Elert, Niklas; Henrekson, Magnus

Working Paper

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IFN Working Paper, No. 1153

Provided in Cooperation with:
Research Institute of Industrial Economics (IFN), Stockholm

Suggested Citation: Elert, Niklas; Henrekson, Magnus (2017) : Entrepreneurship and institutions: A bidirectional relationship, IFN Working Paper, No. 1153, Research Institute of Industrial Economics (IFN), Stockholm

This Version is available at:
https://hdl.handle.net/10419/183382

IFN Working Paper No. 1153, 2017

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Niklas Elert and Magnus Henrekson

Research Institute of Industrial Economics
P.O. Box 55665
SE-102 15 Stockholm, Sweden
info@ifn.se
www.ifn.se

Entrepreneurship and Institutions: A Bidirectional Relationship

Niklas Elert* and Magnus Henrekson**

Research Institute of Industrial Economics (IFN), Box 55665, SE-102 15, Stockholm, Sweden.

February 15, 2017

Abstract: The interplay between entrepreneurship and institutions is crucial for economic development; however, the view that institutions determine the extent to which entrepreneurial activity is productive is only part of the story. We argue that causality is bidirectional, in that entrepreneurship is also, for better or for worse, one of the main drivers of institutional change. Through their actions, entrepreneurs have a fundamental influence on institutions, whether they abide by them, actively try to alter them, or evade them. Particular attention is given to evasive entrepreneurship, an entrepreneurial function which, until recently, has been an underappreciated and poorly understood source of innovation and institutional change. We argue that the influence of evasive entrepreneurship on the economic trajectories of societies is likely to only grow in the future.

JEL *Codes*: L5; M13; O31; P14.

Keywords: Economic development; Entrepreneurship; Evasive entrepreneurship; Innovation; Institutional change; Regulation.

* Tel: +46-703-90 27 51. niklas.elert@ifn.se

** Tel: +46-8-665 45 00. Fax: +46-8-665 45 99 magnus.henrekson@ifn.se

We are grateful for useful comments and suggestions from… Financial support from the Jan Wallander and Tom Hedelius Research Foundation and the Marianne and Marcus Wallenberg Foundation is gratefully acknowledged.

1 Introduction

> [T]he ratio of what is known to what is unknown with respect to the relationship between innovation, competition, and regulatory policy is staggeringly low.
>
> Manne and Wright (2011, p. 1)

The Schumpeterian (1934) view that an economy's long-run growth depends on its ability to exploit innovations has gained substantial traction in recent decades (Baumol 1990; Cohen 2010; Aghion et al. 2014). As the individual responsible for creating these innovations, the entrepreneur has increasingly been recognized as the *primus motor* for economic growth (Henrekson and Stenkula 2016). Additionally, it has been realized that in this role, entrepreneurs are constrained and enabled by their institutional environments (Baumol 1990; Aldrich 2011; Estrin et al. 2013). Rules, norms and other formal and informal institutions affect and incentivize individual behavior, thereby influencing the extent and productive character of an economy's entrepreneurial activity and, consequently, its economic development (Williamson 1975; Olson 1982; North 1990; Mueller and Thomas 2000; Hwang and Powell 2005; Acs et al. 2008; Stenholm et al. 2013; Urbano and Alvarez 2014).

Formal economic institutions that have been identified as particularly important for entrepreneurship include the protection of private property, tax codes, social insurance systems, employment protection legislation, competition policy, trade policies, capital market regulation, contract enforcement, and law and order (Hall and Jones 1999; Henrekson and Johansson 2009; Bjørnskov and Foss 2013). Yet much remains to be learned concerning the relationship between institutions and entrepreneurship. In this paper we will argue that the view that institutions determine the extent to which entrepreneurial activity is productive is only part of the story. Rather, causality is bidirectional, in that entrepreneurship is also, for better or for worse, one of the main drivers of institutional change.

Webb et al. (2013) note that scholars who employ institutional theory traditionally examine how institutional pressures lead to activities that conform to prescriptions. Hence, they assume, implicitly or explicitly, that entrepreneurs, even when engaging in sheer rent seeking, abide by institutions and act within

prescribed institutional constraints (e.g., Baumol 1990; Boettke and Coyne 2003). However, in the real world, the relationship between institutions and the actors that are supposed to conform to their prescriptions is more complicated.

For example, at a conference on the sharing economy in 2013, Kevin Laws of the site *AngelList*, which unites startups and investors, made the following observation (*Santa Clara High Tech Law Journal* 2013):

> …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.

