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EKONOMIJA PRIVATNOSTI

Seminar NDES održan 3.6.2024. godine bio je posvećen temi „Ekonomija privatnosti”. Govornici Bojan Ristić i Nikola Njegovan predstavili su neke od ključnih doprinosa iz ove oblasti, dok su diskutanti Nikola Ilić, docent na Pravnom fakultetu Univerziteta u Beogradu i Bojana Radovanović, naučna saradnica Instituta za filozofiju i društvenu teoriju, proširili temu govoreći kako o njenim pravnim aspektima, tako i onima koji se odnose na oblast filantropije. Prisutni su potom imali priliku da postave pitanja i izlože sopstvene uvide o predstavljenoj temi. Da bi se dočarao sadržaj seminara slede ključni doprinosi govornika i diskutantata, redosledom kojim su se pojavljivali.

Nikola Njegovan: Potraga za začecima neke oblasti može nas odvesti daleko u prošlost. Da bi se ovo izbeglo u pregledu koji sledi, začetak ekonomskog pristupa problemu privatnosti vezaćemo za radove iz 1970-ih i 1980-ih godina. Konkretno, za Ričarda Poznera i Džordža Štiglera (čikaška škola) i njima suprotstavljene argumente Džeka Hiršlajfera – prvi talas (Acquisti *et al.*, 2016). Na šta ukazuje pojam privatnosti? Prema Pozneru (Posner, 1981) postoje najmanje tri različita tumačenja. Prvo, privatnost označava skrivanje informacija, što je najčešće tumačenje. Drugo, ono označava mir i tišinu (recimo da ne volite neželjene telefonske pozive). Konačno, privatnost može biti sinonim za slobodu i autonomiju. On smatra da je prvo tumačenje najzanimljivije iz ekonomske perspektive, naglašavajući da je tesno povezano sa oblašću ekonomije informacija (na primer, skrivanje informacija od strane zaposlenih na tržištu rada principijelno se ne razlikuje od skrivanja karakteristika proizvoda od strane proizvođača jer smanjenje količine informacija smanjuje efikasnost; nije reč o efikasnom osiguranju jer se teret, umesto da bude široko raspoređen, prenosi sa jedne male grupe na drugu). Ovde se otvaraju standardne ekonomske teme: koje je prirode dobro koje razmatramo (privatno, javno, finalno, intermedijarno), mogućnost tržišnog rešenja problema (jasno definisanje prava svojine i dopuštanje trgovine), problemi tržišnih otkaza (priroda i izvor informacija, transakcioni troškovi), itd. Takođe, pomenućemo Štiglerovo insistiranje (Stigler, 1980) da je pogrešna pretpostavka da informacije imaju karakter javnog dobra uz insistiranje da trošak širenja informacija može biti značajan, te da separabilnost između proizvodnje i

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širenja informacija može biti važno pitanje, što ilustruje primerom kreditne istorije pojedinaca. Ključno je međutim pokazati da postoje osnove za ekonomsku analizu prava u ovoj oblasti. Na primer, ekonomski argument protiv prisluškivanja odnosi se na smanjivanje efektivnosti i povećanja troška komunikacije.

