



Digital piracy in Asian countries

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Abstract

Piracy has been one of the most flamboyant topics in the legal and economic literature of the last two decades. The increased importance assigned to copyright in national economies determined the imposing of this issue as one of the leading voices in the exports of many developed countries. However, the impact of several disruptive innovations (such as the internet and all its related technologies) has weakened the original role of copyright, thus stimulating a wide scholarly literature. While the core of this stream of literature has in general considered consumers like potential infringers and tried to check the impact of piracy on sales and industry profits, a few papers have considered the behavioral perspective. This aspect becomes crucial if one wants to take consumers' viewpoint into account, while studying the inner factors that led them to infringe copyright. Yet, behavioral law and economics literature teaches us that beside any normative claims, the individuals' compliance to the law depends on a complex interaction of factors including risk perception, size of sanctions, psychological determinants, and cultural values which jointly determine the social norms that must be properly understood in order to make efficient laws. If a handful of papers have already tried to gain insights on consumers' behavior in western countries, the issue is still largely neglected in many countries in the rest of the world. This paper takes advantage of a survey conducted through field research in four Asian countries, (China, Japan, Korea and Vietnam) in order to provide an innovative picture of consumers' behavior and sketch out some more general policy implications.

Keywords P2P file-sharing · Unauthorized copying · Copyright

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1 Introduction

This paper presents a cross-country investigation on peer-to-peer attitude (p2p) in four Asian countries: China, Vietnam, South Korea and Japan. This specific perspective is rather non-conventional in the pre-existing literature on piracy, where the focus has been essentially directed towards western society: mainly, the US and Europe. The present study essentially relies upon a behavioral investigation on copyright infringement in the music domain, exploiting a unique survey data collected through field research. The peculiar geographical setting appears useful in order to disentangle not only the characteristics that differentiate western consumers from Asian ones. The cross-country perspective will also try to unveil why, within the same continent, dissimilarities in consumers' behavior exist among countries. Interesting results emerge, suggesting that differences in the local specificity that we can shortly define as social norms seem to play a fundamental role in explaining different behaviors with similar legal frameworks and may be very important in predicting the success of new law amendments.

This finding in turn seems to be substantially relevant, especially when considering that the normative attitude has leaned so far towards a worldwide harmonization of the legal framework by means of international agreements, chiefly lead by the TRIPs agreement. With some caveat, we are herewith able to suggest that “one size fits all” copyright policies, extensively adopted by WTO and other international institutions in order to foster the legal harmonization, do not work equally even within the same geographical area, since even historically related countries can differ significantly. Moreover, empirical evidence shows that a longer tradition in protecting creative works in a given country does not have a relevant impact on P2P behavior. On the whole the above suggests that social norms seem the most relevant element determining piracy across all countries considered in our analysis. Policy making should also give more consideration to this locally specific source of regulation rather than simply amending the formal legal framework.

The rest of the article is organized as follows: Sect. 2 provides a short description of the interplay between copyright and piracy and the way of technological changes, legal frameworks and the social context play in this phenomenon. Section 3 describes the methodology and the data gathered while Sect. 4 deals with the empirical analysis and the results. Section 5 thus tries to draw the major policy implications, while Sect. 6 concludes.

2 Copyright and piracy: the birth of an economic issue

The word “copy-right” refers to the legal monopoly entitled by law to the right-holder for making copies of creative works. This is an exclusive right, giving the right-owner the ability to exclude anyone from making and selling copies of the copyrightable work—thus raising a barrier to entry in the market for the information

good protected by copyright¹—and from accessing the copyrighted work, if the consumer is not able to pay the required price. Hence exclusion via copyright is pivotal in order to make possible a market of information goods and give to the right-holder, at least potentially, some market power.² Piracy is then defined as “the ability of making illegal copies” which may hamper the copyright owner in two distinct ways: by lowering the number of legal copies bought by consumers and by making competition more intense, since the illegal copies represent a competitive threat to the legal products, possibly determining crowding-out (Johns 2010). However, for longtime copies had a lower quality and a lower price hence permitting some differentiation within the market.

The scholarly debate in the economic literature started in the early 80s, when technological change making possible to make copies at a larger scales became available, e.g., for written text because of the reprography and in music because of music cassettes (Liebowitz 1985).

