time-consuming to conduct such interviews among a large sample (Berger, 1998), and also focus groups cannot represent a larger population because of a lack of randomness of the sample (Zikmund & Babin, 2012). Therefore, the final sampling in case of conducting interviews may be not appropriate for the study (especially, when it is necessary to collect data on three possible options for the changes in consumers' preferences). In comparison to interviews, surveys allow the collection of data that could be used for the development of inferences regarding a larger population.

Berger (1998) also argues that the possible shyness of respondents may be considered as an obstacle for conducting in-depth interviews. This factor is also applicable to focus groups, because people might not be interested in discussing their personal shopping experiences in public, especially, with people who are unfamiliar to them (Zikmund et.al, 2012). Therefore, their unwillingness to speak on the sensitive topics in this study (e.g. ethical approval of discriminatory commerce methods) may result in the possible invalidity of data. Thus, an anonymous and confidential method of collecting the data via surveys and, especially, via online surveys (that leads to the minimization of social desirability bias (Sue & Ritter, 2007)) seems to be more appropriate for the examination of attitudes towards online price discrimination.

Another reason for the use of a questionnaire to address the research question proposed in this study lies in its combination of deductive and inductive methods of research (Beiske, 2002) (or its ability to be useful in the 'formulation of [new] hypotheses' and 'in putting them to test' (Moser, 1971, 4) and in the examination of already existing theoretical discourses).

More particularly, as mentioned earlier, on the one hand, this study is aimed at the investigation of existing theory on consumers' preferences (more particularly, in context of the three models of consumer power). On the other hand, this dissertation will test new hypotheses via examination of aspects of consumer power in the context of changing consumer preferences (and especially, via scrutiny of a new option regarding consumers' behaviour in the case of price discrimination).

As for the justification of online survey techniques used in this study, one can mention that, based on the necessity of analyzing the online shopping experience, the use of other ways of conducting research (e.g. traditional printed surveys) would be inappropriate, because the final sampling should mostly cover the population of active online users. Thus, a common limitation of online surveys – the ability to cover only the population that is digital literate (Nesbary, 2000) and partly coverage error ('equal ...chance to be included in the sample survey' (Dillman, 2007, 9)) are overcome in this dissertation. Moreover, according to Dillman (2008), respondents, by completing the questionnaire online, can fully control their survey and conditions under which they are done. This can, arguably, reduce one of the common errors of online surveys - the non-response error - by providing the respondents autonomy combined with a reduced fear of a violation of privacy rights (via the anonymous character of online surveys)

Sampling

According to Nesbury (2000), one may find it difficult to circumscribe the online environment. However, the design of a survey should be based on 'a definite view about what is required' (Hoinville & Jowell, 1978). Thus, in the context of the proposed research, one could distinguish an audience that is digitally literate and makes use of e-commerce services. This sample implies an examination of a wide audience that does not have as a distinctive feature the different personal characteristics of audience (e.g. age). As to cover a full listing of the necessary population because of time and budget constraints and, therefore, to use probability sampling techniques seems to be impossible, then, a non-probability volunteer sampling strategy will be used here. Thus, respondents will be self-selected via the invitation to participate in the survey posted on Facebook.

The elements of snowball sampling strategy will be used and, more particularly, some respondents (who will differ mostly on grounds of their geographical location and age) will post the invitation to participate in the survey on their personal social network accounts and this will, arguably, reduce the coverage error (when people, who are not relevant for the

sampling, are not able to participate) of an online survey. The 'SurveyMonkey' online platform will be used here to collect responses from respondents.

Hypotheses

The following hypotheses were formulated based on non-directional predictions.

H₁: Association between consumers' initial trust in companies regarding price and their preferences is different among consumers who are aware and not aware of online price discrimination.

The following hypotheses were formulated based on three possible possibilities regarding consumers' preferences in the case of undergoing price discrimination.

Consumers who stop buying services and products online, no matter whether they are obliged to pay higher or lower prices.

H₂: Finding the spreading of economic power to the Internet unethical is stronger in this group of consumers.