This quotation is revealing: it suggests that, for startups in the increasingly important sharing economy (and possibly elsewhere), abiding by existing regulations may be too costly to even be considered. Instead, these entrepreneurs seem to have turned the quip that it is easier to ask forgiveness than to get permission into a strategic tool (Brenkert 2009). Thus, they embark on their entrepreneurial ventures with a strategy of ignoring or circumventing extant rules, with the idea of supplanting or complementing this strategy with a more costly institution-altering strategy when such a move becomes economically possible.

This strategy is not the way that entrepreneurs are *supposed* to respond to institutions according to mainstream institutional theory, but the prevalence of such evasive tactics are the motivation of this essay. The fact that such non-abiding responses are common should not be surprising. In a world in which "technology changes exponentially, but social, economic, and legal systems change incrementally" (Downes 2009, p. 2), an additional day of regulatory delay can be extremely costly to the entrepreneurs (Prieger 2007). Discouraging examples of attempts to collaborate with regulators abound (Askin 2013) and the cost from these institutional-entrepreneurial conflicts is in all likelihood high, when stated in terms of foregone innovation in areas such as the sharing economy, online genetic analysis, the Internet of Things, wearable devices, smart cars, commercial drones, bitcoin, 3-D printing, robotics, and advanced medical devices (Thierer 2016).

We will explore the various ways that entrepreneurs can respond to institutions and delve into the institutional repercussions of these strategies. We will argue

that institutional change is endogenous (Eggertsson 2005) and that the institutional framework does not merely direct entrepreneurs' actions; entrepreneurs also influence the workings of that framework, whether through "regular" business activity, institutional entrepreneurship or evasive methods (Henrekson and Sanandaji 2011). In exploring both sides of the interaction, we ask: How does the institutional framework influence entrepreneurship, and how do entrepreneurs, in turn, influence the emergence and evolution of institutions? In short, we explore the bidirectional causality between institutions and entrepreneurship.[1]

Special attention will be given to entrepreneurs' evasive responses to institutions, since this phenomenon remains understudied and underestimated in the entrepreneurship literature, although some steps forward have been taken recently (see, e.g., Elert and Henrekson 2016; Elert et al. 2016). Based on evidence from economic history we argue that such evasive entrepreneurship has induced many of the institutional developments that have made the prosperous world in which we now live possible. Taking this type of entrepreneurship into account is also essential for understanding many of the developments that currently affect the social and political order on a global scale.

The remainder of this essay is structured as follows. Section 2 will provide a precursory framework for institutions as functional responses to deviations, followed by an introduction of the idea of entrepreneurs as deviators. In Section 3, we begin by categorizing the three entrepreneurial responses to institutions—abide, alter and evade—before discussing the first two at greater length. The subsequent two sections are devoted to evasive entrepreneurship, with Section 4 defining the concept and discussing the institutional features that make it possible, while Section 5 describes its economic consequences and its potential to usher in institutional change. Section 6 concludes by discussing the implications of our work for policy and future research.

[1] This essay is an attempt to synthesize and extend a number of ideas that have been developed in a series of papers, particularly those of Douhan and Henrekson (2010), Henrekson and Sanandaji (2011), Elert and Henrekson (2016), and Elert et al. (2016).

2 Institutions and deviations

2.1 The institutional status quo

The effective functioning of any society requires the reasonable protection of certain expectations of its members (Hayek 1973–1979). To protect people's incentives to learn, invest, and enter into mutually beneficial contracts, human activity, including market activity, must be embedded in an array of institutions in order to cope with deviating behavior (Dixit 2007), whether this is labeled opportunism (Williamson 1975; Rose 2012), destructive entrepreneurship (Baumol 1990) or something else.

The social science literature provides many definitions of institutions (North 1990; Calvert 1995; Williamson 2000; Sobel 2002; Schotter 2008), but they are generally devices that regulate human interaction, reduce uncertainty and prevent free riding and conflict. By imposing costs on particular behavioral options, institutions produce incentives that discourage opportunistic or deviant behavior; ideally, the expected cost of an opportunistic action becomes so high that undertaking such an action would be irrational.

While a particular institutional order can satisfactorily protect people's expectations and interests, it need not be economically efficient, or result in innovation and economic change. Indeed, problems caused by deficient institutions are ubiquitous in less developed countries (Hay and Shleifer 1998; Djankov and Murrell 2002). By contrast, institutions in advanced countries are relatively effective in directing economic activity toward inherently productive purposes (Murphy et al. 1991; Magee et al. 1989), and come closer to the first-best institutional ideal expressed by organizations such as the World Bank (Rodrik 2008).