The debate reached a momentum in the late 90s—beginnings 2000s, once digital copying technologies and the Internet made it possible for a larger scale piracy (Silva and Ramello 2000). The digital technology allowed duplicating audio files with equal quality with respect to the originals. At the same time, the internet—thanks also to the system of file sharing—supplied a powerful channel for distribution, even more efficient of the commercial delivery channels, that provided for a longtime the barrier to entry and thus the concentration of the music market (Alexander 1994). Of course the two features together gave to copyright infringement a disruptive potential vis-à-vis the existence of the music market, as we know it. However it must be also underlined that so far, music production does not seem to be substantially harmed.

The economic debate has mainly kept the focus on a specific issue: whether piracy crowds out sales and profits (for a in-depth survey of the literature on digital piracy Ref. Belleflamme and Peitz 2019). More recently, other nuances or complementary issues have been considered, including the incentive on musicians and the production of recorded music (Waldfogel 2012; Domon 2018). A few papers, although focusing mainly on the economic effect, have at least tried to have a glimpse on idiosyncratic features connected to the local dimension and social dynamics. Since the very beginning, Liebowitz (1985) has shown that a certain kind of consumer might be willing to slightly increase her willingness to pay in order to buy also the possibility of making copies, eventually increasing the copyright-holder's profit. Then Conner and Rumelt (1991) and Takeyama (1994) showed that in many situations the demand of information goods is subjected to network externalities so that, under certain conditions, the consumption of illegal copies can enhance not only producer's

¹ An information good, according to a consolidated economic literature, is a commodity whose value depends on the information it contains and that in general is protected by copyright, such as a book, a cd, a dvd, a software, etc. (Shapiro and Varian 1998).

² Although the legal monopoly entitled by copyright does not automatically translate into an economic monopoly for the right owner, its rationale is to reward the successful copyrighted works with substantial market power. For an in-depth discussion please refer to Ramello (2003).

profit but also consumer's surplus. These earlier studies still focus on socially driven economic effects. Nonetheless they open the way to the idea that the social dimension has an impact on economic and that non-economic variables play a role not only driving consumption but also in determining the attitude towards copyright law. Copyright goods markets are somewhat artificially created thanks to the opportunity brought by technological change. They then depend on the technological state of the art, the legal protection and the social norms governing individual behaviors in information/communication domain. It is very important to try to understand the role of any of the previous variables and possibly how they interact (Feldman and Nadler 2006).

For the purposes of the present paper it is useful to disentangle the scholarly debate in the three main components, to which piracy is substantially connected:

- technological opportunities,
- institutional framework and
- social dimension.

The existence of piracy (and its diffusion) not only varies in accordance with the interplay of these three stances, as it will be further discussed below, but in a sense might depend on every single component. For example, without the proper technology copying cannot exist, while a very weak legal framework makes copyright infringement very likely. On the other hand, the components interplay for promoting the expected result as, for example, the legal framework alone might not have the expected effect without the proper recognition at the social level.

2.1 Technological opportunities

Undoubtedly, technological change is the main driver not only for the emergence of the market for information goods but also for copyright infringement. It represents, at least, its necessary condition. Without the technical possibility, piracy would not be an issue (Breyer 1970). However its workings are much more complex and depend on a number of issues associated to originals and copies. At the very beginning, the degree of substitutability between originals and copies was low and, accordingly, the scale of the phenomenon was equally low, with some nuances depending on special conditions (for a model on substitutability between original see e.g. Di Liddo 2018).

For example, before the invention of the printing press, copying books was a very difficult venture, possible only with the access of very specialized individuals, the *amanuenses*, and making a copy of a book could take months or even years. The shift from the human technology to the machine expanded the possibility of making copies but with some restrictions in terms of scale (Burke 2000). This has been particularly true for the music domain, the one more specifically under investigation here, where the availability of copying facilities was essentially brought about by the cassettes technology between the end of the 60s and beginnings of the 70s. Such technological change allowed the rise of some sort of commercial but still limited

piracy (Silva and Ramello 2000). Actually, a significant phenomenon of unauthorized copying was actually the so-called private copying, mostly done at the individual scale and with a lower impact on the producer, to the point that many of the major firms involved in producing music recordings were equally producing the hardware making possible private copying.³ Not only this has never been perceived as illegal behavior but in a number of countries the circulation of music-cassettes, original or privately copied, have rather been fundamental in setting up the consumption of recorded music and thus allowing later to start the commercialization of originals (Manuel 1993).