H₃: Adherence to principles of privacy is higher in this group of consumers than in other groups.

Consumers who do not stop buying services and products online, no matter whether they are obliged to pay higher or lower prices.

H₄: Being able to benefit from the set of services that improve the quality of the online shopping (e.g. return policy) is stronger in this group of consumers.

H₅: Adherence to trusted companies is stronger in this group of consumers.

Consumers who stop buying services and products online, only when they are obliged to pay higher prices.

H₆: Desire to minimize costs is stronger in this group of consumers.

H₇: Consumers' desire to be offered lower prices is stronger in this group of consumers.

Research Design

At the very beginning of the survey, informed consent including assurance regarding anonymity, confidentiality and the voluntary character of participation, was introduced to respondents, and the main objectives of the study were explained. Respondents were obliged to accept the terms of this consent to participate. The questionnaire comprised four main

parts. Respondents were asked to reply first to the personal questions and, secondly, to the questions regarding online shopping experience. Then they were introduced to the ranking questions in the case of their unawareness and awareness regarding price discrimination and in the case of paying lower or higher prices compared to other customers. More particularly, three pricing scenarios were proposed to respondents (when respondents were unaware of any price discrimination, when respondents knew that some companies offer them lower prices and when respondents knew that some companies offer them higher prices) and were asked to rank five very popular online companies that mostly help to book hotels online: Hotels.com, Travelocity.com, Expedia.com, Priceline.com and Booking.com. Respondents were notified that the proposed scenarios do not represent the real actions of e-retailers.

Finally, respondents answered questions regarding their attitudes towards online price discrimination. The questionnaire consisted of one open-ended question at the end of the survey that invited respondents to comment on the topic in free form, three ranking, 15 nominal and one ordinal (in five-point Likert scale format) forced-choice questions. According to Smyth et.al, (2006), the use of forced-choice questions allows minimizing spontaneity in the responses by encouraging survey participants to respond to questions more prudently.

The final version of the questionnaire was adjusted based on cognitive interviews with 15 participants from different parts of the world. The pilot study was aimed at the examination of the timing and flow of the proposed survey, respondents' understandings of the questions and ways of improvement (e.g. via rewording and changing questions). The length of the survey was mostly accepted as appropriate among respondents. Some respondents faced difficulties understanding particular questions and proposed improvements. Thus, these questions were reformulated as consistent with respondents' recommendations. More particularly, questions regarding consumers' willingness to pay more to trusted companies were re-worded and a new option 'partly' was added in the question regarding awareness of online price discrimination. Moreover, some information that was useful for understanding of the topic was added before ranking questions and respondents were asked not to answer ranking questions if they were not familiar with the companies in question.

Statistical Procedures

The SPSS software package was used to analyze the data. Responses to questions were recoded, which allowed the making of new variables that were more convenient for the examination of the proposed hypothesis. More particularly, 'age' was recoded into three

groups: young, middle-aged and older adults. Moreover, rank order questions allowed recoding manually consumers into three groups according to their preferences:

- 1) Consumers who stop buying services and products online no matter whether they are obliged to pay higher or lower prices (if preferences of consumers changed in the second and third scenarios and online companies that price discriminate became less preferable).
- 2) Consumers who do not stop buying services and products online no matter whether they are obliged to pay higher or lower prices (if preferences of consumers were the same in all three proposed scenarios).
- 3) Consumers who stop buying services and products online only when they are obliged to pay higher prices (if preferences of consumers changed in second and third scenarios; online companies that price discriminate setting higher prices became less preferable and online companies that price discriminate setting lower prices became more preferable).

An examination of how level of income influences the perception of price discrimination via a contingency table was provided to evaluate the sensitivity of different income groups to higher prices and to draw conclusions regarding the relationship between consumer power and the economic power of e-retailers that is often based on the indicators of price sensitivity of different income groups (as described in the literature review). As for statistical techniques, to understand which group of consumers prevailed in this sample (to identify preference distribution) the method of paired comparisons was used to construct a matrix of normal distribution.