S druge strane, Hiršlajfer (Hirshleifer, 1980) se usredsređuje na treće tumačenje, kritikujući tako usku definiciju čikaške škole, koja privatnost svodi na sposobnost kontrole širenja i korišćenja privatnih informacija. Privatnost prema njegovom mišljenju označava autonomiju unutar društva, što podrazumeva specifičnu društvenu strukturu i prateću društvenu etiku. U duhu čikaške škole koja u potpunosti eliminiše psihologiju iz ekonomije i tretira preferencije kao date, privatnost se razmatra kao intermedijarno dobro, a ne kao finalno, jer bi nas to odvelo do rasprave o ukusima, što nije polje istraživanja ekonomske nauke. Nasuprot tome, Hiršlajfer se upravo bavi ukusima u pogledu privatnosti, smatrajući da jeste reč o ekonomskoj temi, te da evolutivni pristup ima šta da pruži na ovom polju, budući da su postojeća „rešenja” u određenom domenu dobro adaptirana jer su preživela. U tom kontekstu on se poziva na Alčijana (Alchian, 1950), skrećući pažnju na evolutivno tumačenje racionalnosti – kako slepe sile selekcije okruženja dovode do simulacije svesne racionalnosti. Budući da su kulturni kao i genetski faktori pod uticajem prirodne selekcije, skreće se pažnja na stavove austrijske škole, pre svega na ideju o emergenciji društvenih struktura u odsustvu racionalnog planiranja subjekata (Hayek, 2002). Konačno, Hiršlajfer detaljno razmatra tri strukture društvenosti, naglašavajući dvostranost etike na kojoj počivaju: zajedničko deljenje (zlatno pravilo), privatna prava (srebrno pravilo – tranzicija od male grupe ljudi do naseljenih zajednica i civilizovanog života rezultat je čovekovog učenja da se povinuje apstraktnim pravilima emergentnog tržišnog poretka) i dominacija (gvozdeno pravilo). Na liniji Šumpeterovih razmatranja o očekivanom „mentalnom samoubistvu” kapitalizma, Hiršlajfer naglašava da etika privatnosti može biti moćno sredstvo za stvaranje bogatstva, ali kad se dostigne određena tačka, izobilje može dovesti do ozbiljnih društvenih opasnosti, dopuštajući ili čak doprinoseći relaksaciji društvene discipline i širenju remetilačkih ideologija (Šumpeter, 1998).

Najzad, Varijan (Varian, 2002) ukazuje da potrošači racionalno žele da određene vrste informacija o njima budu dostupne prodavcu, dok druge žele da sakriju – kao da je po sredi ekonomska nagodba. Prema Acquisti *et al.* (2016) Varijan uvodi diskusiju o ekonomiji privatnosti u tzv. drugi talas, fokusirajući polje istraživanja o privatnosti u domen njene uloge u ekonomskim transakcijama.

Bojan Ristić: U digitalnom okruženju današnjice, a naročito sa probom veštačke inteligencije u svakodnevni život, tema ekonomije privatnosti dobija poseban

značaj. Prihvatanje „kolačića” koje olakšava potragu za informacijama prilikom internet kupovine podrazumeva pristanak da se sopstvena privatnost podeli sa platformom koja se koristi za tu svrhu, a neretko i sa trećim stranama koje od nje pribavljaju podatke. Očigledno, zadiranje u privatnost počiva na ekonomskoj nagodbi. Platforme koriste prikupljene podatke za analizu potrošačkih preferencija i spremnosti za plaćanje, što može voditi i ka personalizovanom utvrđivanju cena. Budući da rezervaciona cena kupca postaje poznata prodavcu, cena koju mu on nudi može biti baš po meri njegove spremnosti da plati. U takvoj transakciji kupac ostaje bez potrošačevog viška, dok prodavac prisvaja kompletni ekonomski višak.

Ispostavlja se da savršena cenovna diskriminacija nije samo koristan teorijski koncept koji je pre više od sto godina opisao Artur Pigou (Pigou, 1920), već opipljiva realnost u internet okruženju. Privatnost potrošača je gorivo za uspešnu cenovnu diskriminaciju prilikom onlajn transakcija u kojima svakodnevno učestvuju. S razvojem veštačke inteligencije algoritamska cenovna diskriminacija postaje efikasnija u traženju spremnosti za plaćanje, a kupci sve sputaniji da ispolje strateško ponašanje prilikom kupovine. „Mašine za predviđanje” (Agrawal *et al.* 2022) hranjene informacijama koje kupac ostavlja prihvatajući kolačiće sve efikasnije diskriminišu grupe kupaca prema spremnosti za plaćanje. Razvoj događaja ide u prilog uslovima za savršenu cenovnu diskriminaciju.

Kako bilo, ispostavlja se da je percepcija potrošača o cenovnoj diskriminaciji često negativna, verovatno zbog same reči „diskriminacija” (Borgesius & Poort, 2017). Poznat je slučaj kompanije Amazon s početka 2000-ih, koji je značajno uznemirio tadašnju javnost. Kompanija nikad nije priznala da je namerno podizala cene korisnicima kolačića, iako su prilike na to ukazivale. Najzad, čak i kad prodavac ne podiže cenu, po sredi može biti baš cenovna diskriminacija – „umesto da podižu cene nekim potrošačima [očekivana indikacija cenovne diskriminacije], firme mogu jednostavno da preoblikuju svoje ponašanje nudeći popuste drugima” (Acquisti *et al.* 2016). Nasuprot tome, stav ekonomista prema diskriminaciji je tradicionalno blagonaklon, a naročito ako omogući transakcije na novim tržištima. Na primeru lineranih tražnji i konstantnih graničnih troškova u Schmalensee (1981) pokazuje se da je potreban uslov da trećestepena cenovna diskriminacija poveća ukupno blagostanje da omogući porast autputa. Nešto kasnije, Varijan (Varian, 1985) izvodi isti zaključak i u dodatno generalizovanom kontekstu.