The picture dramatically changed with the arrival of digital technology that has at the same time decreased the cost of copying, lowered the differential in quality between copies and original and, thanks to the internet, made distribution affordable to anyone (also concerning competition). So, summing up, the technological settings determine the potential for piracy, with no technological availability implying an equally absent piracy activity. While of course intervention at the technological level might have an effect on limiting the unauthorized duplication of music recordings and sometime in the history of the music business attempts have been made for contrasting piracy via technology (for example, in the case of Digital Audio Tape copying limiter or watermarking of digital files), this has been largely unsuccessful. Moreover, for the extent of this paper, the technological framework is given and thus fixed.

2.2 Institutional framework

The second determinant affecting piracy is the institutional framework, defining the boundaries of what is a copyright law infringement. In general it is composed by a number of elements that essentially define what it is legal and what is not, and how strongly the rule of law will be enforced. Hence in general it generates incentives for agents' behavior.

It has been extensively discussed that the law is the first brick that defines the boundary between legality and illegality. In copyright law, for instance, copying is considered in general a violation with the well-known exception of the “fair use doctrine” existing in many jurisdictions and essentially providing a number of exceptions for “legal” piracy (Gordon 2014). However the law on the books is only part of the system providing incentives, because in the end the enforcement is jointly defining the real effectiveness of substantial law. Hence a very harsh law with low enforcement might be much less effective (or not effective at all) than a weaker law with a stronger enforcement (Marciano and Ramello 2019).

³ It is worth noting that the music cassettes were introduced by the same industrial group (Royal Dutch Philips) owner of one of the five major producing music recording, the Polygram and its affiliated labels. Likewise a significant number of patents for procuring CD burners are owned by Sony, another of the major recording companies. The mentioned industrial groups were of course very much aware of the potential use of the hardware sold in the consumer market Silva and Ramello 2000).

It is well known that pirate behavior in general decreases with the increase of the probability of being caught. Hence the working of police activity and courts is equally important, even if this cannot be expanded infinitely because of the social costs associated to it. This is especially true in the Internet age, in which the optimal policy would possibly require a policeman for every user (Maffioletti and Ramello 2004).

Finally, other institutions, as the collecting societies, concur to complete the institutional framework. These essentially play the double role of licensing the contents to users in many situations while distributing royalties to copyright holders. Even in this case the workings of the system can play a role in orienting the choice of would-be pirates (Katz 2010).

Taken in its entirety, the institutional system can also play a dynamic role inasmuch it may enter the shaping of individual incentives. In the long run it should also shape the cultural attitude towards protection of creative works and copying (Feldman and Nadler 2006). This is a long-lasting phenomenon and, roughly speaking, one should expect that countries with a longer tradition in protecting authors' work should have, *ceteris paribus*, a lower level of piracy.

In other words, the idea of a long-lasting tradition in copyright law should stand as a proxy for larger sensitivity towards protection of intellectual property rights—no government in general amends and preserves long-lasting unexploited law—and beside strong legal framework should have accustomed individuals toward the compliance of the law. This is drawn from that strand of legal scholarship supporting the expressive function of the law and thus emphasizing the effect that law may have in shaping preferences and at the end also social norms (Geiseinger 2002).

A further comment deserves the general theory supporting intellectual property rights, included copyright. Despite the different traditions existing worldwide, in the last decades there has been an instance of substantial homologation, spurred on the one hand by the theoretical assumption that intellectual property rights are central to foster innovation and, on the other, by the need of promoting the harmonization of the legal regimes for facilitating international trade. The TRIPs agreement, amended in 1994 under the auspices of World Trade Organization, has been the spark sponsoring the adoption worldwide of a “one size fits all” policy (Ryan 1998).

In general, this view held that a stronger copyright law and a “vigorous” enforcement were the proper ways for decreasing piracy and for letting markets flourish. A similar claim was related with the idea that countries having higher rates of copyright infringement could easily tackle it by developing and strengthening their institutional framework. This legal dynamics has specifically characterized the four Asian countries subject of the current study.

2.3 The legal framework in four Asian countries

As discussed above, many elements define the institutional setting of intellectual property in a country. Yet, as far as piracy is concerned, copyright law is the first reference for assessing whether a country has implemented its willingness to protect the economic interest of authors and whether there is a local sensibility towards it.

As previously mentioned, one would expect that a longer legal tradition in protecting copyrightable works should have had a stronger impact in framing up the mind of citizens towards respecting the legitimate expectations of copyright holders.

