

Two sides to the evasion

The Pirate Bay and the interdependencies of evasive entrepreneurship

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Abstract

Purpose – Evasive entrepreneurs innovate by circumventing or disrupting existing formal institutional frameworks. Since such evasions rarely go unnoticed, they usually lead to responses from lawmakers and regulators. The paper aims to discuss this issue.

Design/methodology/approach – The authors introduce a conceptual model to illustrate and map the interdependency between evasive entrepreneurship and the regulatory response it provokes. The authors apply this framework to the case of the file sharing platform The Pirate Bay, a venture with a number of clearly innovative and evasive features.

Findings – The platform was a radical, widely applied innovation that transformed the internet landscape, yet its founders became convicted criminals because of it.

Originality/value – Applying the evasive entrepreneurship framework to this case improves the understanding of the relationship between policymaking and entrepreneurship in the digital age, and is a first step toward exploring best responses for regulators facing evasive entrepreneurship.

Keywords Self-employment, Entrepreneurship, Innovation, Institutions, Regulation

Paper type Case study

1. Introduction

William Baumol's (1990) paper "Entrepreneurship: Productive, Unproductive, and Destructive" did for entrepreneurship economics what Douglass North (1990) did for mainstream research on economic growth – it put a spotlight on institutions. Baumol (1990) relied on basic microeconomic assumptions to hypothesize that core entrepreneurial talents are used to maximize individual utility rather than social welfare. Thus, entrepreneurship is not welfare-enhancing by default. Rather, the manner in which institutions structure economic payoffs influences the nature of entrepreneurial activities.

We augment this analysis by studying the interdependency between formal institutions shaped by policymaking and entrepreneurial activities aimed at evading these institutions. The aim of this paper is to provide a better understanding of such evasive entrepreneurship and the regulatory responses that it provokes, and to illustrate how these interdependencies shape the path and payoffs associated with evasive entrepreneurship.

Evasive entrepreneurship is aimed at circumventing formal institutions in order to gain an advantage, facilitate change or exploit an arbitrage opportunity (Elert and Henrekson, 2016)[1]. For instance, to avoid transportation market regulations, the



ride-sharing firm Uber has consistently argued that it is not a transportation company but rather a technology company. Similarly, because rentals through the accommodations website Airbnb often occur between individuals, the users typically avoid many of the regulations that firms in the hotel industry face, even though they compete with these firms. Evasive entrepreneurship always occurs in a legal grey area, but it is also an underestimated and poorly understood source of innovation in the modern economy.

We argue that evasive entrepreneurship can be perceived as a vehicle of regulatory and legislative change. This type of entrepreneurship is a means to test and provoke the existing institutional frameworks, and it also indirectly results in adaptations within those frameworks. Productive, unproductive and destructive forms of evasive entrepreneurship demonstrate that there is a gap or inconsistency in the regulatory structure being evaded.

By regulators, we refer to the decision-makers who shape, implement and monitor the workings of formal institutions. Their activities usually occur in the legislative, judicial or bureaucratic branches of the (local, regional, national or supranational) governmental system. Regulators can respond to evasive entrepreneurship by trying to adapt their institutions and either accommodate or eliminate the evasion. However, the market and institutional outcome of an evasion is highly interdependent, and neither entrepreneur nor regulator can fully control it. Accordingly, an evasion may end up as either a celebrated innovation or a criminal offense.

We formulate a conceptual model based on basic game theory to study the interdependency of evasive entrepreneurship and regulatory responses. We then apply this framework to a recent and well-known case of evasion, the file sharing platform The Pirate Bay (TPB). TPB is arguably one of the most influential and well-known digital Swedish innovations in recent times, and for a while, a considerable fraction of all internet traffic passed through the site's tracker (Snickars, 2010). Simultaneously, TPB's venture heavily relied on exploiting a legal grey area, and regulators eventually decided that its activities were unlawful. Ultimately, its founders were jailed and received million-dollar fines. This case provides an important example of the interplay between evasive entrepreneurs and regulators. A better understanding of this case and its interdependent outcome may provide insights regarding how future evasive entrepreneurs can challenge and affect regulatory frameworks, and may highlight how regulators should or should not respond to such signals.

This paper is organized as follows. In Section 2, we present a formal definition of evasive entrepreneurship and introduce our conceptual model to illustrate the interdependencies of evasion. In Section 3, we present the TPB case, analyzing both the evasive entrepreneurial activity involved and the institutional responses to this activity. To place the themes discussed in this paper in a broader context, the final section begins with a comparison of TPB with other cases of evasive entrepreneurship. We then discuss our results and their implications for policymakers and regulators grappling with the issue of how to address evasive entrepreneurship in manners that enhance social welfare.

2. Conceptual framework

A model to conceptualize the interplay between evasive entrepreneurship and regulatory response must first be developed. Profit-driven entrepreneurship can alter the institutional setup (*de jure* and/or *de facto*) in manners that change the external social reward structure for economic behavior, which, according to Baumol (1990), affects the allocation of entrepreneurial talent. Entrepreneurs can do this in two manners, namely, through political entrepreneurship (e.g., lobbying) that is directly

aimed at altering institutions and through evasion of institutions. In this paper, we discuss only the latter manner because such evasive entrepreneurship can change the workings of existing institutions or trigger responses from regulators that alter institutions.

2.1 *Evasive entrepreneurship*

Entrepreneurial talent is channeled to activities “with the highest private returns, which need not have the highest social returns” (Murphy *et al.*, 1991, p. 506). Although institutions in high-income countries have been relatively good at directing entrepreneurship toward inherently productive purposes, there are still many instances of unproductive or destructive entrepreneurship (Baumol, 1990). We argue that such instances occur partially because allocation of entrepreneurship is determined not only by the entrepreneurial activity itself, but also by the institutional context and the regulatory response that it elicits. For example, what appears to be an unproductive activity may in fact be a second-best substitute for inefficient institutions (Douhan and Henrekson, 2010). Institutions become targets for entrepreneurial innovation when altering or evading the institutions can be a means to generate entrepreneurial profits (Henrekson and Sanandaji, 2012).

The concept of evasive entrepreneurship was introduced by Coyne and Leeson (2004), who describe evasive activities as those that use resources and human effort to evade the legal system or avoid the detrimental effects of other agents’ unproductive activities. Elert and Henrekson (2016) argue that evasive entrepreneurship constitutes a unique and underestimated form of innovation that unlike many other forms of entrepreneurship, interacts directly and antagonistically with laws and regulations. They define evasive entrepreneurship (p. 96) as a:

[...] profit-driven business activity in the market aimed at circumventing the existing institutional framework by using innovations to exploit contradictions in that framework.

The evasive entrepreneur is thus a combination of a Schumpeterian rule-breaker (Schumpeter, 1934; Zhang and Arvey, 2009) and a Kirznerian arbitrageur (Kirzner, 1973), that is, an agent who breaks rules to gain an advantage relative to other agents in the market. Accordingly, if successful, evasive entrepreneurship is potentially disruptive to both markets and institutions.

Although Elert and Henrekson (2016) explicitly define evasive entrepreneurship as profit driven, we note that in the case of TPB, the profit motive was only part of the reason for the venture. As we shall see, these evasive entrepreneurs were driven by both economic and social motives.

