

Conditional Privacy Rights

Comment

by

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1 *Introduction*

New technologies have increased the size and impact of information leakages. For instance, in 2016 more than 11 million files of confidential sensitive information were leaked via the so-called Panama Papers database.¹ This leakage revealed citizens' private information from offshore companies that may have facilitated bribery, tax evasion, financial fraud, and illegal trafficking. 360,000 names of people and companies were leaked, exhibiting how new technologies' can impact individuals' privacy, as well as the cost and benefit trade-offs in terms of social welfare.

As argued in Acquisti, Taylor, and Wagman (2016), the proliferation of databases containing consumer information has led to exponential growth of the literature on the economics of privacy. A substantial part of this recent research focuses on data intermediaries (e.g., search engines, social networks), consumer identification, advertising, and electronic commerce. In contrast, Mungan (2017) contributes to the literature on privacy by focusing on publishers' incentives to gather and disseminate individuals' information. More specifically, the paper studies the possibility of allowing individuals to prevent the dissemination of information by exercising *conditional privacy rights* in exchange of a fee.

In this Comment, I provide what I think are the major contributions and limitations of the analysis in the paper. In particular, I point out crucial conditions that might make conditional privacy rights problematic.

2 *Contribution of the Paper*

Mungan's (2017) most relevant contribution consists of modeling the conflicts of interest between publishers, citizens, and society in the process of gathering and disseminating citizens' information. The paper shows that under certain circumstances, it can be socially beneficial to screen individuals based on their subjective valuation of privacy. Among the broad range of topics regarding privacy rights, Mungan (2017) is particularly suitable for studying social welfare in settings where citizens' privacy is not protected

* Universitat Pompeu Fabra and Barcelona GSE, Spain. I would like to thank Murat Mungan and participants in the 2016 *JITE* Conference. The financial support of the Spanish Commission of Science and Technology (ECO2013-43011-P) is gratefully acknowledged.

¹ <https://panamapapers.icij.org/>.

de jure or de facto. Departing from an initial allocation of property rights such that citizens do not have privacy rights, the paper shows that, under certain conditions, social welfare can be increased by allowing citizens with high subjective valuation of privacy to prevent the dissemination of their information.

The paper studies the trade-off between citizens' cost of privacy disclosure, c , and the social value of disclosing the information, g . To analyze this trade-off, the paper first explores the limitations of a market for personal information (*national information markets*, NIMs hereafter) proposed in previous literature (Laudon, 1996, 1997). In a well-functioning NIM, individuals with relatively low cost of privacy disclosure would sell their information at a price higher than c as long as $g \geq p \geq c$, and transactions would be welfare-enhancing. The paper contrasts the NIM regime with the *publicity regime*, where publishers can disseminate information freely because individuals have no allocated privacy rights. In the publicity regime, individuals with a high relative cost of privacy disclosure would be willing to buy their privacy.

Given that transactions costs are commonly substantial in privacy conflicts, the allocation of property rights matters, and the NIM and the publicity regime do not lead to the same outcome in terms of efficiency (Coase, 1960). Therefore, in both, not all welfare-enhancing transactions take place, due to high transaction costs. As argued by the author, the comparison between these two regimes in terms of social welfare depends on the frequency and value of the welfare-enhancing transactions that each system allows. For instance, in certain settings it might be too costly in terms of transaction costs for a citizen to search for, bargain with, and enforce agreements with all potential publishers of her private information. However, in other settings, transaction costs might be larger for a publisher to transact with all potential citizens related to a given piece of information.

The main message of the paper is that under certain conditions a system of conditional privacy rights dominates, in terms of efficiency, the publicity regime, where citizens have no privacy rights. The decision between buying privacy and not buying it permits screening individuals based on their subjective valuation of privacy. Therefore, social welfare may be enhanced by preserving the privacy of individuals with high personal information disclosure costs.

3 Allowing for Positively Correlated Private Costs and Net Social Value

In Mungan's (2017) model, a key assumption is that the gain from information, g , is constant. As a consequence, $g - c$ is decreasing in c ; however, one can easily think of situations where this is not the case. For instance, information about public figures, such as politicians and public administrators, is more likely to have both larger private costs and larger social gains than information about private citizens. In fact, the dissemination of information about public figures is more likely to generate a public interest that dominates the private interest (i.e., situations where $g > c$), as commonly argued in court decisions.²

² See for instance, *Couderc and Hachette Filipacchi Associés v. France*, November 10, 2015; and *Verlagsgruppe News GmbH v. Austria*, December 14, 2006 – both at the European Court