Prema Acquisti *et al.* (2016) istraživačka pitanja koja čekaju odgovor uključuju: da li potrošači zaista vrednuju privatnost i koliko, da li se personalizovano utvrđivanje cena zaista događa i na kojim tržištima, kao i da li kombinacija sofisticirane analitike i obilja potrošačkih podataka dovodi do uvećanja ili do

redistribucije blagostanja. Takođe, interesantno bi bilo istražiti u kojoj meri tehnologije koje unapređuju privatnost mogu promeniti način korišćenja privatnih podataka i kakve ekonomske posledice se tu mogu očekivati. Istraživački pristupi mogu biti kako eksperimentalni, tako i empirijski i modelski. Jedan od mogućih pravaca mikroekonomskog modeliranja sledi u nastavku.

Nikola Njegovan: Varijan i Akvisti (Acquisti & Varian, 2005) razvijaju različite modele strateške interakcije između kupaca i prodavaca kako bi odredili uslove pod kojima će prodavci smatrati da je isplativo uslovljavati cene istorijom kupovine (npr. prepoznatom uz pomoć kolačića) imajući u vidu mere koje kupci mogu da primene u svrhu odbrane (anonimizirajuće tehnologije, npr. brisanje kolačića). Polazni model podrazumeva monopolistu sa nultim graničnim troškovima proizvodnje nedeljivog dobra i mogućnošću praćenja istorije kupovina. Jednostavnosti radi, postoje samo dva perioda (stopa diskontovanja je jednaka nuli i nema arbitraže) u kojima potrošači mogu da kupe proizvod ili da odustanu od kupovine. Sofisticirani potrošači mogu besplatno da koriste anonimizirajuće tehnologije. Dva su tipa potrošača: jaki sa rezervacionom cenom v_H i udelom π i slabi sa rezervacionom cenom v_L i udelom $(1 - \pi)$. Prema tome, profit u slučaju jedinstvene cene je $\max\{2\pi v_H, 2v_L\}$. Količine koje kupuju potrošači su obeležene sa x_H i x_L (diskretne veličine), a p_H i p_L su sadašnje vrednosti cena koje se naplaćuju ovim tipovima potrošača (reč je o prostoj sumi, pošto nema diskontovanja). Prema tome, problem optimizacije se svodi na maksimizaciju profita uz uobičajene uslove samo-selekcije (ne isplati se imitirati drugi tip) i participacije (kupovina mora da omogući veću korisnost od spoljne opcije). Ispostavlja se da postoje tri načina određivanja cena koja nisu dominirana: prodavati samo jakim potrošačima, prodavati samo slabim potrošačima i diskriminacija. Međutim, kako su sugerisala i ranija teorijska istraživanja (Stokey, 1979), ispada da diskriminacija nije profitabilna. Ipak, značajna ulaganja u prikupljanje ovakvih podataka ukazuju na potrebu da se ponovno razmotre pretpostavke o sofisticiranosti potrošača (kratkovidni potrošači) ili troškovima korišćenja anonimizirajuće tehnologije. Mogućnost je i da se dodatnim pogodnostima poveća vrednost za stare kupce, što stvara uslove za parcijalno „zarobljavanje potrošača”: razdvajajuća ravnoteža u kojoj jaki kupci nastavljaju da kupuju isti proizvod uz dodatne pogodnosti, dok slabi kupuju kod konkurencije.

Nikola Ilić: Ekonomska nagodba gde kupac ustupa deo svoje privatnosti prodavcu, uređena je zakonima i podzakonskim propisima, tj. odgovarajućim pravnim okvirom. U Evropskoj uniji taj pravni okvir je u najvećoj meri zasnovan na Opštoj uredbi o zaštiti podataka o ličnosti: „General Directive on Privacy Regulation – GDPR” (*Official Journal of the EU*, L 119), dok je u Republici Srbiji primarno uređen Zakonom o zaštiti podataka o ličnosti (Službeni glasnik RS, br.