Evasive entrepreneurship thrives when institutions are rife with contradictions. Institutional contradictions are best understood as inconsistencies, gaps or loopholes in institutional frameworks. Such contradictions may arise and increase for a number of reasons. Seo and Creed (2002, pp. 225-226) describe these contradictions as a “complex array of interrelated but often mutually incompatible institutional arrangements” that “provide a continuous source of tensions and conflicts within and across institutions.” Elert and Henrekson (2016) identify three categories of institutional contradictions, namely, regulatory inconsistencies, lack of regulation, and weaknesses in enforcement. Evasive entrepreneurship alters the *de facto* function of formal institutions by exploiting their contradictions. For the purpose of this paper, one of the most interesting sources of contradictions is the manner in which technological development alters the conditions on which the institutional framework relies to function properly.

Because evasive entrepreneurship directly targets regulations and institutional frameworks, it also plays an important role in institutional change. Evasive entrepreneurship affects institutional structures both directly by evading them (changing the *de facto* effect of extant legislation) and indirectly via the feedback it generates. This feedback can take many forms. For example, a reform-minded politician may propose a strategy to legalize an evasion, whereas incumbents who perceive the evasion as a threat may seek to rally legal support to stop it. An evasion may also lead to a shift in public perceptions of what is fair, legal and moral, thereby influencing the enforceability of the institutional framework (Helmke and Levitsky, 2003). Regardless of the source of feedback, the ensuing reform process may stifle the entrepreneurial activity or facilitate its expansion by accommodating the evasion and explicitly legalizing it.

Governments and regulators that seek to foster entrepreneurship and innovation should have a strategy for responding to such signals (Leyden and Link, 2015) given that institutional change processes create substantial friction. Many actors, such as inventors, firm owners, managers, civil servants and politicians, have a vested interest in the continuation of the existing system (Law, 1991), and the regulatory policy of a government often reflects powerful economic interests rather than public needs (Stigler, 1971; Peltzman, 1976; Buchanan *et al.*, 1980). Furthermore, an important feature of political and economic institutions is their relative inertia (Glaeser *et al.*, 2004; Scott, 2008), as evidenced by empirical research that suggests that changes to more efficient economic policies are usually delayed. For example, reforms are not implemented when rational and informed observers would expect them to be welfare-enhancing; rather, they are implemented much later (Fernandez and Rodrik, 1991; Drazen, 1996). Taken together, these factors may result in judicial and political friction, contestation and negotiation, also described as institutional war (White, 1992; Hoffman, 1999; Seo and Creed, 2002). Hence, the resources and power available to actors are critical for their ability to influence outcomes (McAdam *et al.*, 1988).

The economic effects of the evasive activity influence the institutional change process. According to the Kaldor-Hicks criterion, an institutional reform is efficient if the gain from it could – at least theoretically – fully compensate those who stand to lose from its implementation (Scitovsky, 1941). If evasive entrepreneurial activities are welfare-enhancing, they should create additional resources prior to any reform. These resources may, at least in theory, be used to compensate those harmed by the institutional reform or at least lead to economic gains that would facilitate legalization of the evasion[2].

If, however, an evasive activity appears to reduce social welfare prior to reform, it is more likely to meet opposition and ultimately result in institutional change banning the activity. Consequently, whether evasive entrepreneurship is perceived to be productive, unproductive or destructive prior to a regulatory response may affect not only that response but also whether the entrepreneurial activity actually turns out to be productive, unproductive or destructive following the response.

In this interdependent decision-making process, although an evasive entrepreneur can make the first move toward institutional change, he or she cannot control the final results. When regulators adapt institutions to an evasion, their actions can prompt additional firms to enter into the new market and thereby increase competition. This type of development can be detrimental to the original evader if he or she enjoyed temporary monopoly power *vis-à-vis* competitors when regulators remained inactive. As Yandle's (1983) analysis of bootleggers and Baptists suggests, regulations are

sometimes supported not only by groups that favor the ostensible purpose of the regulation, i.e., Baptists who want to ban liquor sales, but also by groups that profit from undermining that purpose, i.e., bootleggers who want to eliminate competition.

On the other hand, institutional change to legalize evasion also removes uncertainties and may improve the long-term potential for business growth for the evasive entrepreneur. Conversely, stringently enforcing regulations regarding evasive activities may hamper overall entrepreneurship and innovation, in addition to the ability to leverage new technologies to promote growth.

2.2 Modeling the interdependency

Evasive entrepreneurship affects institutions by destabilizing the current status quo, thereby triggering an institutional response to the evasion. However, neither the evasive activity nor the institutional response can by itself determine the outcome of this interaction, partly because the structure of resulting institutions is too complex to anticipate (Simon, 1947; Hayek, 1988) and also because the outcomes for each party are interdependent.

Interdependent outcomes in decision-making processes are hallmark characteristics of game-theoretic models, in which each player's payoff depends on both his or her own choices and those of the other players. We construct a simple model for the interplay between evasive entrepreneurship and regulatory responses. The result (see Figure 1) is used to illustrate the positioning of the entrepreneur and the regulator in relation to one another, and their decisions are framed by their strategies and their previous moves. Although admittedly crude, this model allows us to observe and analyze the interdependency of the actions taken by the evasive entrepreneur and the regulator.

When deciding how to act, the entrepreneur has the following options, which are listed in the three rows of Figure 1: to act as most market actors do and abide by current regulations, to act as an institution-altering entrepreneur and attempt to trigger adaptation of the existing regulations, or to act as an evasive entrepreneur and evade the regulations.

Upon observing an entrepreneurial act, the regulator has the following options, which are listed above the three columns in Figure 1: enforce current laws and regulations more harshly or, if necessary, pass new legislation that explicitly outlaws the evasive activity; remain inactive, i.e., neither enforce nor change the affected

		Regulator's decision		
		(Adapt to) Enforce current laws	Remain inactive	Adapt to accommodate
Entrepreneur's decision	Abide by			
	Alter			
	Evade			

Figure 1.
Interaction between
the entrepreneur and
the regulator

legislation or regulation; or adapt institutions to accommodate the evasive activity, i.e., legalize it, and thereby promote competition and market expansion.

An entrepreneur would most likely evade regulation if he or she knew that the regulator would remain inactive (bottom middle box: evade/remain inactive) or would adapt to accommodate the evasion (bottom-right box: evade/accommodate). However, if the regulator attempts to enforce current laws, the entrepreneur may have to either attempt to alter the regulations (middle-left box: alter regulation/enforce current laws) or abide by the current regulations (top-left box: abide by/enforce current laws).

Regarding evasive entrepreneurs, the bottom-right box (evade/adapt to accommodate) could be considered an equilibrium that promotes change because neither the entrepreneur nor the regulator would wish to change their strategy had they known what the other player would do. The bottom middle box (evade/remain inactive) is a possible equilibrium for the entrepreneur, who essentially has monopoly in his market, but not so for the regulator, who will most likely be pressured to take action by incumbent firms or potential competitors if the evasive activity is successful. The top-left box (abide/enforce current laws) is an equilibrium that blocks institutional change.