To analyze the first hypothesis and the nature of association between awareness/unawareness of online price discrimination, initial trust in companies regarding price and consumers' preferences, three-way contingency tables were used. Fisher's exact probability test for two partial tables (consumers who are aware or partly aware and not aware of online price discrimination) was used to evaluate the association between initial trust and preferences, because some cells did not meet the minimum expected count. Given that the SPSS software student home package does not calculate Fisher's test for 2*3 tables, the facilities of VassarStats.net were used to make calculations. The third hypothesis was tested using an independent samples t-test via comparing means between consumers who stop buying services online no matter whether they are obliged to pay higher or lower prices and consumers who do not. Also the difference in means was analyzed among consumers who stop buying services online no matter whether they are obliged to pay higher or lower

prices and consumers who stop only in case of higher prices. Two simple linear regression models were constructed to analyze whether expected levels of adherence to the principles of privacy are higher among consumers who stop buying in both cases. To analyze other hypotheses two-way contingency tables and chi-squared test of independence (if this test was needed) were used.

RESULTS

Sample overview

There were 164 respondents to the survey but only 122 completed it entirely. The low completion rate could be attributed to the unfamiliarity of consumers with the proposed online companies in pricing scenarios. Respondents who did not agree with the terms of informed consent, who never bought products and services online, who booked tickets or hotels via different online booking platforms or who did not answer all ranking questions were excluded from the final sample. These rejections resulted in a decrease in the number of respondents to 111 consumers.

A large proportion of the respondents reside in North America (49.5%), which may be explained via the researcher's location at the time of the conducting of survey and the largest share of the North American region in the total e-commerce sales (eMarketer, 2014). 34.2% of respondents are from Europe (14.4% from Eastern Europe, 9.9% from Western Europe, 8.1% from Southern Europe, 1.8% from Northern Europe), 9% from Asia, 2.7% from Africa, 1.8% from South America, 1.8% from Australia and Oceania and 0.9% from the Caribbean. Thus, the final sample covers a full list of global regions and allows cultural comparisons. The final sample consists of 44.1% young, 33.3% middle-aged and 18.9% older persons.

It is important to take into account that online purchases (and, especially, the booking of hotels and flights) are mostly done by younger age groups, thus, such age distribution seems to be appropriate. The distribution of males and females in this sample is 48.5% and 50.5% respectively. Thus, one can state that there are no over-represented groups of respondents in the final sample according to the variables of age or gender. Moreover, a large proportion of all respondents (86.4%) make purchases online sometimes or often which, arguably, means that the final sample consists of digital literate individuals who are fully familiar with the e-commerce world.

The method of paired comparisons was used here to identify the final preferences distribution across the three proposed pricing scenarios. It should be noticed that 99 responses (that consisted of a full listing of all proposed companies in ranking questions or, in other words, did not include missing values, when respondents ranked not all companies) were used to apply this method to the survey. **Figure 1** demonstrates how preferences change in the case of unawareness of online price discrimination and in the case of consumers' awareness of paying 1) lower and 2) higher prices in comparison to other consumers. Thus, one can state that the prevailing group of consumers in the sample were individuals who stop buying services and products online only when they are obliged to pay higher prices, because respondents punished only companies that set higher prices in comparison to other consumers (Travelocity.com and Booking.com in the proposed third imagined scenario).

Figure 1 Consumers' preferences in pricing scenarios

Rating position	1st pricing scenario (respondents are unaware of price discrimination)	2nd pricing scenario (respondents are aware that Expedia.com and Hotels.com set lower prices)	3d pricing scenario (respondents are aware that Travelocity.com and Booking.com set higher prices)
1	Expedia.com	Expedia.com	Expedia.com
2	Hotels.com	Hotels.com	Hotels.com
3	Travelocity.com	Travelocity.com	Priceline.com
4	Booking.com	Booking.com	Travelocity.com
5	Priceline.com	Priceline.com	Booking.com