87/2018). U oba pravna sistema, neophodno je da učesnici u nagodbi ispune određene zakonske uslove da bi prikupljanje, obrada i upotreba podataka o ličnosti bili dozvoljeni i da bi zaključeni ugovor proizvodio pravna dejstva. Ključna uloga tih zakonskih uslova je da zaštite privatnost tako što uklanjaju ili umanjuju probleme asimetrije informacija koji mogu da nastanu kada potrošači nisu adekvatno informisani o načinima upotrebe podataka. Zbog toga, između ostalog, prikupljanje i obrada podataka su dozvoljeni samo za tačno određene svrhe, o kojima su potrošači informisani i sa kojima su saglasni. Iz ugla ekonomske analize prava, trebalo bi posebno obratiti pažnju na samu saglasnost između obrađivača podataka i lica na koje se podaci odnose – njen karakter može značajno da utiče na pravne i ekonomske posledice nagodbe i na ponašanje učesnika u nagodbi. Štaviše, empirijski je utvrđeno da preciznije definisanje i uvođenje novih uslova za postizanje saglasnosti može da unapredi zaštitu privatnosti kupaca, uz poboljšanje poslovnih rezultata prodavaca koji zasnivaju poslovanje na upotrebi podataka o ličnosti (de Matos & Adjerid, 2021).

Bojana Radovanović: Najzad, o privatnosti se može govoriti i iz ugla filantropije, konkretno, u vezi sa grupnim finansiranjem lečenja putem donacija. Ovde se otvaraju značajna etička pitanja, uključujući pristrasnost donatora, održavanje socio-ekonomskih nejednakosti i podrivanje sistemskih reformi. Svakako, najvažniji problem je ugrožavanje privatnosti korisnika fondova. Platforme za grupno finansiranje često zahtevaju od njih da javno otkrivaju lične i osetljive zdravstvene informacije kako bi privukli donacije. To dovodi do komodifikacije bolesti, pretvarajući privatne zdravstvene probleme u javne spektakle gde dolazi do razmene lične privatnosti za finansijsku podršku. Uspeh kampanja često zavisi od sposobnosti da privuku pažnju medija, što su privilegije koje su dostupnije bogatijim i obrazovanim pojedincima sa većim socijalnim kapitalom. Ovo perpetuira socio-ekonomske nejednakosti, jer je za one koji su već u nepovoljnom položaju manje verovatno da će uspeli u ovim kampanjama. Štaviše, grupno finansiranje podriva sistemske reforme i smanjuje pritisak na vlade da ulažu u javno zdravstvo i preventivne programe. Čak i kada postoje propisi za zaštitu ličnih podataka, dobrovoljnost pristanka je upitna kada pojedinci moraju da biraju između čuvanja svoje privatnosti i odustajanja od neophodnog medicinskog tretmana. Da li ima dobrovoljnosti kada su život i zdravlje ugroženi, a jedini način da se dođe do šanse za lečenje podrazumeva da se bolešću trguje?

KLJUČNE REČI: PRIVATNOST, KOLAČIĆI, CENOVNA DISKRIMINACIJA

JEL KLASIFIKACIJA: D82, D83, L1

THE ECONOMICS OF PRIVACY

The NDES seminar held on June 3, 2024, was dedicated to the topic “The Economics of Privacy”. Speakers Bojan Ristić and Nikola Njegovan presented some of the key contributions in this field, while discussants Nikola Ilić, assistant professor at the Faculty of Law, University of Belgrade and Bojana Radovanović, research fellow at the Institute for Philosophy and Social Theory, expanded on the topic, addressing both its legal aspects and those related to philanthropy. Attendees then had the opportunity to ask questions and share their own insights on the presented topic. To convey the content of the seminar, here are the key contributions of the speakers and discussants in order they appeared.