From a Schumpeterian or evolutionary perspective, however, the idea of an optimal set of legal rules ignores a central feature of successful economic development: the continual change, innovation and adaptation of institutions that are necessary in a competitive environment. Even if identifiable, the ideal institutional bundle will therefore change from one point in time to another and will, in practice, be impossible to achieve because few, if any, institutions can be adapted at the pace at which innovations occur (Downes 2009).

Not even in advanced countries do institutions always cope well with adaptability and innovation. One reason is that most human beings as boundedly rational individuals (Simon 1955) are likely to make choices based on what norms, customs and traditions stipulate (Day 1987; Heiner 1986). Furthermore, people have an evolutionarily evolved propensity to observe and punish those who deviate from such informal institutions (Boyer 2002; Cosmides and Tooby 1992; Boyd and Richerson 1992).

This often results in skepticism towards the novel and the unknown; popular resistance against innovation can even be viewed as the default response since time immemorial (Morison 1966; Mokyr 1992). In Weber's (2002/1930, p. 31) words, "[a] flood of mistrust, sometimes hatred, above all of moral indignation, regularly opposed itself to the first innovator." Even today, citizens' attitudes toward most emerging technologies typically reflect a pattern of resistance, followed by gradual adaptation and eventual assimilation. Thierer (2016, p. 66) provides a long list of technologies to which this pattern applies—from the telegraph to wireless location-based services.

Additionally, because few potential innovations are Pareto superior, economic history is replete with important self-serving interests (such as guilds and unions) that stood to lose from the introduction of innovations, usually because these entities owned specific assets dedicated to the status quo mode of production. The owner of an asset used in a highly specialized activity can rarely reallocate it to another activity without incurring substantial costs, irrespective of whether the asset consists of physical, human or intangible capital (Caballero 2007). To protect the value of their assets, special interests therefore resort to using non-market means to block the market selection process, notably laws and regulations barring the innovation in question (Olson 1982; Mokyr 1998; Bauer 1995). Furthermore, the beneficiaries of an institution thwart change in order to preserve their rents, causing it to grow entrenched and non-adaptive (Etzioni 1985).

All institutions impose costs on deviant behavior, but the source of the costs can differ—from self-enforcing conventions to negative feedback in the case of social norms or third-party enforcement of a non-violent or violent (usually

government-instituted) type (Barzel 2000, 2001; cf. Martens 2004). Importantly, institutions of all types coexist and overlap, simultaneously affecting an individual's incentives in complicated ways (Lipford and Yandle 1997; Mantzavinos 2001).

When institutions are complementary, the presence or usefulness of one increases the returns from or usefulness of the other (Hall and Soskice 2001). In such instances, different elements of a society's institutional configuration are mutually reinforcing. Once an institutional setup performs reasonably well—and often when it does not—it becomes locked in or sticky (Arthur 1989; Hall and Soskice 2001; Nelson and Winter 2002; Boettke et al. 2008); the institutional status quo becomes even more persistent and institutional change more difficult as a consequence (Kuran 2009).

Even in advanced countries, these innate features of institutions preserve the status quo and pose a challenge to the idea, common in economics textbooks, that an innovation exhibiting greater fitness than the state-of-the-art technology—for example, in terms of usefulness or profitability—will automatically become a success story in the market. In actuality, market competition has seldom been the sole arbiter of the decision of whether a society should embrace a new innovation (Mokyr 1998).

2.2 Institutional deviations

The fact that the existing institutional setup favors the status quo does not mean that all economic actors accept the institutional status quo, or that they are all content with simply performing as well as possible given the existing institutional constraints. The limitations of that perspective were well recognized by Schumpeter (1942, p. 84):

> [T]he problem that is usually being visualized is how capitalism administers existing structures, whereas the relevant problem is how it creates and destroys them.

This point is perhaps best understood if one considers innovators and entrepreneurs as people who are less constrained by the institutional status quo than others. Indeed, researchers have shown that entrepreneurs typically rebel against traditional structures and rules (Obschonka et al. 2013). An innovation

can therefore be regarded as an individual's attack on a constraint that everyone else takes for granted—constraints that may be not only technological or economic in nature but also institutional. As Lienhard (2006) claims, "[i]nventing means violating some status quo."