In game theory, individual payoffs are assigned to each potential outcome, and strategies are analyzed and evaluated based on how well they maximize those payoffs. In this model, assigning specific payoffs while also maintaining the model's general applicability to different cases of evasion would be impossible because of the complexity involved in institutional change. However, it could be argued that the joint payoff of cooperation (abide by/enforce or evade/adapt to accommodate) is greater than the other payoffs simply because the joint payoff of cooperation does not involve a conflict, which would be costly for both parties in terms of time and money. The payoffs are also related to the time-span in which each player acts. An entrepreneur may engage in evasive activities to reap quick rewards and then move on, or he or she may do so as part of a long-term strategy to grow and expand his or her business. An individual policymaker may be solely interested in being re-elected, whereas it may be expected that it is in a democratic government's interest to adapt its institutional and regulatory framework to remain globally competitive and uphold regulatory authority domestically.

Furthermore, being evasive is not necessarily a constant state over time. Rather, an entrepreneur may start by attempting to alter an institutional structure, but when the regulator remains inactive or resists by enforcing current regulations, the entrepreneur may become evasive. Conversely, an entrepreneur may start out as evasive but then switch to an institution-altering strategy if the regulator enforces current regulations in a manner that makes it necessary to discontinue the evasive activity. Regulators can also proactively reform either by enforcing current regulations or by accommodating new types of market solutions, thereby encouraging entrepreneurs to explore the new opportunities or adapt to stricter regulations. Rather than just focussing on the set of actions, both entrepreneurs and regulators must formulate or subscribe to long-term strategies, i.e., sets of rules determining which actions they choose to engage in and under what circumstances.

Understanding evasive entrepreneurship as part of an ongoing, or iterative, game also enables a more general interpretation of how regulators respond to evasion and, perhaps, how they could respond more appropriately. Given that evasive entrepreneurship is unlikely to disappear as long as globalization, urbanization and digitization continue to transform societies and economies, policymakers will need to

build consistent long-term strategies to address it. This process will involve not only adapting regulatory frameworks to shifting circumstances but also promoting entrepreneurship that drives development in markets (Leyden and Link, 2015).

In short, this model provides a basic tool to map cases and to illustrate and emphasize the interdependent and interactive nature of evasive entrepreneurship. Consequently, the model enables further analyses of this type of entrepreneurship and its economic and institutional repercussions. In the next section, we will apply the model to the case of TPB.

3. The case of TPB

3.1 *Copyright, making copies and sharing files*

A copyright is a “property right in an original work of authorship [...] fixed in any tangible medium of expression, giving the holder exclusive rights to reproduce, adapt, distribute, perform or display the work” (West Group, 1999, p. 337). Economically, copyrights and other immaterial property rights can be rationalized as means to promote creation and investment because they enable control of the reproduction and distribution of creative works (Tratos, 2007).

Since the ratification of the Berne Convention of 1886 (Monlux, 2009), a system of international intellectual property regulations has been established with the help of international agreements. The system has no courts of its own but is instead based on collaboration between nation states and their legal structures. It is currently protected by a series of international sentinel organizations, all of which are primarily under the direction of the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations. WIPO currently has 184 member states (Dahlberg, 2010, pp. 155-156; Burke, 2010, p. 70).

The Swedish Copyright Act of 1960 stipulates the absolute right of a copyright holder to control when, where and how a copy is made. Copyright infringement is the use of works protected by copyright law without permission that encroaches on certain exclusive rights granted to the copyright holder, such as the right to reproduce, distribute, display or perform the protected work or make derivative works[3]. However, the act mentions a number of so-called fair use exceptions.

Notably, temporary copies and private copies can, under certain circumstances, be made without permission from copyright holders superfluous (Johansson, 2010, p. 108; Li, 2009, pp. 291-292). These exceptions were created to acknowledge the implausibility of enforcing a complete ban on “home copying” between friends, and were combined with the so-called cassette tape retribution system, which meant that a levy was paid by manufacturers or importers of storage media to the rights holders’ organization Copyswede. The system worked fairly well for cassette and video tapes because geographical dissemination of them was limited, making copies was tedious and time-consuming, and the quality declined significantly because copies were often made from other copies rather than from the original.

Thus, the regulatory framework worked because it relied on weaknesses or imperfections in the technological infrastructure rather than trying to limit the behavior of the individuals who made copies. However, regulations that rely on technological limitations are not robust to innovation. With the advent of digital content, the internet and BitTorrent trackers, the setting for home copying suddenly became global because copies no longer deteriorated in quality. Nonetheless, the exceptions to the Swedish copyright legislation persisted and would prove crucial to the story of TPB.

3.2 TPB as evasive entrepreneurship

TPB is a file sharing website based on BitTorrent technology. It was started in 2003 by Fredrik Neij and Gottfrid Svartholm, who were later joined by Peter Sunde and Carl Lundström. TPB had its origins in Piratbyrån (the Pirate Bureau), an organization that described itself as a think tank devoted to a free copy culture. The founders of TPB first established a Swedish BitTorrent tracker, which provided a platform for sharing content locally. However, they also realized that because of its unique features, BitTorrent technology would most likely present a challenge to copyright regulation (Rydell and Sundberg, 2009, p. 129).

Instead of simply copying a file from one hard drive to another, BitTorrent technology allows for a large number of users who all have the same file to aggregate into a swarm, from which an additional user can obtain the file by copying small pieces of it from each of a large number of users. This process is enabled by a tracker that coordinates the different copies of a file (ensuring that they are all instances of the same file) distributed among the network of users. The technology provides decentralization, redundancy and robustness to the communication network because no user is required to rely exclusively on one specific user to complete a file transfer.

From a copyright perspective, the introduction of BitTorrent technology was disruptive in Sweden and elsewhere. Whereas it was illegal for an individual to freely distribute copies without the consent of the rights holder, whether it was illegal to allow people to copy small pieces of that content from a large number of different sources and assemble them into a complete copy was unclear (Rydell and Sundberg, 2009, p. 103). More legal ambiguity was created by the fact that the central server never needed to have access to the original file being uploaded by the user; rather, it was required only that the tracker pointed to the location of the file (Li, 2009, p. 287).

It was Gottfrid Svartholm, then working in Mexico, who created a BitTorrent tracker for the Pirate Bureau's members (Li, 2009, pp. 287-288). Thus, TPB was engaging in evasive entrepreneurship from the beginning because they exploited geographical inconsistencies in copyright legislation and enforcement between Mexico and Sweden by hosting a Swedish file sharing service in Mexico.

The tracker quickly became popular, and in November 2003, it was made public. Demand soared quickly, and the tracker was moved to Sweden in early 2004 (Rydell and Sundberg, 2009, p. 104). In the winter of 2004, the then-largest BitTorrent site Supernova was dismantled after legal pressure from rights holders. However, the demand did not wane. Instead, it relocated to TPB, which quickly became the world's largest tracker.

The actual copying and file sharing was performed by the users and their client software, which was completely independent from TPB, although the tracker made everything significantly easier and more efficient. At one point, as much as 70 percent of the world's torrents (Snickars, 2010, p. 343), i.e., the metadata files that coordinate all instances of a specific version of a file, were estimated to be trafficked through TPB's tracker. This volume constituted a considerable part of the world's internet traffic. Although copyright infringement was occurring on a large scale, TPB's moral and legal responsibilities were not entirely clear (Snickars, 2010, p. 342). This lack of clarity can be explained by a number of institutional contradictions that TPB successfully exploited (cf. Elert and Henrekson, 2016).