More particularly, among 111 respondents only eight consumers would stop buying services and products online no matter whether they were obliged to pay higher or lower prices, 46 consumers would not stop buying services and products online no matter whether they were obliged to pay higher or lower prices (this corresponds to the proportion of respondents who would agree to pay higher prices – approximately 41%, and 57 consumers would stop buying services and products online only if they were obliged to pay higher prices. Interestingly, participants with high and middle incomes were more sensitive to higher prices than low-income respondents and 66.7% of individuals with high income, 50.7% of consumers with middle income and only 33.3% of low-income respondents would stop buying services and products online if they were obliged to pay higher prices. Moreover, 53.3% of low-income

consumers and only 33.3% of high-income consumers would not change their preferences after being price discriminated. It is also noticeable that among consumers who stop buying services and products online no matter whether they are obliged to pay higher or lower prices (or, in other words, individuals who express fully their consumer power) no one is from the higher income group of consumers.

Hypotheses testing

This section provides the results of statistical analysis of the eight proposed hypotheses.

The results showed that there was no association between consumers' sensitivity to price discrimination and trust in online companies among consumers who were aware of price discrimination ($P=0.413$) and among consumers who were partly aware ($P=0.879$). However, there was an association between consumers' sensitivity to price discrimination and trust in online companies among consumers who were unaware of price discrimination at 10% significance level ($P=0.085$). Analysing the three-way contingency table, one can state that consumers unaware of price discrimination who stop buying services and products online only when they are obliged to pay higher prices mostly trust online companies (92%).

However, there were fewer respondents who would not stop buying online no matter whether they were obliged to pay higher or lower prices that trust online companies regarding price (73%) and the least trusting consumers were those who would punish any form of price discrimination (40% of such respondents do not trust online companies).

Thus, if people are aware (even partly) about price discrimination, it is impossible to suggest causality between the initial level of trust and consumers' preferences in comparison to the situation when they are unaware about price discrimination and there is a kind of association. However, one can state that, when aware, people trust online companies less (54.5% of participants would stop buying services and products online only when they are obliged to pay higher prices and 33.3% would not change their preferences regarding trust in online companies if they were aware of price discrimination), and, thus, there is a kind of association between aware and unaware consumers and their preferences. However, one can see that there is no association between respondents' awareness and trust in e-retailers in the context of price among consumers who punish any form of discriminatory pricing scenario (almost the same proportions – 60% of unaware and 66.7% of partly aware consumers – trust online companies). Therefore, the first hypothesis was partly supported by the data.

- I. Consumers stop buying services and products online no matter whether they are obliged to pay higher or lower prices.

The second hypothesis was not strongly supported by the data. A large proportion of respondents from this group of consumers (87.5%) found price discrimination unethical. However, a not insignificant proportion of respondents from the other two groups of consumers (67.4% and 82.1%) found price discrimination also unethical and, therefore, one cannot relate the indicator of ethicality exclusively to this group of consumers. According to the independent-samples t-test, the mean levels of privacy importance were the same for consumers who stop buying services online no matter whether they are obliged to pay higher or lower prices and consumers who do not at any conventional level of significance ($t=-0.268$, $df=52$, $p=0.789$). However, the mean levels of privacy importance are not the same for consumers who stop buying services online no matter whether they are obliged to pay higher or lower prices and consumers who stop only in the case of higher prices at 5% level of significance ($t=-2.248$, $p=0.08$).

However, analysing the linear regression model that separates consumers using dummy variables, one can only state that the mean levels of privacy importance are not the same only at a 10% significance level ($t=1.766$, $df=63$, $p=0.028$). Thus, one can only be 90% confident that differences in means are between 0.39 and 1.263 higher for consumers who are sensitive only to high prices in comparison to the analyzed group of consumers. Moreover, the mean level of privacy importance for consumers who stop buying services online no matter whether they are obliged to pay higher or lower prices (3.875) was lower in comparison to the mean levels of the other consumer groups (4 and 4.52 correspondingly). Thus, the third hypothesis is also not supported by the data.

- II. Consumers do not stop buying services and products online no matter whether they are obliged to pay higher or lower prices.