Now, if we focus on the countries under screening in this paper, we see a nuanced picture. All these countries had recently amended laws compatible with the western (and now international) tradition of copyright on the impulse of TRIPs agreement. Hence the legal framework at the time of the survey that generated the data used in this paper (2006) was substantially homogenous. However, if we look backward to the each national legal tradition, some of them had a longer habit in protecting something compatible with what we define today as copyright.

In China a number of scholars identify the emergence of a copyright-like regulatory system soon after the advent of printing during the Tang Dynasty (AD 618–906). A handful of scholars assert that the first law protecting creative works and its exploitation dates back to the Song dynasty (AD 966–1279). Others contend that a legal measure really comparable to copyright might be found in the entire history of imperial China (BC221–AD1911) (Ganea and Hajun 2009; Alford 1995). All however converge at least that the Chinese society was not indifferent to the reproduction of unauthorized text since many century and of course the rise of printing press made the regulation of publication a central issue.⁴ Even if not directly comparable with what we define today as copyright, one might expect that a similar institutional environment should have been sufficient to at least create a more respectful attitude toward illegally reproducing copyrightable works. The first modern copyright act was amended in 1990 and then revised in 2001 in order to incorporate the TRIPs agreement (Ganea and Hajun 2009).

In Vietnam, by contrast, there is no earlier evidence of any law somehow relating the protection of authors and their creative products; the first copyright law was enacted only in 1994. It was actually an *Ordinance on Protection of Authors Rights*, part of a number of reforms intended to give the impression to the rest of the world of the radical transformation characterizing the economy and the state occurring in Vietnam. A more advanced copyright law was then introduced only in 2005, with the reform of the Civil Code (Phan 2009).

From the above is thus reasonable to expect a more respectful attitude towards right-holders in China rather than in Vietnam, since the former country is characterized by a longer tradition in protecting copyright.

The first copyright law was amended in Japan as a Publication Statute in 1869 (then revised in 1887) under the pressure of foreign countries, especially the United Kingdom. It was a sort of gracious concession in order to comply with the requests of major foreign trade partners, while not really intended to impact substantially within national borders. The first modern copyright act was amended only in 1970. However, this law was weakly enforced and contained elements of isolationism, like the de facto absence of any form of protection granted to foreigners. This feature is

⁴ Like in the case of Western copyright, Chinese authorities were very much concerned about controlling and filtering what was published and then widely distributed. Hence in both case legal measures were rooted to censorship (Alford 1995).

well known by music experts that for longtime have had the chance to buy (pirate) Japanese productions of western product, something done without requiring any permission nor paying royalties to the right-holders. The new copyright act amended in 2003 in order to incorporate the TRIPs agreement was then assimilating Japanese law to international standards (Ganea and Nagaoka 2009).

South Korea shows a similar path. The first copyright law dates 1908 under the Chosun dynasty. This reform was intended to meet the requirement of commercial foreign partners, although it appeared stronger than the Japanese statute. Afterwards, because of the annexation of Japan, for nearly 35 years Korea followed a very similar path. Finally once again a free nation, Korea tried to speed up its modernization by amending a modern copyright act in 1957 that was revised repeatedly (1997, 2000, 2003, 2005), also for incorporating the TRIPs agreement (Park 2009).

On the whole, the story of these last two countries shares some elements of commonality, although then Korea tried later to leapfrog Japan in structuring a copyright regulation. Hence, one would expect here a stronger tradition in protecting copyright holders.

2.4 Social behaviour

Socially driven attitudes are becoming increasingly relevant in order to explain economic decisions. This is true almost everywhere in economics as widely witnessed by experimental and behavioural studies that identify for instance the role of social norms in governing individual and group action. While of course there may be a deterministic effect of laws and law enforcement on social norms, as previously discussed, the social norms give a sort of instantaneous picture of the locally held beliefs and values that regulate the behaviour of the group members without any need of sanctions.⁵ Very often the social norms are based on the local morals and ethics, which in a sense represent the cultural apparatus regulating the group and, to a large extent, also individual behaviour. Compliance is not necessarily uniform and people can deviate. Yet, in general social norms represent a reference for a large number of people, especially if they set up private incentives and because they raise (or lower) psychological costs. In this respect they can create a sort of stigma or group evaluation that in turn produces a benefit—i.e. approval by the peers—or a cost—i.e. disapproval by peers (Posner 1997).

A growing literature specifically deals with law infringement, especially tax evasion, claiming that indeed local culture and social norms can explain the existence of different preferences and ethics (Alm and Torgler 2011).