Such violations are often facilitated by the fact that not all institutions are complementary or mutually reinforcing; in fact, institutional conflicts are common, such as conflicts between different centers of authority not only within the state but also across polities. Today, innovators can—and increasingly do—move to polities whose legal and regulatory environments are more hospitable to entrepreneurial activity at the expense of more conservative polities (Thierer 2016, p. 56). The formal and informal sides of the institutional coin can also clash, as when entire communities or identity-based groups adhere to norms, values and beliefs that contradict laws and regulations (Safran 2003; Webb et al. 2009).

These and other institutional contradictions make it possible to circumvent or break out of the existing institutional straightjacket and its stipulation of the "hows" and "whys" of production.[2] Their existence implies that the law need not be passively received by those who are supposedly subject to it. Rather, an institution can be actively worked on to alter its consequences, e.g., by using the law to escape legal control without actually violating legal rules, for example with respect to accounting or environmental standards (McBarnet 1984; Johnston 1991; McBarnet and Whelan 1991). Likewise, while most entrepreneurship scholars implicitly assume that entrepreneurs act within prescribed institutional constraints (Webb et al. 2013), there is also a literature that focuses primarily on how large corporations attempt to shape government regulations in ways that are favorable to them (Hillman et al. 2004; Battilana et al. 2009; Lawton et al. 2013).

It is perhaps understandable that many researchers perceive deviations from the existing institutional framework as a problem that may lead to welfare losses and impeded economic development (Pistor 2002, p. 112; McBarnet 2006; Rose

[2] This fact has been acknowledged in the criminology and legal literature, which points to indeterminacy in rules, broad or narrow, to the scope within the law to legitimize contradictory decisions, and to a requirement to prove intentionality on the part of the alleged perpetrator.

2012; Nurse 2015). However, this perception rests on the assumption that the rule being bent is well tailored or has evolved to have beneficial effects. When this is not the case, deviations can be beneficial rather than unproductive or destructive, for example, if they enable entrepreneurs to innovate.

Determining whether this is the case may involve comparing the deviation with some measure or standard of what would have occurred if the rules had been followed (Warren 2003). From a welfare economics perspective, an obvious standard to compare outcomes is Pareto efficiency, while a more process-oriented perspective may emphasize the factors that lead to economic development (Holcombe 2009; McCloskey 2010). Calculating the commercial potential of innovations has never been an easy task (Verspagen 2007, p. 487), but in general, the externalities of the innovation process are enormous—with the exception of a small fraction, benefits flow to consumers in the form of lower prices and higher quality (Nordhaus 2004). However, valuable innovations sometimes do not leave any trace in the national income statistics.[3]

An additional, but possibly deeper reason why deviations from the institutional status quo should not always be discouraged is provided by Hayek. Upon discussing moral rules, he (1962, p. 60) argues that:

> It is, in fact, desirable that the rules should be observed only in most instances and that the individual should be able to transgress them when it seems to him worthwhile to incur the odium this will cause…. It is this flexibility of voluntary rules which in the field of morals makes gradual evolution and spontaneous growth possible, which allows further modifications and betterments.

The view of institutions as serving a status quo that is not necessarily apt to handle tomorrow's economic challenges suggests that the desirability of pliable rules applies to both formal and informal institutions. Especially in times of rapid change, economic adaptability may be difficult to achieve if actors invariably operate strictly within the limits of existing institutions (Etzioni 1987;

[3] One telling example is the introduction of anesthesia in the 19th century, which did not influence measured national income, despite its dramatic effects on perceived welfare (Mokyr 2010, p. 257). Likewise, today, people spend a substantial part of their leisure engaging in online services such as games, entertainment, and news. Based on how we spend our time, we value these new services dearly, but what we pay for them is likely to be a mere fraction of their value to us (Coyle 2014).

Thierer 2016). In such instances, deviations can prevent existing institutions from stifling economic development.

As an illustration, consider Mokyr's (2010) account of the economic development in Britain during the Industrial Revolution, which casts considerable doubt on the importance of state enforcement of formal rules. At the time, Britain had some formal institutions that promoted economic growth, but many other institutions impeded rather than supported economic development. Growth occurred despite rather than because of some of these institutional conditions: "By ignoring and evading rather than altogether abolishing obsolete rules and regulations, eighteenth century Britain moved slowly toward a free market society" (Mokyr 2010, p. 397). More generally, Mokyr (1992, 2010) identifies the willingness to criticize and deviate from the conventional wisdom of past generations as an important element of a society's ability and desire to innovate.