Desire for a set of services that improve the quality of online shopping (e.g. return policy) is stronger in this group of consumers, as 54.3% of respondents from this group justified price discrimination because of the accompanying product bundle in comparison to only 25% and 33.3% of respondents from the other groups. Moreover, at a 10% significance level, there seemed to be an association between consumers' preferences and their justification for online price discrimination because of the set of additional services proposed by companies that discriminate ($\chi^2=5.593$, $df=2$, $p=0.61$). Thus, the fourth hypothesis was supported by the data.

The fifth hypothesis was not supported by the data as consumers who stop buying services and products online only when they are obliged to pay higher prices favour even more online

purchases at discriminatory prices in trusted companies (66.7% of respondents from this group of consumers) in comparison to the analyzed group of consumers (51.1%).

III. Consumers stop buying services and products online only when they are obliged to pay higher prices.

The sixth hypothesis was strongly supported by the data, 8.5% of respondents from this group of consumers strove to minimize their costs in comparison to the other groups of consumers, among which only 62.5% and 65.2% of respondents wanted to minimize their costs. Thus, desire to minimize costs was stronger in this group of consumers.

Finally, consumers' desire to be offered lower prices was not stronger in this group of consumers, because almost the same proportions of respondents in the analyzed group of consumers (84.2) and among consumers who do not stop buying services and products online no matter whether they are obliged to pay higher or lower prices (87%) want to be offered lower prices. Thus, H_7 was not strongly supported by the data.

DISCUSSION

This section provides a comprehensive analysis of the quantitative results of the research augmented by qualitative data from the open-ended part of the survey. The main purpose of this part of the study is to analyze the final data in correspondence with examined literature and to draw conclusions via answering the main research questions.

Changes in consumers' preferences in the event of the occurrence of price discrimination

The results show that, overall, respondents are sensitive to the changes in prices if they are aware of price discrimination. However, it is impossible to examine consumers' preferences in the context of lower prices, because as the results show (the use of the method of paired comparisons) Expedia.com and Hotels.com are initially the most preferable booking e-retailers for consumers. In contrast, examining the third pricing scenario, one can clearly see that setting higher prices makes e-retailers less favourable among consumers, as Travelocity.com and Booking.com are last in the ratings of companies. Thus, 57 consumers out of 111 (the largest proportion in the final sample) would stop buying services and products online only if they were obliged to pay higher prices. However, one should also take into account that the proportion of respondents for whom preferences would not change, no matter whether they were obliged to pay higher or lower prices, does not significantly differ

from the largest subgroup of consumers, as 46 consumers out of 111 did not seem to be sensitive to price changes at all. Although, many respondents in the open-ended section mentioned that price discrimination in any possible form would not be acceptable ('prices should be group neutral - the same for all groups.' R1), only a few respondents in the final sample could represent a group of consumers who would stop buying services and products online no matter whether they were obliged to pay higher or lower prices. The main reason for this, possibly, lies in the explanation that was provided by one of the respondents: 'unfortunately, times may dictate me using the cheapest prices regardless of my feelings but I would much rather give my money to ethical companies' (R2).

Thus, one should analyze mainly the two main subgroups of consumers: consumers who do not care about price and consumers who are very price sensitive and whose preferences change only in the case of paying higher prices. Therefore, in the case of paying lower prices, the largest proportion of respondents would not withstand price discrimination, but in the case of paying higher prices, people would either accept these prices or stop making purchases from these e-retailers.

Price sensitivity

In the context of price sensitivity and e-personalization (as a tool for the identification of price sensitive groups of consumers and as one of the ways of acquiring symbolic power via informational power, or, in other words, using online opportunities for persuading people to buy a particular item or service), the results show that using level of income as one of the indicators of price sensitivity (to set higher prices for higher income consumers) is not appropriate and, therefore, the results of this survey contradict the findings of Sirvanci (2011) discussed in the literature section.