Since tracing the origins of a field can take us far back, in the forthcoming review, we will link the beginnings of the economics of privacy to the contributions of Richard Posner and George Stigler from the Chicago School, as well as the contrasting viewpoints of Jack Hirshleifer, focusing on insights from the 1970s and 1980s—the first wave (Acquisti et al., 2016). What does the term privacy refer to? According to Posner (Posner, 1981), there are at least three different interpretations. First, privacy involves concealing information, which is its most common interpretation. Second, it signifies tranquillity and peace (such as avoiding unwanted phone calls). Finally, privacy can be synonymous with freedom and autonomy. Posner regards the first interpretation as the most intriguing from an economic perspective, emphasising its close connection to the economics of information (for example, the hiding of information by employees on the labour market is, in principle, no different from the hiding of product characteristics by producers because reducing the amount of information reduces efficiency; it is not an effective means of insurance because the burden is not widely distributed but instead shifted from one small group to another). Standard economic topics are raised: the nature of the good in question (private, public, final, intermediate), the possibility of market solution to the problem of privacy (clearly defining property rights and allowing trade), problems of market failure (nature and source of information, transaction costs), etc. Furthermore, we will discuss Stigler’s assertion (Stigler, 1980) that it is incorrect to assume information inherently has the characteristics of a public good. He emphasises that the cost of disseminating information can be substantial and highlights the critical issue of the separability between the production and dissemination of information (this point is illustrated through the example of individuals’ credit histories). The key, however, is to demonstrate that there is a basis for applying economic analysis to law in this domain. For instance, the economic argument against eavesdropping illustrates how it diminishes communication effectiveness and increases costs.

On the other hand, Hirshleifer (1980) focuses on the third interpretation, thus criticising the narrow definition of the Chicago school, which reduces privacy to the ability to control the dissemination and use of private information. In his opinion, privacy means autonomy within society, which implies a specific social structure and accompanying social ethics. In the spirit of the Chicago School, which excludes psychology from economics and treats preferences as given, privacy is viewed as an intermediate good rather than a final consumption good, avoiding the discussion of tastes, which lies outside the domain of economics. In contrast, Hirschleifer directly addresses tastes in the context of privacy, arguing that it is an economic topic. He believes the evolutionary approach is valuable in this field, as existing solutions are well-adapted because they have withstood the test of time. In this context, he refers to Alchian (1950) drawing attention to the evolutionary interpretation of rationality—the way blind forces of environmental selection simulate conscious rationality. Since cultural as well as genetic factors are under the influence of natural selection, attention is drawn to the views of the Austrian school, primarily to the idea of the emergence of social structures in the absence of rational planning of subjects (Hayek, 2002). Finally, Hirschleifer examines in detail the three structures of sociality, emphasising the two-sidedness of the ethics on which they rest: communal sharing (the golden rule), private rights (the silver rule – “the transition from the small human band to settled communities and civilised life resulted from man’s learning to obey the abstract rules of an emergent market order”) and dominance (iron rule). Along the lines of Schumpeter’s reflections on the “mental suicide” of capitalism, Hirschleifer emphasises that the ethics of privacy can be an “enormously powerful device for creating wealth, but beyond a certain point affluence creates great social dangers in permitting or perhaps even promoting a relaxation of social discipline together with the spread of disruptive ideologies” (Šumpeter, 1998).

Finally, Varian (2002) notes that consumers rationally prefer certain types of information about themselves to be available to sellers while wanting other information to remain hidden—as if it is an economic tradeoff. According to Acquisti *et al.* (2016), Varian introduces a discussion on the economics of privacy in the so-called “second wave”, focusing research on privacy within the context of its role in economic transactions.

Bojan Ristić: In today’s digital environment, particularly with the advent of artificial intelligence in everyday life, the topic of the economics of privacy has gained special significance. Accepting “cookies”, which facilitates information searches during online shopping, implies consent to share one’s privacy with the platform used for this purpose and often with third parties that acquire data from it. Clearly, this intrusion into privacy is based on an economic tradeoff. Platforms

use the collected data to analyse consumer preferences and willingness to pay, which can lead to personalised pricing. Since the buyer's reservation price becomes known to the seller, the offered price can be precisely tailored to the buyer's willingness to pay. In such a transaction, the buyer loses consumer surplus while the seller captures the entire economic surplus.