A limited number of studies so far has focused on copyright infringement and mainly on software piracy (Kini et al. 2000, 2004), while very few have tried to get a behavioural glimpse on music piracy (Kwong et al. 2003; Maffioletti and Ramello 2004; Chiang and Assané 2007, 2008). Most studies focus on EU and US

⁵ In a sufficiently broad timespan the interplay between law—including its enforcement and sanctions—and social norms can have dynamic effects on behaviors that however are not studied in the this article, focused only on a static view (on this Ref. Mulder 2018).

respondents, while very little evidence has emerged with respect Asian countries (Kini et al. 2000, 2004; Kwong et al. 2003). Very few of them have adopted the social norms perspective and even when they did, they focused rather on the role of economic variables, such as cost and utilities, thus bringing it de facto back to the usual cost–benefit analysis (Feldman and Nadler 2006). To our best knowledge, in one case the focus has been on the moral evaluations but otherwise the investigation in the non-economic side of social norms has so far been very limited (Jambon and Smetana 2012).

It is worth noting that in the case of copyright different stances can foster the emergence of social norms favouring law infringement. This peculiar dynamic can be connected to a specific widely spread sentiment of disapproval of the law (in this sense it might be interpreted the recent emergence of the Pirate Party in a number of countries⁶) or it can simply depend on the absence of a specific culture in favour of protection of copyrighted work, in general associated to a social recognition of imitation as a source of education. In the latter case the norm might be a widely held perception of the social value of copying.⁷

Concerning the former case, some scholar believe that there is an increasingly shared sensation that modern copyright law is not properly serving the interest of either creators nor readers, while it concentrates the benefits in the hands of other stakeholders (Litman 2004). The disillusionment can spill over into areas of actual behavior: for example, an individual can infringe the law guided by a sort of “moral mandate” urging her to infringe copyright as a sort of protest (Mullen and Nadler 2008). This phenomenon has been fragmentarily observed in copyright domain where sometime infringing behavior served rather an expressive function (Migheli and Ramello 2018; Jambon and Smetana 2012).

Finally, if the copyright infringement is strongly connected to a social norm, one should expect a substantial uniformity of behaviors across the members of a relevant group. A reasonable way for testing the latter is to check for example whether “gender effects” influence agents’ behavior. This method will be adopted in the following analysis.

3 Survey design and data description

Considering the previously analysed theoretical background, we designed a survey in order to get insights about the determinants affecting the probability of the respondents to engage in p2p activities and, more specifically, to get a glimpse on the impact of social norms. As proxy of the latter we intended to check whether country specific effects spurious of socio-economic differences were important

⁶ The Pirate Part is a political movement born in Sweden in 2006 and has spread all around the world. Among others, its program includes a substantial reform of copyright and intellectual property current regimes.

⁷ In most cultures “imitation” has played a fundamental role in education (Warnick 2008). This makes sometime blurred the boundaries between the positive evaluation of imitation and the negative evaluation of copying substantially.

in determining the choice to infringe copyright and whether the individual and social features (including gender) had any significant impact on the decision to make use of p2p technology.

Despite the current technological state of the art was kept exogenous, we addressed the following question: whether in the sample of respondents, the choice of using p2p had any impact on the number of CDs bought during the same period. This was intended in order to somehow address whether piracy has an impact on legal sales, one of the most often raised question by scholarly investigations. Moreover we asked for a number of socioeconomic characteristics such as age, financial resources, music consumption habits (e.g., how do you get music? how do you listen music? what devices do you use?) and about the access to Internet infrastructures (high speed connection availability, etc.).

A questionnaire was submitted between July and October 2006 to a number of undergraduate university students in China (Beijing), Vietnam (Ho Chi Minh City), Korea (Seoul) and Japan (Tokyo). We collected 100 random respondents per country for a total of 400 observations.

It is important to stress that, while sometimes the use of university students for surveys and experiments has been criticized, especially when the enquiries concern issues exceeding the boundaries of juvenile behaviour (such as for instance conducting lab studies concerning manager decisions, judicial decision making, etc.), this critique does not equally apply to the present case of music piracy for a number of reasons. First, students are among the top infringers. Second, they share a similar risk attitude and educational background including technological skills so this limits the interference of other uncontrolled factors (Chiang and Assané 2007). Third, and novel in this study compared to the extant empirical investigations, they are more uniform cross-country than the standard populations for what concerns the major socio-economic characteristics. Consequently, one can more safely focus on the specific influence of the local culture and the local values. In other terms, this makes more plausible to assert that differences in infringing behaviours depends on social norms spurred by differences in the local culture.