However, the results of this survey allow us to agree with the findings of Sirvanci (2011) and Garbarino et.al (2003) that it is important to consider the indicator of price knowledge (or awareness of respondents) in order to examine price sensitivity among consumers, because applying different pricing strategies (both setting lower and higher prices) could result in a collapse in trust in companies. More particularly, as the statistical results show, individuals who are very sensitive to price changes trust mostly online companies if they are unaware of price discrimination; however, the level of trust is significantly lower if they are aware or partly aware of price discrimination. This, arguably, allows us to state that, to harness economic power via price discrimination, producers should include the indicator of price knowledge in their business models. It is noticeable that in the open-ended section of the survey some respondents mentioned that they did not know about price discrimination at all: 'I didn't know this existed, and now I just feel the whole world is gross' (R3).

However, it is important to mention that even losing trust in companies, people continue not to prevent price discrimination (as consumers who do not change their preferences or change only after being obliged to pay higher prices do). Based on these findings, one may justify the chosen way of the examination of consumers' preferences that investigates and compares consumers' choices when they are unaware and aware of price discrimination.

Factors that predetermine consumers' attitudes

Examining the main factors that can, according to the reviewed literature, influence consumers' preferences, one can see some inconsistencies with the results from the survey here. Analyzing consumers who stop buying online in both cases (lower and higher prices); one could mention that privacy seems less important for them in comparison to other groups of consumers. This contradicts the theory of Odlyzko (2003) about the public's 'strong opposition' to acts of privacy infringement, because consumers who actually punish companies for any form of price discrimination are less concerned with the safety of their personal data in comparison to other consumers. Furthermore, finding price discrimination unethical is common for all groups of consumers and, therefore, this indicator cannot reflect the increased sanction, legitimate and expert power of consumers.

Although some respondents mention in the open-ended section of the survey that 'it is unethical to ask someone to pay a higher price simply because he is using a Mac computer. I would stop doing business with such a company' (R4), results show that, even finding discriminatory pricing unethical, most respondents would agree either to pay lower prices or to not to change their preferences. Therefore, the commonly accepted view that price discrimination because of the infringement of privacy rights and its unethical character could cause a significant loss of business for online companies is not supported by the data here.

Analyzing consumers who do not stop buying services and products online no matter whether they are obliged to pay higher or lower prices, one can state that the results prove the findings of Daripa et.al (2001) regarding the importance of additional services provided by online companies for certain consumers. R5 mentioned 'I might pay more if I were getting more service of interest to me'. The theory of Brynjolfsson et.al (2000) regarding consumers' readiness to pay more to trusted companies is consistent with the results of this survey. R6 noticed 'I tend to buy from only a few select vendors/providers'.

However, the readiness to pay more to trusted companies was not exclusive for consumers with unchanged preferences. Only a half of consumers who did not change their preferences (via ranking proposed online companies in imagined pricing scenarios almost in the same order) would agree to pay more to trusted companies. Interestingly, a larger proportion of

respondents who actually punished companies for higher prices in the ranking section of the questionnaire would agree to pay more to trusted companies. The main reason, arguably, lies in the lack of a 'trusted company' in the proposed range of companies. Therefore, consumers who actually punished companies for higher prices in the proposed scenarios might not have changed their preferences if another selection of online companies had been proposed. Thus, in the context of price discrimination, the indicators of the reputation of an online company and of the range of additional services proposed by the company (that could be regarded as specific symbolic meanings created by these companies) seem to be useful and they play an important role in the formation of consumers' preferences among consumers who are not sensitive to price changes.

Finally, analyzing consumers who stop buying online only after being obliged to pay higher prices, one can see that, according to the results of the survey, there is a specific group of consumers who strive to minimize their costs. Moreover, their desire to be offered lower prices is high and, therefore, they will accept price discrimination in the form of lower pricing. It is noticeable that desire to be offered lower prices is also high among consumers who do not change their preferences, but as R8 noticed, 'If I don't have any choice, so I am going to pay more'. Therefore, even finding lower prices attractive such consumers may be too loyal to particular e-retailers: 'After many years of online use, I know the sites that I prefer for ease of use' (R9). Thus, the indicator of price minimization is crucial only for consumers who are sensitive to high prices.