More formally, as in Mungan (2017), let c be a random variable with a strictly positive density function for all $c > 0$. Then, in the conditional privacy-rights regime, for a fee x , all individuals with a sufficiently large private cost, $c > x$, are willing to protect their privacy. A constant g implies that those that would be willing to pay the fee – the fraction of individuals with higher private cost c – would be those with the lower net social value of disseminating the information, $g - c$. This is the case because a constant g implies that $g - c$ is decreasing in c . Now, unlike in the paper, let g and c be jointly distributed according to a density function f such that $f(c, g) > 0$ for all $g > 0, c > 0$. As in the paper, the expected social value of publishing a given piece of information in the conditional privacy-rights regime can be measured as the expected net social gain of disseminating the information for all those who are not willing to pay the fee:³

$$\int_0^x (g - c)f(c, g)dc.$$

In the publicity regime and given high transaction costs, all the information is released. Thus, the expected social value of disseminating a given piece of information can be measured as

$$\int_0^\infty (g - c)f(c, g)dc.$$

Thus, the difference in terms of expected social value between the publicity regime and the conditional privacy-rights regime is given by

$$\int_x^\infty (g - c)f(c, g)dc.$$

A crucial implication of a nonconstant g is that when the net social value of the information, $g - c$, is positively correlated with the private cost, c , then $g - c$ is higher for those who are willing to pay the fee than for those who are not. Notice that those willing to pay the fee are precisely the individuals for which the information is more socially valuable (e.g., managers of prestigious firms accused of tax evasion). Given the constant social gain, g , the main result in Mungan (2017) states that there exists a fee such that the conditional privacy-rights regime dominates the publicity regime.⁴ The following proposition shows that this result does not necessarily hold if the net social value of the information, $g - c$, is positively correlated with the private cost, c .

PROPOSITION *Let the net social gains from information, $g - c$, be positively correlated with the private cost to individuals, c , and have its unconditional expected value be strictly positive, $\mathbb{E}(g - c) > 0$. Then the conditional privacy regime described in Mungan (2017) does not strictly dominate the publicity regime.*

of Human Rights.

³ In Mungan (2017) the two regimes generate the same incentives to gather information. Therefore, for comparison purposes, the relevant component of social welfare is the expected social value of disseminating the information.

⁴ See Proposition 1 in Mungan (2017).

PROOF As shown above, the expected social value of publishing a given piece of information can be measured as the difference between the expected social value under the publicity regime and the expected social value under conditional privacy-rights regime. In other words, it is the expected social value of the information of those individuals who pay the fee and for which the information is not disseminated. That is, it is given by the expected $\mathbb{E}[(g - c)|c > x]$. Given the positive correlation between $g - c$ and c , and that $\mathbb{E}(g - c) > 0$, then for any $x < \infty$ it must be that

$$\mathbb{E}[(g - c)|c > x] > 0.$$

That is,

$$\int_x^\infty (g - c)f(c, g)dc > 0.$$

Q.E.D.

4 Other Potential Negative Implications of Conditional Privacy Rights

There are two additional potential negative consequences of implementing conditional privacy rights. First, an adequate implementation of this regime is likely to require enforcement resources, which would be costly. Second, this regime may lead to the truncation of the information released to the public. The implementation of the conditional privacy-rights regime proposed in the paper can be costly in terms of enforcement resources. When a publisher discovers information about a citizen, it must offer it for purchase to the individual. In the model this step is automatic and does not involve enforcement costs. In practice, this might not be the case when publishers' incentives differ from social-welfare incentives on what information should be published. For instance, media's profits might make publishers be interested in publishing information on certain individuals even if the net social value of disseminating this information is negative. If that is the case, the implementation of conditional privacy rights would require enforcement mechanisms to provide the right incentives for publishers.

The truncation of information can be a disadvantage, as it can affect the representativeness of the information disclosed to the public. Screening individuals via the payment of a fee truncates the collection of information. Those with higher subjective valuation will be out of the sample. As argued in the paper, one goal is to permit welfare-enhancing transactions "without interfering much with the free flow of information" (Mungan, 2017, section 1). However, conditional privacy rights interfere by keeping part of the information out of the public sphere. Such interference can misrepresent the real information because the truncation takes place in a private and nonrandom way.

5 Discussion and Further Research

Screening based on subjective valuation can enhance social welfare, but should be implemented with extreme caution and only under very specific conditions. In particular,

implementing it may reduce social welfare relative to the publicity regime if there is a positive correlation between individuals' privacy disclosure costs and the net social gains associated with disclosure.

In addition to the caveats mentioned above, screening individuals via monetary fees can be undesirable in that privacy has redistributive effects, as discussed in Posner (1981) and Acquisti, Taylor, and Wagman (2016). Therefore, it might be preferable to screen individuals using nonmonetary mechanisms. Finally, any social-welfare analysis of privacy rights should take into consideration the frictions generated by risk aversion, information asymmetries, and uncertainty about the future private costs of information dissemination, in line with Daughety and Reinganum (2010). In the particular framework of conditional privacy rights, uncertainty about future potential costs might make risk-averse individuals overinvest in being unobservable to others.

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