It turns out that perfect price discrimination is not just a useful theoretical concept described by Arthur Pigou over a century ago (Pigou, 1920) but a tangible reality in the internet environment. Consumer privacy fuels successful price discrimination in online transactions in which they participate on a daily base. With the development of artificial intelligence, algorithmic price discrimination becomes more efficient in discerning willingness to pay, while consumers become increasingly constrained in exhibiting strategic behaviour during purchases. "Prediction machines" (Agrawal *et al.* 2022), fed with information left by the consumer when accepting cookies, are increasingly effective in discriminating groups of consumers based on their willingness to pay. Developments are thus favouring the conditions for perfect price discrimination.

However, it turns out that consumers' perception of price discrimination is often negative, likely due to the very term "discrimination" (Borgesius & Poort, 2017). A well-known case from the early 2000s involving Amazon disturbed the public significantly. Although circumstances suggested otherwise, the company never admitted to deliberately raising prices for users with cookies. Ultimately, even when a seller does not raise the price, price discrimination may still be at play—"instead of raising prices to some consumers [the expected indication of price discrimination], firms may simply reframe their behaviour by offering price discounts to others" (Acquisti *et al.*, 2016). In contrast, economists traditionally view discrimination more favourably, particularly if it enables transactions in new markets. For example, Schmalensee (1981) demonstrates that for third-degree price discrimination to increase overall welfare under linear demands and constant marginal costs, it must result in an increase in output. Later, Varian (1985) reaches the same conclusion in a more generalised context.

According to Acquisti *et al.* (2016), the research questions that wait for answers include whether consumers genuinely value privacy and to what extent, whether personalised pricing actually occurs and in which markets, and whether the combination of sophisticated analytics and abundant consumer data leads to an increase or redistribution of welfare. Additionally, it would be interesting to explore the extent to which privacy-enhancing technologies (PETs) can change how private data is used and what economic consequences might be expected.

Research approaches can be experimental, empirical, or model-based. One possible direction for microeconomic modelling follows.

Nikola Njegovan: Acquisti & Varian (2005) develop different models of strategic interaction between buyers and sellers to determine the conditions under which sellers will find it profitable to condition prices on purchase history (e.g. cookies), taking into account the measures that buyers can apply for defence purposes (anonymising technologies, e.g. deleting cookies). The base model assumes a monopolist with zero marginal costs of producing an indivisible good and the ability to track the history of purchases. For simplicity, assume there are only two periods, with a zero discount rate and no arbitrage opportunities, during which consumers can either buy the product or abandon the purchase. Sophisticated consumers can use anonymising technologies for free. There are two types of consumers: high type with reservation price v_H and share π and low type with reservation price v_L and share $(1 - \pi)$. Therefore, the profit in case of uniform price is $\max\{2\pi v_H, 2v_L\}$. The quantities purchased by consumers are denoted by x_H and x_L (discrete quantities), while p_H and p_L are the present values of the prices charged to these types of consumers (a simple sum since there is no discounting). Therefore, the optimisation problem reduces to profit maximisation under the standard conditions of self-selection (where it is not beneficial for one type to imitate another) and participation (where the purchase must offer greater utility than the outside option). It turns out that there are three pricing strategies that are not dominated: selling exclusively to high-type consumers, selling solely to low-type consumers, and implementing price discrimination. However, as suggested by earlier theoretical findings (Stokey, 1979), it appears that discrimination is not profitable. Nonetheless, the substantial investments made in data collection of this nature imply a need to revisit assumptions regarding consumer sophistication (such as short-sighted behaviour) or the costs associated with employing anonymising technologies. Another approach is to enhance the value for existing customers through supplementary benefits, thereby fostering conditions conducive to a “partial lock-in”. In this separating equilibrium, high-type customers continue purchasing the product with added benefits, while low-type customers opt for alternatives offered by competitors.

Nikola Ilić: The economic transaction when a buyer cedes a portion of their privacy to a seller is governed by laws and by-laws, specifically by the relevant legal framework. In the European Union, this legal framework is, to the greatest extent, based on the General Directive on Privacy Regulation – GDPR (Official Journal of the EU, L 119), while in the Republic of Serbia, it is primarily regulated by the Law on Personal Data Protection (Official Gazette of RS, No. 87/2018). In both legal systems, it is necessary for participants in the transaction to meet

specific legal requirements for the collection, processing, and use of personal data to be permitted and for the concluded contract to produce legal effects. The key role of these legal requirements is to protect privacy by eliminating or mitigating problems of information asymmetry that may arise when consumers are not adequately informed about how their data is used. Therefore, among other things, data collection and processing are allowed only for specific purposes, which consumers are informed about and with which they agree. From the economic analysis of law perspective, special attention should be paid to the consent between the data processor and the data subject—the nature of this consent can significantly influence the legal and economic consequences of the transaction and the participants' behaviour. Moreover, it has been empirically established that more precise definitions and the introduction of new conditions for obtaining consent can enhance consumer privacy protection while improving the business outcomes of sellers who base their operations on personal data (de Matos & Adjerid, 2021).