Consumer power versus economic power of e-retailers

The results show that a very small proportion of respondents represent rational buyers as in the consumer sovereignty model (Knott et.al, 2010), because precious few respondents would stop buying products or services online after being price discriminated (regardless of lower or higher discrimination). Even being able to overcome some information asymmetries or having opportunities for exercising expert power and, therefore, also sanction power (using voice and exit methods), many individuals are not ready to express legitimate power to influence e-retailers' prices to be neutral. This allows us to state that there is no significant re-addressing of the power from producer to consumer as Kucuk et.al (2007) would argue. In other words, customers' actions are of a kind controlled by e-retailers.

However, on the one hand, the largest proportion of respondents would stop buying online being obliged to pay higher prices. This means that in some way, individuals use their sanction power (not fully, because they do not punish companies for price discrimination when they are obliged to pay lower prices and other customers pay higher prices) and, therefore, can express their legitimate power. Thus, consumer power is actually not so weak

and the main prerequisites of the discursive power model (Knott et.al, 2010) are fulfilled. In other words, customers are not passive and can 'voice and exit'. On the other hand, the results also show that many respondents would not change their preferences after being price discriminated because of their adherence to particular 'trusted' companies or because of a set of additional services proposed by e-retailers. This could serve as evidence of the validity of the cultural power model (Knott et.al, 2010), according to which one cannot regard online space as a way of empowering consumers; because, in reality the web creates opportunities for the empowerment of particular e-retailers that acquire market power. Furthermore, one may notice that this market power is possible because e-retailers obtain symbolic power via informational power, or use opportunities provided by the web to persuade consumers or to create value priorities with regard to the quality of services and, therefore, price levels in their mind.

Moreover, as was mentioned earlier, many respondents who are representatives of a group of consumers who will never agree to pay higher prices, but will accept lower prices, showed their readiness to pay more to trusted companies. This means that actually, if the selection of online companies in the ranking questions had been different (including some companies that are 'trusted' in the eyes of these respondents), then there could have been more respondents in the final sample with unchanged preferences. Therefore, one may conclude that there are two main positions regarding consumer power and the economic power of e-retailers according to the final sample: some consumers possess some sort of consumer power, because they will never accept price discrimination in the form of high prices, and some consumers are determined by e-retailers and their economic power and accept any proposed price, because they put high value upon the quality of services. More particularly, consumer power in online spaces opposed to the economic power of e-retailers is still weak, but there is a certain level of consumer power, as there are individuals who strive to minimize their costs.

Focusing on the research of Knott et.al (2010), one may find the theoretical model of discursive power (mapping consumers neither autonomous nor too passive or unable to resist) the most appropriate and consistent with the results of survey, or one may conclude that there is a balance between consumer power and the economic power of e-retailers. However, this balance is shifted in favour of producers.

Limitations and considerations for further research

Using the online questionnaire provided necessary empirical data; however, respondents' comments in the open-ended section of survey were also very useful to analyze the data. Thus, one may find it appropriate doing further research to combine quantitative methods

with qualitative, and also to interviewing in the examination of consumers' preferences. Moreover, interviewing could be useful to identify how successful e-retailers are in creating symbolic meanings for their customers (e.g. in persuading them that they should pay more to trusted companies or for additional services).

There are other methodological limitations to this study. Taking into account that many respondents did not answer ranking questions (because they were asked not to participate if they did not know companies), it is important to review the selection of proposed e-retailers and even to widen it. Furthermore, the results of this survey do not allow the drawing of conclusions regarding the possibility of identifying price sensitive groups of consumers via their location, because most respondents were from North America. However, geographical location is one of the important features used by e-retailers to price discriminate that should be analyzed appropriately. Therefore, one might investigate consumers' price sensitivity according to their geographical location and from this it follows that one may examine how location influences consumers' preferences. Overall, the empirical findings and theoretical considerations regarding consumer power could be generalized only with caution as this study is in exploratory stages and does not cover large sample or all the variables that could have an impact on consumer preferences.