Certainly, many deviations can be detrimental to growth. Substantial empirical evidence suggests, for example, that corruption has large deleterious effects on economic performance (Shleifer and Vishny 1994; Mauro 1995; Aidt 2003; Pellegrini and Gerlagh 2004; Hodgson and Jiang 2007). As Hodgson (2016, p. 339) notes, such rule-breaking behavior and weak enforcement can spread contagiously throughout society, threatening the organizational efficacy that is critical for any developed economy. Nevertheless, findings from other studies suggest that malfunctioning institutions have a smaller effect when the level of corruption is high (Méon and Weill 2008; Klapper et al. 2006).

A great deal of additional research is needed to fully comprehend the conditions enabling wealth creation and economic growth by striking the right balance between institutions that make the future stable enough so that people are prepared to make long-term investments, yet flexible enough to encourage value-enhancing innovations and entrepreneurship. As Kuran (1988, p. 145) observes, a central problem of society is achieving a balance between protecting expectations and allowing adaptation to new conditions, since civilizations flourish only when this balance has been attained. In the following section, we shall take a first step towards furthering that understanding, by delving deeper

into the manners through which entrepreneurs can respond to institutional constraints.

3 Entrepreneurship and institutions

3.1 Three entrepreneurial responses to institutions

We have already touched upon Baumol's (1990) distinction of (entrepreneurial) activities that are productive, unproductive or destructive. A related and influential stream of research has built on the insight that productive abilities can also be used for rent extraction (e.g., Murphy et al. 1991 and Acemoglu 1995). This literature typically stresses that institutions determine the relative rates of return of productive and unproductive types of activities. In this process, the social product may be unaffected, as in the case of a simple transfer, or be lowered, as in the case of destructive entrepreneurship (Baumol 2010, p. 144). In the terminology of the neoclassical theory of production, the distinction between the different types can be characterized as an inward (destructive) or outward (productive) shift in the production possibility frontier (Coyne and Leeson 2004).

One of Baumol's central premises is that entrepreneurial talent is more or less equally distributed across time and societies but that its manifestation crucially depends on the institutional setup. Although all three types of entrepreneurial activity occur in all societies (see, e.g., Acemoglu 1995; Baumol 1993, 2002; Desai and Acs 2007; Coyne and Leeson 2004; Smallbone and Welter 2002; Sobel 2008), the relative allocation varies greatly. This allocation is an important determinant of each society's level of welfare and growth rate. Although Baumol himself hints in later writings that the relationship between institutions and entrepreneurship may be bilateral (Baumol 2010), the direction of causality has typically been assumed as running from institutions to entrepreneurship, while a potential reverse or bilateral causality has been largely neglected.[4]

[4] Boettke and Coyne (2009) thoroughly analyze the link between institutions and entrepreneurship (and also offer a comprehensive review of the related literature). Boettke and Coyne (2003) present what is probably the most forceful assertion that institutions are the ultimate cause of growth and that entrepreneurship is merely a proximate cause because, according to them, the entrepreneurial supply and its direction is fully determined by the institutional setup.

Certainly, the idea that innovative individuals contribute to institutional change has a long history in political science (Dahl 1961), as well as in sociology (Scott 2004). In fact, Baumol's (1990) original writing can be used to shed more light on this perspective, if it is acknowledged that the same individual can engage in productive, unproductive and destructive entrepreneurship. For example, imagine a business owner who (innovatively) finds his way through the bureaucratic red tape and finally acquires a production license. Given first-best institutions, the entrepreneur's effort is wasteful because he could have instead expended this effort on directly productive activities.

Yet the point made in section 2 is that, in many cases, institutions are far from optimal (Rodrik 2008). It is therefore often appropriate to view non-productive forms of entrepreneurship as second-best *productive* responses to suboptimal institutions (Douhan and Henrekson 2010). *A priori* unproductive activities can thus fill the gap of institutional failures—a function that may be beneficial even if the acquired license is a monopoly license, in which case the prevailing institutions are probably even less efficient. Even in this case, non-productive entrepreneurship may be a way of breaking a bureaucratic deadlock that prevents everyone from obtaining a license.

For an illustration of the argument, consider California-based entrepreneur Elon Musk's aerospace venture SpaceX. A 2012 report from the Sunlight Foundation (Kiely 2012) found that "SpaceX has spent over US$4 million on lobbying Congress since it was established in 2002 and doled out more than US$800,000 in political contributions" to Democrats and Republicans. Additionally, following SpaceX's intense political lobbying, the firm received US$20 million in local incentives and rebates for a space launch facility in Texas (Free Beacon 2014; Hirsch 2015). Apart from these incentives, and quite possibly as a result of its lobbying, SpaceX has won more than US$5.5 billion in government contracts from NASA and the U.S. Air Force. Much of this political activity is arguably unproductive or even destructive.