First, TPB benefited from institutional inconsistencies, both in terms of geography and implementation of regulations. If different nations or states have different rules, an entrepreneur can benefit from institutional arbitrage by identifying a locale in which

rules are less binding or less stringently enforced, provided that such movement is possible. In Tratos' (2007, p. 217) words:

[...] because the Internet knows no state or country boundaries, the laws of states and countries other than the physical location of the Internet publisher or broadcaster may apply, particularly where the audience or market exists in a locale other than the location where the materials are being placed onto the Internet.

The first TPB tracker was hosted in Mexico to avoid legal scrutiny, and TPB's servers were later relocated as an additional evasive measure (Rydell and Sundberg, 2009, p. 104).

Second, as a file sharing platform, TPB benefited from the aforementioned grey area in previous copyright regulations that allowed for home copying between friends, which can, in turn, be interpreted as a regulatory accommodation for an inconsistency based on the implausibility of enforcing a complete ban on making copies and giving them to friends. This exception was of little consequence for cassette and video tapes because making copies of these media was costly, mostly occurred locally and led to a reduction in quality. With digital content, the internet and BitTorrent trackers, the setting for home copying suddenly became global, and copies did not deteriorate in quality.

Third, TPB benefited from institutional contradictions due to a lack of regulation. As previously mentioned, the legal implications of copying a file by downloading a series of small pieces from a large number of different users and combining them into a whole were not clear (Rydell and Sundberg, 2009, p. 103) because this process had previously not been a viable option for making copies. New technology had enabled a new practice for which there were no regulations, and legislation was lagging behind. For many years, Sweden had comparatively lenient laws concerning piracy (Wikström, 2009, p. 9), which led to the country's increasing notoriety as a piracy safe haven and reputation as a rogue nation in terms of illegal file sharing (Brooks, 2006). Burke (2010) argues that by the time that any legal actions were taken against file sharing, the practice had already become deeply entrenched in Sweden's technological culture (cf. Norton, 2006b).

Evasive entrepreneurs can consciously shape their innovations to evade the legal system. Prosecutor Håkan Roswall observed in an internal memorandum in 2005 that the founders of TPB had obviously studied Swedish copyright legislation to exploit its potential flaws and thereby avoid prosecution. The founders of TPB counted on not being convicted for copyright infringement because they did not actually store any copyrighted material on their servers or actively disseminate such material. They also believed that they were protected from being convicted of serving as accessories to copyright infringement because each person in the BitTorrent data swarm shared only fragments of copyrighted material that were useless on their own. Therefore, it seemed doubtful that anyone could be convicted for violating the Copyright Act. The prosecutor arrived at the same conclusion (Rydell and Sundberg, 2009, p. 129).

Lastly, TPB had the advantage of an institutional contradiction based on enforceability. If file sharing were to be considered a crime, it was not TPB but rather all of its users that committed the crime. Accordingly, to enforce the regulation, authorities and rights holders would have to engage in legal processes against each individual, or, as it was repeatedly framed in the public debate, the government would have to label an entire generation of young people criminals[4]. Furthermore, as Hinduja (2012, p. 242) observes, copyright laws are meaningless unless they are interpreted in light of the effect they have on the people to whom they are supposed to

apply, that is, unless those individuals regard the laws as legitimate. Many people engaged in file sharing at the time, and they did not consider copyright infringement to be morally wrong (Larsson, 2010, p. 190). Notably, at the time, few Swedes considered file sharing a serious crime or even as a crime at all, and this is still true today. Andersson and Snickars (2010, p. 36) argue that this was an important factor in TPB's success. In addition, the media attention that TPB received both prior to and during the trial involving its founders possibly promoted their causes of shaping public opinion and profiling themselves as (benevolent) evaders or rebels.

Fleischer (2010) describes TPB as an assemblage of "hardware, software and humans." The technology mainly consisted of the servers, a search engine, a torrent file archive, a tracker, a popular site with a top list of downloaded torrents, a blog and a web shop selling TPB merchandise. In essence, TPB only enabled transactions of digital content by connecting and coordinating a distributed network of users – in short, by matching supply and demand. Together with the network of users, the BitTorrent technology blurred the borders between up- and downloading (Fleischer, 2010, p. 263) and consequently challenged the institutions regarding copying and copyright infringement. Schollin (2010, p. 224) accordingly argues that the openness and scope of TPB was its strength, whereas the users were its value. This point brings us to the importance of how TPB's founders handled their end of the evasion.

A central part of the legal case against TPB was the argument that TPB was profit-driven, notably by advertising revenue from the website[5]. However, the founders were also clearly driven by motives other than profits, and for the analysis at hand, the non-profit motives behind TPB are equally important, if not more so. TPB's founders can be aptly described as entrepreneurial activists who were driven by a desire for social change as part of the anti-copyright movement. The name of the site not only underscores its ideological agenda but also makes the evasiveness of TPB quite apparent because the practice of labeling those who infringe on copyright legislation as pirates dates back to at least the early 1600s (Dekker, 2000). Although TPB's founders clearly had a political agenda, they avoided traditional ideological and partisan associations (Andersson and Snickars, 2010, pp. 33-34).

TPB's founders did not primarily lobby policymakers to induce them to accept or adapt to the new technology. Instead, they engaged in lobbying the public directly and in building an activist movement centered on TPB. It is important to remember that although TPB was not the first popular BitTorrent site, it was unprecedented among them as a standard bearer for a cause – a quite aggressive position in favor of copyright reform or even copyright abolition. Hence, whereas legal pressure from the copyright industry had induced previous sites such as Supernova to close down, the TPB's founders instead assumed an adversarial stance (Rydell and Sundberg, 2009, pp. 107-109). TPB became notorious for openly embracing piracy and for ridiculing threats of legal actions from copyright organizations and media companies by posting their complaints and cease-and-desist letters on its website (Lewen, 2008). During their trial, TPB's founders maintained their aggressive strategy, and together with the think tank Piratbyrån, they rallied followers in an online event named "spectral" to protest the trial, calling it a political spectacle (Hässler, 2009).

TPB sold merchandise and received donations from its users. This voluntary financing rested on a foundation of trust tied to TPB's symbolic value, which, in turn, depended on how the site and its founders were perceived (Fleischer, 2010, p. 264). For instance, the rebel image of TPB was tarnished when it was confirmed in 2007 that the site had received financial support from Carl Lundström, who was also known for

financing far-right political movements in Sweden (Jibbenga, 2007; Rydell and Sundberg, 2009, p. 107). Furthermore, the importance of the perception of TPB as motivated by non-pecuniary goals was clearly demonstrated in 2009, when news broke that the founders were trying to sell the domain name. Although the deal was ultimately not completed, it damaged the symbolic value of TPB as a non-commercial net community and substantially undermined the site's popular support (Fleischer, 2010, pp. 264-265).

3.3 *The institutional response to TPB*

The evasion enabled by the BitTorrent technology disrupted the content distribution industry, and TPB became the global figurehead of this evasion. Nevertheless, the actual effects of file sharing on record and movie sales were – and remain – unclear. On the one hand, it was argued that downloaded copies displaced physical record and film sales. A counterargument was that file sharing made it easier for consumers to discover new content and increased the exposure of small and independent artists in a manner similar to that provided by services such as YouTube today. Andersson and Snickars (2010, pp. 29-31) and Söderberg (2010) argue that unregulated file sharing should not be perceived as being in opposition to the market ecosystem but rather as complementary to it[6].