Bojana Radovanović: Finally, privacy can also be discussed from a philanthropic perspective, particularly in relation to crowdfunding for medical treatment through donations. This practice raises significant ethical issues, including donor bias, maintenance of socio-economic inequalities, and undermining systemic reforms. By all means, the most pressing issue is the violation of the privacy of fund beneficiaries. Crowdfunding platforms often require them to publicly disclose personal and sensitive health information to attract donations. This leads to the commodification of illness, turning private health issues into public spectacles where personal privacy is exchanged for financial support. The success of campaigns often depends on their ability to attract media attention, which are privileges more accessible to wealthier and better-educated individuals with more significant social capital. This perpetuates socio-economic inequalities, as those already disadvantaged are less likely to succeed in these campaigns. Moreover, crowdfunding undermines systemic reforms and reduces pressure on governments to invest in public health and preventive programs. Even though there are regulations in place to protect personal data, the voluntariness of consent is questionable when individuals must choose between preserving their privacy and forgoing necessary medical treatment. Is there true voluntariness when life and health are at stake, and the only way to obtain treatment is by commodifying the illness?

KEYWORDS: PRIVACY, COOKIES, PRICE DISCRIMINATION

JEL CLASSIFICATION: D82, D83, L12.

LITERATURA

- Acquisti, A. & H. R. Varian (2005). Conditioning prices on purchase history. *Marketing Science*, 24(3), 367-381.
- Acquisti, A., C. Taylor & L. Wagman. (2016). The Economics of Privacy. *Journal of Economic Literature*, 54(2), 442-492.
- Agrawal, A., J. Gans & A. Goldfarb. (2022). *Prediction Machines: The Simple Economics of Artificial Intelligence*. Harvard Business Review Press, Boston, Massachusetts.
- Alchian, A. A. (1950). Uncertainty, Evolution, and Economic Theory. *Journal of Political Economy*, 58(3), 211-221.
- Borgesius, Z. F. & J. Poort. (2017). Online Price Discrimination and EU Data Privacy Law. *Journal of Consumer Policy*, 40, 347-366.
- de Matos M. G. & I. Adjerid. (2021). Consumer Consent and Firm Targeting After GDPR: The Case of a Large Telecom Provider. *Management Science* 68(5), 3330-3378.
- Hayek, F. A. (2002). Epilog: Tri izvora ljudskih vrednosti. U *Pravo, zakonodavstvo i sloboda* (tom 3, str. 388-410). Podgorica, Crna Gora: CID; Beograd, Srbija: JP Službeni list.
- Hirshleifer, J. (1980). Privacy: Its Origin, Function, and Future. *The Journal of Legal Studies*, 9(4), 649-664.
- Pigou, C. A. (1920). *The Economics of Welfare*. The Macmillan Company, London.
- Posner, R. A. (1981). The Economics of Privacy. *The American Economic Review*, 71(2), 405-409.
- Schmalensee, R. (1981). Output and Welfare Implications of Monopolistic Third-Degree Price Discrimination. *The American Economic Review*, 71(1), 242-247.
- Stigler, G. J. (1980). An Introduction to Privacy in Economics and Politics. *The Journal of Legal Studies*, 9(4), 623-644.
- Stokey, N. (1979). Intertemporal price discrimination. *Quarterly Journal of Economics*, 93(3), 355-371.
- Šumpeter, J. (1998). *Kapitalizam, socijalizam i demokratija*. Plato, Beograd.
- Varian, H. R. (1985). Price Discrimination and Social Welfare. *The American Economic Review*, 75(4), 870-875.
- Varian, H. R. (2002). Economic aspects of personal privacy. In W. H. Lehr & L. M. Pupillo (Eds.), *Cyber Policy and Economics in an Internet Age* (Topics in Regulatory Economics and Policy Series, Vol. 43). Springer.