However, the level of innovation achieved by SpaceX is remarkable, as are the low prices it can offer for space launches relative to those of its competitors. The company developed an entire commercial space transportation system for less

than what NASA spent on *one* suborbital test launch with its Ares I-X booster. At present, the company offers reliable launch services at prices 20 to 30 percent lower than those of its competitors (Dillow 2015). The company has also made several successful strides towards developing a truly reusable rocket that can be landed and refurbished. This rocket could drive down the launch cost by 99 percent, thus opening space to entirely new market segments.

Hence, although the lobbying and rent seeking in which SpaceX engages may seem unproductive or even destructive, these activities may nonetheless be necessary ingredients to enable its productive endeavors. It all harks back to the institutional structure that the firm faces, as the incentives commonly faced by public and private actors in the aerospace industry differ significantly from those faced in a private market. To secure contracts from the U.S. government, a firm must participate in and successfully navigate the administrative bureaucracy associated with the acquisitions process (Higgs 2012, p. 204–224; Duncan and Coyne 2013). For example, certifying SpaceX to ferry sensitive military and national security payloads took two years and involved 150 people, at a cost of more than US$60 million (Bloomberg 2015). Aerospace contracts are granted through a political process, and they can be considered the outcome of a successful grazing of the "fiscal grass" by those with privileged access (Wagner 1992, 2012; Raudla 2010). In view of these incentives, an aerospace firm's lack of engagement in some form of (seemingly) unproductive entrepreneurship would be surprising.

Generally, the ways in which the profit-driven entrepreneur uses his or her talents to respond to formal institutional constraints can fall into three categories. Entrepreneurs can abide by, alter, or evade existing institutions (cf. Oliver 1991). These responses are defined in *Figure 1*. The matrix aims to structure the discussion and does not claim perfect and mutually exclusive categorization; on the contrary, the entrepreneur can engage in several of these responses, either simultaneously or sequentially.

Figure 1 A typology of entrepreneurial responses to institutions and some illustrative examples.

	Abide	Alter	Evade
Productive	Pursue a business opportunity within prevailing institutions.	Provide a new local public good, private security firms.	Sidestep stifling labor market regulations through a new contractual form
Unproductive	Sue competitors for a share of their profit. Rogue states; rivalry between warlords.	Lobby for a new regulation to protect an industry. Repeal property rights to plunder a wealthy group.	Bribe a government official to obtain a contract. Illegal syndicates.

The most commonly studied entrepreneurial category is institution-abiding entrepreneurship. The institution-abiding market entrepreneur is the archetypical entrepreneur, the one most discussed in the literature. When such entrepreneurship is productive, it increases the economy's innovativeness and its ability to adapt to exogenous conditions. Yet entrepreneurs can abide by institutions and act within prescribed institutional constraints but still engage in unproductive activities, e.g., by using the courts to sue competitors for a share of their profits.

However, firms often actively engage in purposeful political activities to control and manipulate their unfavorable environment (Pfeffer and Salancik 1978). The second and third categories are both examples of such institutional entrepreneurship, but they are sufficiently distinct to be separated analytically.

The second category is what is generally thought of when institutional entrepreneurship is discussed, and applies to entrepreneurs who directly alter existing institutions through lobbying or political activity (Battilana 2006; Battilana et al. 2009). Li et al. (2006) describe them as institutional entrepreneurs, who not only play the role of traditional entrepreneurs in the Schumpeterian sense but also help establish institutions in the process of their business activities (cf. Khanna and Rivkin 2001). A firm that lobbies to change rules and regulations that are relevant for its operations is engaged in institution-

altering entrepreneurial activity.[5] Hence, these entrepreneurs cause institutional change through activities that are directly aimed at policymakers who have the power to alter institutions (Lawrence and Suddaby 2006). The public choice school has also previously discussed this possibility. For example, Buchanan (1980, p. 14) notes the following:

> Faced with a prospect of differentially unfavorable tax treatment by government, a person or a group may (1) engage in lobbying effort; (2) engage directly in politics to secure access to decision-making power, and/or (3) make plans to shift into or out of the affected activity.