Nevertheless, global incumbents in the copyright industry took action against TPB. Industry actors condemned digital music piracy and sued software services and individual file sharers while also lobbying for stricter laws and harsher penalties (Dean, 2003; Hinduja, 2012, p. 243; Burke, 2010, pp. 69-70; Brown, 2008). Sweden was no exception. Prominent anti-piracy organizations active in Sweden included Antipiratbyrån, Business Software Alliance, the International Federation of the Phonographic Industry and the MPA, which is the international branch of the Motion Picture Association of America (MPAA).

The push for an institutional response in Sweden did not only come from Swedish actors. According to district prosecutor Håkan Roswall, the US Government threatened to apply sanctions against Sweden within the WTO framework (Rydell and Sundberg, 2009, pp. 130-131), but this claim was later denied by the Swedish Government. Meanwhile, the MPA's executive president, John G. Malcolm, wrote a letter to Dan Eliasson, Swedish State Secretary (i.e., second in command) in the Ministry of Justice, in March 2006, stating:

As I am sure you are aware, the American Embassy has sent entreaties to the Swedish government urging it to take action against The Pirate Bay and other organizations operating within Sweden that facilitate copyright theft. As we discussed during our meeting, it is certainly not in Sweden's best interests to earn a reputation among other nations and trading partners as a place where utter lawlessness with respect to intellectual property rights is tolerated. I would urge you once again to exercise your influence to urge law enforcement authorities in Sweden to take much-needed action against The Pirate Bay (Mennecke, 2006).

In the same month, the Swedish Ministry of Justice drafted a directive, signed by Minister of Justice Thomas Bodström, that encouraged the National Police Board and the Swedish Prosecution Authority to take joint action to combat intellectual property crimes more efficiently (Rydell and Sundberg, 2009, pp. 130-131). TPB was not mentioned explicitly by name because that would have amounted to ministerial rule in a specific case and would have been a violation of the Swedish Constitution.

A raid against TPB occurred on May 31, 2006. Swedish police seized TPB's servers and arrested two of its founders (Rydell and Sundberg, 2009, pp. 127-131). It has been suggested that the raid was at least partly undertaken as a result of pressure from the US Government and the MPAA (Norton, 2006b). The MPAA was triumphant in a press release, in which they stated, "Intellectual property theft is a problem for film industries all over the world and we are glad that the local government in Sweden has helped stop TPB from continuing to enable rampant copyright theft on the Internet" (Motion Picture Association of America (MPAA), 2006).

Prior to the raid, Peter Sunde and Fredrik Neij managed to make almost complete backups of the TPB site before it went offline (Norton, 2006b; Rydell and Sundberg, 2009, p. 135). Consequently, TPB reappeared only three days later, openly mocking the police for its inability to keep the site closed.

The raid had far-reaching unintended consequences. First, the increased attention doubled the number of TPB users (Norton, 2006a). Second, TPB changed its structure following the raid, becoming more decentralized and evasive. The founders first relocated their servers to Russia and the Netherlands and later spread them across the world, making sure that not even the people in the inner circle knew where the machines were located. Third, the raid propelled the newly founded Pirate Party to media prominence (Rydell and Sundberg, 2009, p. 136), giving it a type of publicity that money could not buy. Its membership increased from 2,200 to 6,600 people during the first week of June 2006, and its website became one of the most visited in the world.

Unrelated to but fueled by TPB, the Swedish Pirate Party was founded in 2006. After the raid, the Swedish Pirate Party was followed by parties in other countries, notably in Austria and the USA, and by 2009, there were Pirate Parties in 20 nations worldwide (Li, 2009, p. 289). The site pirate-party.us had 100,000 visitors in its first week. Founder David Segal said in an interview (Milchman, 2006), "I think the raid is what brought this whole thing to my attention, and to the attention of people around the world. The raid in Sweden could turn out to be the best thing that happened to the Internet community."

The Swedish Pirate Party initially demanded complete abolition of copyright, but they soon became more pragmatic (Li, 2009, pp. 289-290). They demanded that copyright legislation be reformed and limited to five years and that non-commercial use not be subject to copyright (Rydell and Sundberg, 2009, pp. 119, 143). The evidence strongly suggests that the Pirate Party's success in the June 2009 European Parliament election, in which they received 7.1 percent of the votes and one seat, was intimately tied to what happened to TPB.

The attention given to copyright issues also influenced the policies of other Swedish parties. Even established center-right parties such as *Folkpartiet* and *Moderaterna* began to question traditional copyright protection and the legal framework behind it (Andersson and Snickars, 2010, p. 12). Other parties in Sweden adopted many of the issues and views advocated by the Pirate Party (Li, 2009, pp. 289-290), albeit with different emphases on individual freedom and integrity, modified copyright protection and net neutrality. The debate regarding file sharing and the media exposure that TPB was enjoying nationally and internationally thus appears to have had a considerable effect on policymakers. The case of TPB arguably induced most parties to endorse the view that copyright law was in need of some form of modernization (Andersson and Snickars, 2010, pp. 18-23).

With growing partisan interest in copyright issues, TPB went to court. In January 2008, at a time when TPB was one of the world's 100 most visited websites, the

prosecutor decided to charge its leaders Peter Sunde, Fredrik Neij, Gottfrid Svartholm and Carl Lundström with complicity in and preparation to commit crimes against the copyright act (Rydell and Sundberg, 2009, p. 137). One of the primary issues for the prosecution was the technology. Convicting any one of the accused as an accessory to a copyright crime required that a crime had in fact been committed. Regarding the BitTorrent technology, this was still far from evident, a fact that lies at the very heart of the evasive entrepreneurship behind TPB. It could be argued that the prosecutor hedged his bets by including the label preparation to commit a crime against the copyright act (Rydell and Sundberg, 2009, pp. 216-217). In this respect, the legal action represents an institutional response toward strengthening and enforcing current regulations.

The joint criminal and civil prosecution that was labeled “the copyright dispute of the decade” began on February 16, 2009 in the Stockholm District Court. The verdict was reached on April 17, sentencing all four defendants to one year in prison and a total of SEK30 million (roughly USD3.5 million at the time) in fines and damages. The appeals trial in 2010 shortened the sentences of the three defendants who appeared in court that day. (Svartholm did not appear, citing health reasons. He would later flee the country.) However, the fines were raised to SEK46 million. In 2012, the Supreme Court of Sweden refused to hear an appeal in the case.

In Figure 2, we return to the game presented in Section 2. The interaction between TPB and the government follows a straight path to conflict in the bottom left corner (from evade/remain inactive to evade/enforce). TPB adopted an evasive strategy, and they also signaled that they had no interest in changing to an institution-altering strategy. For instance, they publicly discredited and ridiculed the warnings and cease-and-desist orders that they received. Thereby they effectively burned their bridges to alternative strategies, acts that could have contributed to building their political activist movement among the general population. However, their strategy also sealed their fate and resulted in them being perceived as antagonists among legislators and policymakers in the institutional framework.