In order to enhance comparability, we submitted the questionnaires to university students of the capital of our four countries with the exception of Vietnam where the peculiar characteristics of the country for the reasons just explained suggested preferring the ‘economic’ capital of the country, i.e. Ho Chi Minh City, to the political capital, Hanoi.

On one hand our limited sample size—100 university students per country, for a total of 400 respondents—might affect the generalization of our results to the whole population. Nonetheless, the uniformity of such sample makes the cross-country comparability possible as the survey’s responds (university students) are more similar across country, thus less exposed to uncontrolled factors other than local culture/social norms. It must be also noted that in the timespan during which the survey was conducted the main access to internet was the fixed “wired” broadband access, while the the widespread diffusion of mobile access started only a few years later (from 2008 on). In most of the countries investigated here broadband access was very skewed for the population as a whole, while was (almost) universally available

Table 1 Variable description and descriptive statistics

Variable	Obs	Mean	SD	Min	Max	Description
p2p	400	0.5125	0.5004697	0	1	Dummy = 1 if respondent engaged in P2P activity at least once in the last in the last year, 0 otherwise
Korea	400	0.25	0.433555	0	1	Dummy = 1 if respondent is located in Korea, 0 otherwise
China	400	0.25	0.433555	0	1	Dummy = 1 if respondent is located in China, 0 otherwise
Vietnam	400	0.25	0.433555	0	1	Dummy = 1 if respondent is located in Vietnam, 0 otherwise
NOT_guilty	400	0.2625	0.4405439	0	1	Dummy = 1 if respondent felt (very or little) guilty when using P2P, 0 otherwise
Female	400	0.465	0.4993981	0	1	Dummy = 1 if respondent is female, 0 otherwise
original_cd	400	4.4675	10.60383	0	100	Number of original CDs bought in the last year
Age	399	21.7594	2.432456	18	33	Respondent's age
financial_ind	400	0.125	0.3311331	0	1	Dummy = 1 if respondent is financially independent from his/her parents, 0 otherwise
money_imp	400	166.8994	172.035	0	852.2243	Amount of monthly pocket available to the respondent in US\$
fast_web	400	0.765	0.4245298	0	1	Dummy = 1 if respondent has access to high speed internet connection, 0 otherwise
pirated_cd	400	4.00625	10.08333	0	120	Number of pirated CDs bought in the last year
time_imp	400	14.30996	17.0178	0	105	Hours devoted per month to entertainment
use_internet_home	400	0.5275	0.4998684	0	1	Dummy = 1 if respondent has internet access at home, 0 otherwise

to university students (OECD 2015). On the whole thus our sample meaningful for studying p2p in that specific technological and socio-economic setting.

Taking the above factors into consideration allows charging a greater emphasis on the relevant variables limiting the impact of other uncontrolled covariates. A definition of all variables and their descriptive statistics can be found in Table 1.

4 Empirical analysis and results

In order to test the probability of engaging in p2p piracy, the empirical strategy was to adopt a logistic regression model with a few relevant variables and a number of controls. Table 2 shows the results for a number of different models and interaction between different variables of interest and country-dummies. This was needed in certain cases in order to clean up the outcome coming from the sample composition that might perturb the final interpretation. As we are fully aware that our identification strategy does not allow us to rule out completely all form of endogeneity issues and thus supply definitive evidence on the causal impact of our regressors on P2P behavior, we interpret our estimates more cautiously as correlations.

As it can be easily observed, the probability of engaging in p2p at first sight seems to be significantly related to gender and apparently it decreases in the case of female respondents, consistently with the literature asserting that females are the “fairer sex” (Dollar et al. 2001). However, once interacted the gender variable with respondents’ country of origin, the effect loses significance, thus showing that the fact of being a woman in each country does not really matter. What matters is the fact of being national of the same country, thus accounting more for the existence of social norms.

A similar situation is displayed in the case of displacements of original purchased CDs (*original_cd*): it seems to be positively and significantly correlated in the sample, but once the variable is interacted with the country the effect loses significance. This result should be handled with care for a number of reasons; first there is also a weakness connected to the cross-sectional approach and the inherent bias as highlighted by Waldfogel (2012); second results might be only descriptive of the sample, as we are focusing on a part of every society with a substantial well-being. Hence, if the students (and their families) can afford the costs related to university education, this implies a substantial endowment of wealth and of course the amount devoted to buy CDs is a marginal share. Actually, it makes sense that the main reasons for this kind of subjects for engaging in p2p is not saving a small amount of money, so once more we can claim that something connected to the social norms shared among different national groups can be the major influence.