That being said, the existing empirical research focuses primarily on how large corporations attempt to shape government regulations in ways that are favorable to them (Hillman et al. 2004; Lawton et al. 2013; Oliver 1991). Since this option is not costless, it may effectively be unavailable to most new and small firms. They must therefore resort to less direct methods to shape government policy and institutions. We label this third category evasive entrepreneurship, which can also be considered a type of institutional entrepreneurship. Yet unlike institution-altering entrepreneurs, evasive entrepreneurs do not use political means to change institutions; they instead affect them through their market activities.

In the following subsection, we will discuss institution-abiding and institution-altering entrepreneurship; we will then proceed to discuss evasive entrepreneurship at greater length in Section 4, as it is a more novel and less investigated concept.

3.2 Institution-abiding and institution-altering entrepreneurship

Even in the case of institution-abiding entrepreneurship, its relationship with institutional evolution is more complex than is commonly thought. On the one hand, institution-abiding entrepreneurship can be self-perpetuating, since entrepreneurs (and non-entrepreneurs) who abide by institutions tend to strengthen these institutions (Becker and Murphy 2000). In Searle's (1995, p. 57) view, each use of an institution is in a sense a renewal of that institution.

[5] In a modern society, lobbying is probably the most obvious example of how business interests attempt to influence the political sphere and formal institutions (Furlong and Kerwin 2005). In line with our reasoning, Lambsdorff (2002) questions the validity of treating lobbying as equally wasteful as corruption.

This tendency is particularly important for informal institutions, such as codes of conduct and traditions, which are reinforced each time they are acknowledged and allowed to guide behavior, but the law has also been found to derive much of its value from the respect that it enjoys (Kasper and Streit 1998).

Notably, productive institution-abiding entrepreneurship legitimizes the institutions that foster it by creating demonstrable new wealth, products and jobs. At the same time, it creates a constituency of consumers, private-sector workers and self-employed individuals who support productive institutions. The American economic system, with its high degree of inequality and the opportunity to grow fabulously rich, has maintained its legitimacy largely because entrepreneurs, from Andrew Carnegie to Bill Gates, have created new value that has benefited the general public through their innovative business ventures. Of course, this tendency is strengthened by their philanthropy, i.e., the reconstitution of their wealth by investing in education, universities and research, which creates opportunities for others (Acs and Phillips 2002).[6]

On the other hand, truly innovative entrepreneurship, even when it abides by the current institutional structure, can create so much change that the very foundation of that structure is challenged. For example, the successful introduction of a revolutionary new technology, can lead to the reform and dissolution of extant institutions, particularly in traditional societies. How the institutions needed to support particular technologies have evolved varies considerably (cf. Hughes 1983; Nelson 1991). For example, the recent revolution in information and communications technology centered in the United States evolved in tandem with institutional changes pursued by politicians, such as the highly permissive framework regulating Internet activities in the 1990s (Thierer 2016, p. 13–15) and the regulations that ushered in the growth of the venture capital industry (Fenn et al. 1995; Gompers and Lerner 2004).

[6] Aghion et al. (2015) show that the increased income inequality in the United States is entirely driven by the increased income of the top 1 percent. Moreover, they show that this reflects a causal link between innovation and inequality: income from innovation contributes significantly to the increase in the share of income that goes to the top 1 percent. This link is also consistent with Henrekson and Sanandaji's (2014) finding that two-thirds of the billionaires in the U.S. have become wealthy by starting and expanding their own firms.

Baumol (1990) describes productive entrepreneurship solely in terms of private sector business activity, but his theory has bearing on institution-altering entrepreneurship as well. The incentive structure guides the allocation of political entrepreneurial effort, just as it guides the allocation of business entrepreneurship. Because all societies enjoy a mix of incentives, institution-altering entrepreneurship will be allocated to both productive and unproductive/ destructive institutional reform efforts. The same individual may shift between categories, just as a business entrepreneur may introduce a new product one year and then frivolously resort to legal action to bar competition the next, for example by suing a competing business.

That said, researchers often emphasize the unproductive and destructive activities of rent-seeking political entrepreneurs, stating, for example, that "[t]he essence of political entrepreneurship is to *destroy* wealth through negative-sum rent-seeking behavior" (DiLorenzo 1988, p. 66, italics in original). By contrast, Wagner (1966) argues that political entrepreneurs can substitute for the rent-seeking activities of powerful interest groups, and thereby mitigate the key difficulties associated with overcoming collective action problems in organizing interest groups in defense of the broad public interest (Olson 1965).