Regulators were initially passive, but they soon adopted a stronger enforcement strategy (evade/enforce). At least partially, they were induced to make this transition by incumbents and by foreign governments that lobbied for it. Arguably, TPB’s openly defiant approach further prevented regulators from seeking constructive interaction, i.e., moving to altering/accommodating. Making concessions to TPB would have alienated actors lobbying for harsher enforcement. Hence, if they compromised,

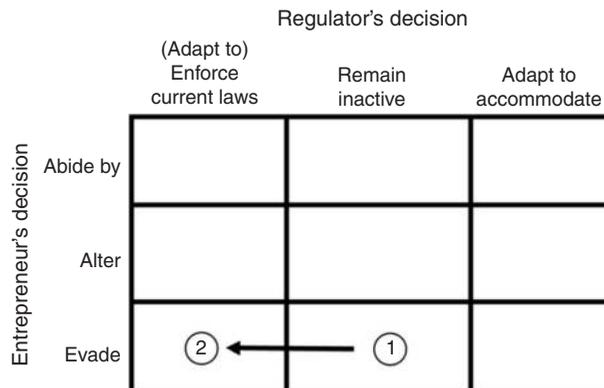


Figure 2.
Interaction between
the entrepreneur
and the regulator
revisited

regulators risked ending up with enemies on both sides. Furthermore, the enforcement strategy was to construct a legal interpretation of the evasive activity that rendered it illegal rather than to enact new legislation. By prosecuting, regulators essentially closed the door to the accommodating approach, thereby making it pointless for TPB to move toward an institution-altering strategy.

Consequently, the game was reduced to a zero-sum game (evade/enforce) and a purely antagonistic conflict in which a positive payoff for one player corresponded to a negative payoff for the other player. Assuming that both parties, knowing each other's choice of strategy, would have preferred or at least been indifferent to a different outcome, it could be argued that this state of affairs was not an equilibrium outcome.

Because they ended up in the evade/enforce state, both players knew that the other would not move to cooperate. TPB was committed to an openly antagonistic strategy, and the government was engaged in a criminal prosecution process, thus making it pointless for TPB or the government to seek cooperation by moving toward alter or accommodate, respectively. Consequently, they ended up in mutual defection with suboptimal payoffs, and a potentially productive but evasive venture was criminalized, permanently excluding it, and possibly other ventures of a similar type, from the legal economy. Moreover, the entrepreneurs were both fined and imprisoned.

Given what we know about the outcome, what would cooperation have looked like? It would most likely have required compromises from both parties. TPB's founders could have lobbied specifically for new legislation to fully or partially accommodate their evasion, whereas regulators could have mediated between the incumbents and TPB by providing a regulatory framework that changed the incentives to adapt, interact and cooperate with each other.

3.4 *Subsequent developments*

Following the legal developments related to TPB and file sharing, many authors worry about tendencies toward a more institutionally sanctioned and regulated internet, which would be in conflict with other democratic principles (e.g., Andersson, 2010, p. 69; Fleischer, 2010, p. 276; Söderberg, 2010, p. 252). Rydell and Sundberg (2009) note the trend that the control apparatus has increasingly relocated outside of the democratic system as copyright holders and their representatives increasingly participate in police work (Rydell and Sundberg, 2009, pp. 198-200).

In the first decade of the twenty-first century, the EU greatly increased the stringency of its copyright legislation (Larsson, 2011), and the EU Directive IPRED prescribed harsher penalty levels. IPRED was passed by the Swedish parliament in 2009. This feature of the EU Copyright Directive is among the most contentious, and its implementation was met with considerable resistance in Sweden (Larsson and Larsson, 2010). The enactment of IPRED in Sweden initially reduced the number of file sharers, but the decline turned out to be temporary. In fact, an October 2009 poll revealed that the TPB rulings and the strengthened IPRED legislation did not affect Swedish attitudes regarding illegal downloading of movies. In total, 75 percent of all Swedish young people engaged in file sharing in 2009 (Andersson and Snickars, 2010, pp. 10-12), and although the original TPB website is only occasionally active, a popular clone of the site still ranks as one of the most popular torrent sites on the internet (Torrentfreak, 2015).

If anything, it would appear that the difference between formal legislation and informal norms among users widened with respect to file sharing in the years following the TPB trial. Lundblad (2010, pp. 132-133) argues that ineffective court rulings have

unfortunate consequences. For example, the law was ridiculed when TPB was declared illegal, and subsequent infringements had no legal consequences. Arguably, the likelihood that legislation will survive is low if a large fraction of citizens decide to circumvent it (Ekström, 2010, p. 82).

An important question is thus whether it is possible to regulate and enforce more restrictive and more encompassing copyright protection (Larsson, 2011, p. 190). It appears that the institutional contradictions on which TPB relied in its evasion are growing more apparent and difficult to ignore or counteract, which should serve as an important signal to regulators. The outcome of evasive entrepreneurship results from the interdependent actions of entrepreneurs and regulators, and there is no guarantee that opting for stronger enforcement will have the intended effect; if it does not, moving out of that position may prove to be difficult.

Among the suggested reforms of the copyright system in a more liberal direction is that of freeing creative works from copyright sooner by requiring that copyright holders pay a fee at frequent intervals to retain their rights (Lessig, 2008). Another suggestion is to impose a levy or tax to compensate copyright holders for revenues lost due to media piracy (Ekman, 2006). Such a levy could be collected in a manner similar to the television licensing fees in many EU countries. It has also been suggested that levies be imposed on broadband connections and/or taxes imposed on internet service providers, with the proceeds then being distributed to rights holders (Burke, 2010, p. 89). Yet another solution would be a private license for free distribution and downloading, a measure that would mean more money to copyright holders if it was combined with a quantity-based payment scheme (Johansson, 2010, pp. 115-117). Time will tell whether such changes will materialize.

4. Discussion

Studying TPB as a case of evasive entrepreneurship proves to be fruitful not only for understanding the case but also for further exploring the interdependencies of evading institutional structures. There are two sides to the evasion, each of which depends heavily on the other.

TPB's founders chose an adversarial evasion strategy aimed at ridiculing existing regulation and mustering public opinion to support their cause. This approach made it more difficult for regulators to respond to their evasion without turning the interaction into an antagonistic conflict, a sort of tug of war. It should also be noted that the Swedish Government had to shape their strategy with respect to international copyright agreements, which further restricted their ability to maneuver. In response, the Swedish Government eventually chose to take the measures necessary to strengthen the current regulations and convict the people behind TPB in court, i.e., they adapted and enforced the existing regulations.

It may be tempting to draw the conclusion that the outcome was inevitable, but doing so would be to ignore the fact that international laws and regulations are also subject to change and evasion. Moreover, the outcome resulted in neither a complete eradication of the evasive activity nor strict enforcement of the law. TPB is still online, and file sharing with BitTorrent technology continues. Thus, the issue is still far from settled. Furthermore, it could be argued that file sharing, and TPB in particular, sowed the first seeds for a market for digitized content. Actors such as Netflix and Spotify later moved in to capitalize on this market and became attractive alternatives to file sharing by providing customers with streaming options, "freemium" business models and low prices.

In a sense, TPB is one of the most significant and successful Swedish innovations in the past 50 years. It is therefore remarkable that both the regulators and entrepreneurs seem to have ended up with the proverbial short end of the stick. The entrepreneurs were sentenced to jail and forced to pay large fines. Meanwhile, Swedish policymakers appear to be no closer to establishing an institutional framework that can gain legitimacy for a new generation of file sharers and leverage the potential of the Swedish information economy to promote further innovation. This situation raises an important question. Specifically, how should policymakers respond to evasive entrepreneurship to promote its advantages while curtailing its potentially negative consequences?

4.1 *Alternative endings*

The case of TPB could have played out differently. To understand this, we compare TPB with other cases of evasive entrepreneurship. Specifically, we focus on how they differ in terms of their approaches and interdependencies.