However, this study may be fruitful for further research and, more particularly, for the examination of actual economic power as a particular expression of symbolic power via constructing linear model (using as possible explanatory variables the reputation of a company, a set of additional services proposed, the ability to identify awareness of consumers regarding price discrimination, the share of consumers who strive to minimize their costs) that can measure this producer power. In contrast, consumer power may be measured via constructing linear models that use as possible explanatory variables the ability of consumers to refuse using the services of trusted companies and a set of additional services, their awareness of price discrimination or their desire to minimize costs. Moreover, further research could analyze in more detail customer power via using the variables of sanction power, legitimate power and expert power.

CONCLUSION

The main research question of this quantitative study was *'How does online price discrimination influence the relationship between consumer power and economic power of online retailers?'* An online questionnaire was used to analyze the impact of online price discrimination on consumers' preferences and to gather data. This allowed the discovery that consumer power in the web as opposed to the economic power of e-retailers is still weak and

people do not use all the economic advantages that are provided by the Internet (not fully or not at all to express their legitimate, sanction or expert power).

Therefore, online producers are more powerful, because many consumers would not change their preferences even after being price discriminated. However, there is a certain level of consumer power, because there are a large proportion of consumers who are able to punish online retailers for higher prices and to stop buying online after being obliged to pay more in comparison to other consumers. Thus, the theoretical model of discursive power (that regards consumers neither as autonomous nor too passive and that believes in the balance between economic power of e-retailers and consumer power) (Knott et.al, 2010) is accepted here to be the most appropriate for the examination of the B2C online market.

There were three sub-questions for this study that allowed drawing such conclusions. The first sub-question analyzed how the preferences of consumers changes in the event of the occurrence of price discrimination and, consequently, the payment of 1) lower or 2) higher prices and the method of paired comparisons was used to identify how the chosen online companies would be ranked in three imagined pricing scenarios. This helped to identify two main groups of consumers: consumers who do not change their preferences being price discriminated in any form (both being obliged to pay lower prices and higher prices) and consumers who punish e-retailers only in the case of paying higher prices.

The second sub-question aimed at the examination of which indicators for the identification of price sensitive groups of consumers (via e-personalization as a way of exercising symbolic power) could be used by e-retailers in the context of price discrimination. The importance of price knowledge (or awareness of respondents of price discrimination) for the identification of groups of consumers sensitive to price changes was demonstrated; this, then, helped to justify the chosen data gathering methodology and analysis. Interestingly, the indicator of income level was accepted to be not useful for the identification of price sensitive consumers' groups.

Finally, the third sub-question covered the factors that could influence the attitudes of consumers towards online retailers that price discriminate and their willingness to use these online services. The results showed that privacy features and the unethical breaking of norms (that are considered in the literature to be the leading factors for the formation of the group of consumers who stop buying online after being price discriminated in any form (or who could resist the economic power of e-retailers)), could not cause the significant loss of business for online companies. However, the impact for the reputation of an online company and of the range of additional services proposed by the company (that is the way of creating

symbolic meanings among consumers by e-retailers) on consumers who do not change their preferences after being price discriminated in any form, was found to be strong. Moreover, the factor of the desire to minimize prices was accepted to be crucial for the formation of the preferences among consumers who stop buying online only after being obliged to pay higher prices.

However, the scrutinized sample was too small. Further research could benefit by covering a larger sample and analyzing more variables. Moreover, to identify the symbolic meanings created by e-retailers among consumers, one may find it useful to combine quantitative study with interviewing. The results point also to the limitations in the selection of proposed e-retailers. Thus, it is important to review the selection and to widen it. It should be taken into account that the majority of respondents were from North America and, therefore, to analyze whether consumers are sensitive to price changes based on their location, or to identify some cultural differences in preferences was impossible. Further quantitative research is required based on the results from this study to build models that can measure the economic power of e-retailers versus consumer power.

Overall, although subject to limitations, this study has made some relevant contributions to the understanding of media economics and B2C online market and, more particularly, how, via price discrimination, one can analyze the balance of the economic power of e-retailers (that occasionally reaches monopoly power and should be regarded as the establishment of an effective method for the distribution of products or services via using different symbolic forms (e.g. the status of 'trusted' company) among consumers) and consumer power.

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