The controls for financial independence (*financial_ind*) and pocket money (*money_imp*) are not significant confirming that among respondents in our sample indeed the decision to engage in piracy is not mainly connected to an economic justification (i.e., saving money), which in turn is relevant for directing the attention towards the existence of social norms.

It is then interesting to observe that the country-dummy variables are positive and significant only in the case of China and Korea (with respect of Japan). In other

Table 2 Regression models

	p2p	p2p	p2p	p2p	p2p	p2p
Korea	2.285 (0.480)***	2.676 (0.552)***	2.799 (0.657)***	2.403 (0.528)***	3.334 (0.761)***	
China	3.555 (0.584)***	4.106 (0.649)***	3.509 (0.673)***	3.871 (0.653)***	4.443 (0.810)***	
Vietnam	0.071 (0.647)	0.683 (0.691)	-0.445 (0.845)	0.082 (0.689)	0.224 (0.930)	
NOT_guilty	0.835 (0.332)**		0.829 (0.338)**	0.824 (0.335)**		
Female	-0.691 (0.310)**	-0.762 (0.316)**		-0.668 (0.314)**		
original_cd	-0.052 (0.024)**	-0.047 (0.025)*	-0.049 (0.024)**	-0.039 (0.027)	-0.030 (0.027)	
Age	-0.003 (0.073)	0.002 (0.075)	-0.021 (0.076)	-0.011 (0.074)	-0.028 (0.080)	
financial_ind	0.065 (0.449)	-0.039 (0.470)	0.143 (0.458)	0.071 (0.452)	0.014 (0.486)	
money_imp	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	
fast_web	0.487 (0.353)	0.441 (0.368)	0.483 (0.352)	0.436 (0.356)	0.385 (0.370)	
pirated_cd	-0.007 (0.016)	-0.004 (0.015)	-0.006 (0.016)	-0.007 (0.016)	-0.003 (0.016)	
time_imp	-0.007 (0.008)	-0.008 (0.009)	-0.007 (0.008)	-0.006 (0.008)	-0.007 (0.009)	
use_internet_home	0.406 (0.347)	0.372 (0.349)	0.398 (0.351)	0.427 (0.351)	0.393 (0.356)	
NOT_guilty		2.394 (0.683)***			2.395 (0.684)***	
NOT_guilty*Korea		-1.624 (0.874)*			-1.698 (0.883)*	
NOT_guilty*China		-2.515 (0.993)**			-2.646 (1.009)***	
NOT_guilty*Vietnam		-3.173 (1.297)**			-3.098 (1.298)**	
Female			-0.495 (0.655)		-0.572 (0.722)	
Female*Korea			-0.854 (0.894)		-0.787 (0.946)	
Female*China			-0.113 (0.901)		-0.007 (0.959)	
Female*Vietnam			0.457 (0.971)		0.404 (1.027)	
original_cd*Korea				-0.021 (0.070)	-0.027 (0.071)	
original_cd*China				-0.087 (0.066)	-0.106 (0.067)	
original_cd*Vietnam				0.007 (0.067)	0.017 (0.065)	

Table 2 (continued)

	p2p	p2p	p2p	p2p	p2p
_cons	-1.647 (1.616)	-2.062 (1.671)	-1.270 (1.679)	-1.538 (1.653)	-1.531 (1.778)
N	399	399	399	399	399

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

words being in Korea and China increases the odds of using p2p, which is quite interesting because it implies a different country effect. However China is the country with longer tradition in copyright protection. Accordingly, the first interesting observation is that this issue does not seem to have the expected negative impact on copyright infringement, at least for what concerns p2p. The interpretations of these results can be various: first, it seems that the legal framework is not decisive in fostering the expected behavior. Second, even countries with a partially common legal path like Japan and Korea show diverging results. Third, if the history of the legal framework is taken as a proxy for the potential rootedness in the local culture and in the individual mindset of the value of the law, no effect emerges from our analysis. This latter result shows that individual behavior depends on other stances and the law is just a relatively less important frame of the present story. Japan, once theater of widespread copyright infringement, at least towards the western music industry, while now with a legal framework similar to that of other countries like Korea, shows today a smaller probability of favoring p2p activities than other countries.