First, consider the introduction of commercial television in Sweden in the 1980s. At that time, it was illegal to broadcast commercial television to Swedish households. However, the entrepreneur Jan Stenbeck and his holding company Kinnevik were able to exploit several institutional contradictions to evade and challenge the regulatory framework to introduce the channel TV3 (Ewertsson, 2002). The president of Kinnevik made the following statement in the company's 1987 Annual Report (Ewertsson, 2002, p. 5, authors' translation):

In our entrepreneurial efforts we look for business opportunities with high initial thresholds, high future growth preferably driven by new technology, and an oligopoly-oriented competition situation. These opportunities are often found close to the public monopolies, which is also the case for several of Kinnevik's new companies.

More specifically, the firm exploited the following two institutional contradictions. First, the regulation of television and radio transmissions had yet to be adapted to the emerging satellite technology, which made it possible for TV3 to transmit television signals to Sweden from space out of a head office in London, where it had been located, at least in part, due to favorable legislation (Ewertsson, 2002, pp. 6-8). Second, Kinnevik exploited an exemption in the ban on commercial television that allowed cable television networks consisting of up to 101 subscribers. They did so by establishing Finvik AB, a company that supplied central cable receiver facilities that served no more than 100 households at a time (Ewertsson, 2002, p. 9).

The strategy worked. The Swedish Cable Board ruled that TV3 had not broken the cable law, and it was allowed to continue its operations, with a member of the board observing that the channel's commercials could not be banned unless new legislation were enacted. A government commission was launched with the purpose of exploring the options for the future of the industry (Blomberg and Larsson, 1990). The commission eventually concluded that it was no longer beneficial to ban commercials on Swedish television in consideration of the new technological landscape. The stringent measures required to achieve this goal would jeopardize other television-related political priorities (Jörnmark, 2013, pp. 120-125).

In terms of our conceptual model, Kinnevik started out evading and then moved to altering institutions, with the implicit threat to continue evading them if reform was not enacted. Regulators responded by moving from inactivity to accommodation. Both Kinnevik and TPB were evasive, but whereas Kinnevik lobbied regulators to accommodate its evasion, TPB engaged in activism at the cost of provoking and alienating regulators.

Unlike TPB, Kinnevik was a financially strong and well-established market actor that could alternate between evading and altering approaches. Ewertsson (2002, pp. 2-3) argues that Stenbeck and Kinnevik needed to “link together several different components to a consistent and complete system: programs (content), individuals, and organizations were to be combined with relevant technological, economic, legal, social and political skills” and that “new large-scale socio-technological combinations like TV3 need wide social and financial support as well as political legitimacy to survive.”

If TPB had followed a track similar to that of TV3, it could arguably have ended up in a position closer to that of Spotify, a freemium music streaming service that negotiates with rights holders to provide their content in return for compensation based on listening frequencies, subscription fees and commercial revenues. Although the BitTorrent technology is highly decentralized, the platform, search engine, top lists and commercial banners could have been used to shape an extended business model. With such an approach, the regulatory response may also have been very different. However, given the idealistic or ideological motivations behind TPB, it is doubtful that the founders even considered this option. Whereas Kinnevik vacillated between altering and evading, the founders and operators of TPB essentially adhered to an adversarial evasive strategy until the end, perhaps hoping that their strategy would indirectly lead to institutional change if they succeeded.

As a second example, consider the new types of businesses that leverage digital solutions to introduce new types of service-providing platforms. Uber, for example, provides a matching of supply of and demand for transport services in cities around the world. Each driver has her or his own business, while Uber vets the drivers, provides a mobile app that connects them to riders, handles payments (and claims a fee) and allows both parties to rate each other semi-transparently to promote good behavior. In a similar manner, Airbnb provides a platform for leasing and renting temporary housing. Again, both residence owners and guests can rate each other, and Airbnb handles the payments and claims a share. Uber is not a taxi company, but it competes with taxi companies. Airbnb is not a hotel, but it competes with hotels.

Both Uber and Airbnb are prominent examples of contemporary evasive entrepreneurship. Similar to TPB, they are global in reach, but unlike TPB, they are local in use. That is, they may encounter different regulatory responses in different cities, and as a result, they obtain very different outcomes from their evasive activities depending on where the activities are carried out. Both companies appear to have followed a strategy of maximizing the number of establishments, and users from all over the world have been able to use their services. Regarding our conceptual model, these businesses suggest an interesting case, in which companies could potentially learn by playing the game repeatedly against different regulators, finding common denominators and using previous encounters to frame future ones. In the wake of conflicts with incumbents and negative regulatory responses, both companies are now mixing their evasion with altering strategies and increased lobbying to induce regulators to accommodate their evasion.

In many countries, these companies have been met with reluctant or antagonistic responses from regulators. For instance, Uber’s low-cost service UberPop has been banned in France, Germany and Italy, and the company is involved in legislative conflicts in several other locations (Nguyen, 2015). In 2015, the Swedish court Hyresnämnden ruled that housing associations have the right to forbid its members to let their apartments via Airbnb (Goldberg, 2015). The service also faces restrictions and regulatory responses aimed at enforcing current regulations in countries such as

Spain and Germany (Hellekant, 2015b). However, in other countries, the regulatory responses have been more permissive, with laws being adapted to accommodate the service to different degrees (Coldwell, 2014).

Because of their geographically localized submarkets, Uber and Airbnb can learn iteratively from the regulatory response in each country and city. To a lesser extent, this was also the case for Kinnevik. Stenbeck attempted to establish TV3 in several Scandinavian countries simultaneously and could also draw on experiences from a previous attempt in Luxembourg (Ewertsson, 2002, pp. 5, 8-9). This ability adds an important dimension to the evader's strategy. Similar to a chess game, the outcome may not be knowable from the start, but there is a set of standard opening moves to which each player can learn to relate. Furthermore, these companies can leverage success from one place across the entire global market, thereby giving them an extremely valuable source of data, business knowledge, which is largely tacit and therefore difficult to imitate. As such, previous success supports their cause.

Returning to the board game, Uber and Airbnb initially engaged exclusively in evasive behavior, but as a reaction to unfavorable regulatory responses, they complemented their evasion with altering strategies, such as lobbying and efforts to win public opinion. Airbnb has also espoused an abiding strategy by adapting their service to collect and forward local taxes. Paris is a prime example of this strategy (Hellekant, 2015a).

Overall, it is evident that evasive entrepreneurship takes different forms, depending on the context in which it is carried out. In many cases, entrepreneurs choose to mix evasion with altering or even abiding strategies. What makes TPB noteworthy is that it was based solely on an antagonistic, evasive strategy. In this respect, it resembles political activism to a greater degree than the examples discussed in this section.

4.2 Concluding remarks

Institutions shape entrepreneurship, but the reverse is also true. Entrepreneurs choose how to employ their entrepreneurial talent depending on the incentive structure as determined by the relevant rules and regulations. In this manner, and as highlighted by Baumol in his classic 1990 paper, institutions fundamentally determine the distribution of this talent across productive, unproductive and destructive activities. Conversely, entrepreneurs actively respond to the environment that they face, which tends to affect institutions. The case of TPB forcefully illustrates the latter effect.

Legislation and policymaking processes have remained largely unchanged, whereas digitization has become a new general purpose technology that is driving a shift in the entire economy. Consequently, the preconditions for entrepreneurship have changed in many, if not most, markets. What TPB did to music and movies parallels developments in other industries. Bearing this in mind, the lessons learned from the case of TPB are likely to have important implications for many other sectors and industries. We are already seeing similar developments with companies such as Uber and Airbnb, as mentioned in the previous section, although the nature and outcomes of the evasions vary. This trend will cause policymaking to lag behind technology-driven innovation, and may cause even more serious friction in the future.

The pace and character of technological development and entrepreneurship have changed significantly as a result of digitization, but regulations and regulatory processes adapt slowly to these changing circumstances. Furthermore, the role and function of such formal institutions depend not only on their original design but also on the context in which they operate. To illustrate this dependency, consider the concept of

“convergence culture” introduced by Jenkins (2008) to describe how different media channels, e.g., newspapers and television, are becoming increasingly entangled through digitization. Similarly, the regulatory frameworks that have been established to govern such channels separately will also converge, and their applications will overlap. Consequently, the risk for institutional contradictions and uncertainties will increase, as will the potential for evasive entrepreneurship. Against this backdrop, we highlight four reasons why policymakers must pay close attention to evasive entrepreneurship.

First, entrepreneurs and innovators may not be able to afford to wait for policymakers to adapt regulations and give them the authority to pursue new ventures, which implies that evasive entrepreneurship may increasingly become a necessary strategy for entrepreneurs to test new ideas in highly dynamic markets. Indeed, in a conference about the sharing economy in 2013, Kevin Laws of the site AngellList, which unites startups and investors, said, “the approach almost all startups take is to see if they can be successful fast enough so they can have enough money to work with the regulators” (Santa Clara High Tech Law Journal, 2013).

Second, if regulatory frameworks are updated too slowly, it may become increasingly complex to interpret whether a specific innovation or venture is legal, that is, to determine what laws apply and how they should be interpreted. This situation especially holds true for digital data-driven services that combine different data sources across sectors of the economy or across national borders because they may encounter regulatory inconsistencies or difficulties complying with several different or fragmented sets of regulations. Such increased institutional uncertainty is likely to become an impediment for firms that cannot afford the legal process necessary to determine whether their business model is legal.

Third, if the gap between regulation and technological development continues to increase such that obsolescent regulations must be increasingly bent to fit with new technological innovations, there will be an increasing level of noise in the interaction between regulators and entrepreneurs. Consequently, these parties will have a more difficult time communicating and finding common ground.

Finally, the supply of entrepreneurship is arguably affected by the institutional response to entrepreneurship. If policymaking and legislation appear to inhibit entrepreneurship or make it an increasingly uncertain activity, it will influence how potential entrepreneurs choose to channel their efforts. We are not aware of work that directly and convincingly links policy uncertainty to growth-oriented entrepreneurship, but there is high-quality evidence that policy uncertainty reduces corporate investment more generally in a manner that comports with real options theory (Baker *et al.*, 2016; Gulen and Ion, 2016). Because investments in growth-oriented entrepreneurship are costly to reverse, this evidence suggests that policy uncertainty also impedes entrepreneurship. Thus, slow institutional adaptation may not only delay or inhibit technology-driven entrepreneurship but also reduce the number of entrepreneurs willing to put in the necessary effort to overcome these thresholds.

Overall, we not only argue that evasive entrepreneurship is an underestimated and unique source of innovation and economic development but also conclude that a crucial factor is determining the appropriate response strategies for regulators and policymakers. If this response fails, large parts of the potential benefits of evasive entrepreneurship are unlikely to be reaped. TPB is a case in point. Although it was ultimately ruled unlawful, the venture nevertheless paved the way for a digital content market that has changed dramatically in the wake of file sharing.

Entrepreneurial activities cannot be classified as socially wasteful without a contextual understanding of the manner in which they interact with the institutional environment. *Prima facie*, it may seem obvious that file sharing of music and movies over the internet should be banned to safeguard incentives in the entertainment industry. However, as we have observed, the challenge from file sharing forced the industry to develop new business models for the distribution of music and film adapted to the new technology. As a result, consumers can now benefit from highly valuable and flexible services at extremely low prices relative to the pre-TPB era. Thus, evasive entrepreneurship can offset deficiencies in the existing institutional framework, cause policymakers to adapt regulations and force incumbents to adapt to a changing market.

Notes

1. In North's (1990, p. 3) view, institutions are "the humanly devised constraints that shape human interaction." In this paper, our main focus is evasive behavior with respect to formal institutions, but we still acknowledge that laws and regulations can sometimes conflict with the norms, values and beliefs of large social groups (Dowling and Pfeffer, 1975; Safran, 2003), in addition to the fact that evasive entrepreneurs, while defying formal institutions, still operate within informal institutional boundaries, in the sense that their means and ends are legitimate to subgroups of society (Webb *et al.*, 2009).
2. Consider, for example, the spark that ignited China's agricultural reforms in the late 1970s. It emanated from the actions of a number of farmers in a poverty-stricken village in the province of Anhui. In a secret agreement, the farmers decided to divide up the land and allow each household to work on its own. This organizational innovation amounted to *de facto* privatization and provided a second-best substitute for the inefficient institutions that governed agriculture, thus amending the perverse incentives created by forced collectivization. The subsequent year's grain production in the village equaled the total production of the previous five years. The success of the innovation was propagated through lobbying by local officials and eventually resulted in institutional change that allowed contracts allocating land to households on a long-term basis and gave farmers the right to retain profits (Li *et al.*, 2006).
3. The act was amended in July 2005 (through the government bill *Upphovsrätten i informationssamhället*) following the 2001 EU decision to ban the downloading of copyrighted material without permission.
4. "Our view is that copyright legislation should be protected, but we do not want to criminalize an entire youth generation," stated Swedish Prime Minister Fredrik Reinfeldt in a debate (SVT, 2008).
5. The founders claimed that they had earned only small amounts but were unwilling to disclose any information about the site's profitability. In the subsequent trial, the prosecutor concluded that the site had generated a total of SEK1.2 million (\approx USD170,000 at the time) in advertisement revenues (Rydell and Sundberg, 2009, pp. 136-137). Given the widespread use of TPB's innovations, this sum appears very modest. However, it has been observed that innovators are typically able to capture only a few percent of the total surplus generated by their innovations (Nordhaus, 2004; Baumol, 2010, p. 51).
6. It is unclear to what extent the decline in record sales in Sweden and other countries (IFPI, 2012) can be attributed to file sharing. Swedish record sales did not fall at all during the preceding Napster era, and the Swedish industry's aggregate revenue remained roughly unchanged despite the advent of TPB, with live music revenue increasing (Schollin, 2010, p. 214). Claims about revenue losses due to piracy are often based on the assumption that

most unauthorized copies would be replaced by the sale of a legitimate product had the product not been obtained through file sharing (Cammaerts and Meng, 2011). For example, in the 2009 trial, when record and movie companies demonstrated how much they “should” have been paid for each download of their protected works, they used a calculation method which, if applied consistently, would mean that the value of the files shared through TPB would amount to hundreds of billions of SEK (Larsson, 2010, p. 189; USD1 \approx SEK7 in 2006-2007). This calculation is grossly inaccurate because it is based on the implicit assumption that the price elasticity is zero (Oberholzer-Gee and Strumpf, 2007, p. 4).

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