Findings seem thus to head toward the fact the locally shared systems of beliefs and values, what we defined social norms (at least among university students of the same country), are really the major driver determining the reception of the legal framework. In order to confirm whether indeed what observed can depend on social norms, in accordance to what observed by Posner (1997) about the existence of psychological costs, we checked whether infringers were feeling guilty when engaging in p2p.

When looking at the coefficients of the NOT_guilty variable, trying to capture the feeling of people when engaging in p2p, another interesting evidence emerges. Not only the psychological attitude is very important in determining the choice of whether or not participating to p2p activities, but this effect shows, as expected, a significant variance across countries, being connected with the social norm emerged locally. In other words, the latter implies that the individual ethics and perceptions largely depend on social norms and in our sample varies across countries.

5 A few policy implications

When it comes to draw policy implications, it is important to take into account the inherent limits connected to the survey-methodology, the sample composition (only 400 hundreds respondents from 4 different countries and member of the higher level of the society) and other factors. The current study does not escape the rule of thumb. Yet, we feel entitled to raise a number of points that can be at least of food for thought about the current attitude and other possibilities.

First, findings here reasonably show that social norms seem to have in the sample a stronger impact on behaviors than the legal framework. In addition they are pivotal in driving group behavior. Hence, any policy willing to contrast p2p and copyright infringement broadly speaking should target the social dimension rather the only focusing on legal change. Even though one may imagine a system of penalties such to alter the cost–benefit analysis by single infringers and to redress “legal” behaviors, that would be very costly without the proper complement acting on socially

shared values. Moreover, a number of studies have shown that when there is a substantial divergence between the legal framework and the social recognition, in selected cases an expressive function of law infringement can emerge, leading to unexpected opposite results (Leroch 2014). This has specifically been observed also for the case copyright infringement (Migheli and Ramello 2018).

Consequently, if the local dimension is important given the substantial variance across countries (at least in the case observed here) and the idiosyncratic characters of every single culture, a nuanced action according to every specific country would seem much more effective than a uniform policy. This is in contrast with the “one size fits all” approach in general adopted by the WTO in light of the harmonization of intellectual property rights regimes. In effects, this raises the complementary issue extensively disentangled by the literature showing how the effectiveness of legal transplant largely depends on what we can define as the local ‘absorptive capacity’, intended as the ability of a given society and its citizens to recognize the value of an institutional harmonization (Cohen and Levinthal 1990). This implies that pure law-making without the proper preparation of the local environment may lead to inconsistent results.

Last but not least, if the existence of persistent social norms witnesses a substantial divergence or even disapproval for a specific legal framework, as happening in the case of modern copyright (Litman 2001), legislators might use this input as a starting point for endorsing a new direction. Despite the latter claim seems to be somehow revolutionary, one must consider that citizens are also voters and if they stick with social norms somehow in contrast with the law, this might express the fact the consensus within society towards the legal order is not very wide.

6 Conclusions

A large body of scholarly literature in the last two decades has dealt with the topic of piracy. However, only a small fraction of these studies have focused on behavioural analysis of non-Western countries. This paper is a first step in filling the gap and enlarging the overview by proposing an investigation on peer-to-peer habits in China, Vietnam, South Korea and Japan with a special focus on music. By means of an empirical analysis of survey data a number of results emerge. These results may be preliminary and constrained by the limits of the sample used. However they provide some new food for thoughts to debate starting from a non-western perspective. First, the general attitude towards piracy perched on monolithic positions can be questioned. Countries from the very same area and with common historical backgrounds show very different attitudes towards piracy and peer-to-peer in particular. This seems to be connected to the specificity of the local culture and ethics. Indeed these elements seem to be much more effective in orienting the decision whether or not infringe copyright, than many other things, including the legal framework. Countries sharing a similar copyright legal tradition show very different results. In addition, enjoying a longer tradition in protecting intellectual property does not determine any effectiveness in lowering law infringement. This possibly suggests that any

policy willing to effectively tackle peer-to-peer should not only strengthen the legal framework but also try to promote the change in social norms.

Another important consequence of our analysis is that the traditional “one size fits all” copyright policy, sponsored by the major stakeholders worldwide, will unlikely produce the same expected effect everywhere. The underlining policy implication is quite straightforward because it essentially questions what done, at least since the TRIPs agreements, when promoting the harmonization of the same copyright law everywhere.

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