Furthermore, far from all institution-altering activities can be defined as rent seeking; policy innovations often improve welfare, especially in favorable institutional environments (Leyden and Link 2015). Favorable institutions do not arise out of nowhere and are often the result of the political or institutional entrepreneurship of gifted, pivotal individuals. The National Science Foundation, for example, was partly created through political entrepreneurship (Polsby 1984). Like the productive institution-abiding entrepreneur, the productive institution-altering entrepreneur deserves recognition as a fundamental agent in the economy.

Certainly, most institution-altering entrepreneurship is incremental in its effect, but occasionally it has sufficient clout to fundamentally alter the rules of the game. As an example, consider the Chinese entrepreneur Jing Shuping, who openly advocated and succeeded in persuading Chinese authorities to allow private entry into China's banking sector. Following this institutional change he

founded China Minsheng Banking Corp. in 1996, the first national joint-stock commercial bank in China. In the ten years that followed, about 20 more banks based on mixed-ownership were established (Li et al. 2006, p. 244–245).

Importantly, institution-altering entrepreneurs usually face a different type of feedback compared to institution-abiding entrepreneurship. Entrepreneurial activity in the market is governed by a strong feedback mechanism: Resources can usually be efficiently allocated using profits and losses transmitted by prices as a guide, making the entrepreneur better able to compare different technological alternatives and do things in a smarter way than before (Boettke 1998; Hoff 1981; Horwitz 1996, 1998).

The feedback mechanism is less powerful for political and institutional entrepreneurship (Glaeser 2005), and the political reward mechanism is rather noisy: Prime Minister Lee Kuan Yew of Singapore was rewarded for his social reforms with a long tenure, but Cuba's Fidel Castro and Zimbabwe's Robert Mugabe managed to stay in power despite far less impressive track records. Constructive institution-altering entrepreneurs are more often rewarded for productive activities and punished for destructive reforms when the broader institutional setting—particularly the general public's norms, values and beliefs—is propitious; better informed and more socially oriented voters are more likely to reward socially beneficial reforms (Caplan 2007; Strömberg 2004).

That being said, because of its stronger feedback mechanisms, institution-abiding entrepreneurship in a market setting is more likely than institution-altering entrepreneurship to be efficient and productive. Although both types of activities can be unproductive when the broader institutional setting is of low quality, its weaker feedback mechanisms increase the risk that institution-altering entrepreneurship is directed in an unproductive or even destructive way.

4 Evasive entrepreneurship

4.1 Definition

To our knowledge, the term evasive entrepreneurship was first introduced by Coyne and Leeson (2004),[7] but much older observations of the phenomenon can be found. In fact, already Adam Smith noted that individuals could circumvent institutional constraints that were unfavorable to commerce, stating that the "natural effort of every individual to better his own condition … [is] not only capable of carrying on the society to wealth and prosperity, but of surmounting a hundred impertinent obstructions with which the folly of human laws too often encumbers its operation" (Smith 1776, p. 316).

This observation actually conforms with the Schumpeterian view of the entrepreneur as a rule-breaker (Schumpeter 1934, 1942; Zhang and Arvey 2009) and with Kirzner's (1973) view of the entrepreneur as an arbitrageur. Why would Schumpeterian entrepreneurs merely adjust to prevailing institutions if they could earn profits by using their innovations to circumvent them? In addition, why would Kirznerian entrepreneurs act as arbitrageurs with regard to market prices but not with regard to institutions?

Drawing on these insights, we define evasive entrepreneurship as *a profit-driven business activity in the market that aims to circumvent the existing institutional framework by using innovations to exploit the contradictions in that framework* (Elert and Henrekson 2016). The intuition is straightforward. While politically determined institutions may prevent or raise the costs that entrepreneurs incur when exploiting business opportunities, these costs may trigger evasive behavior because entrepreneurs can earn rents if they use their innovations to circumvent institutions (Li et al. 2006; Boettke and Leeson 2009).

Although evasive entrepreneurship can take many forms depending on the context in which entrepreneurs operate, a number of common features can be identified. First, evasive entrepreneurs are entrepreneurial in the Schumpeterian sense, creating and commercializing something new and disruptive—a

[7] Coyne and Leeson (2004) do not give a formal definition of this notion, although they come close when they state the following (p. 237): "Evasive activities include the expenditure of resources and efforts in evading the legal system or in avoiding the unproductive activities of other agents."

technological and/or organizational innovation. Second, they use their innovations to behave in a Kirznerian fashion with respect to institutional contradictions; that is, they either engage in evasive behavior or enable others to engage in evasive behavior. Third, as a consequence of the second feature, these entrepreneurs disrupt both market and institutional equilibria.

As with the other types of entrepreneurship, evasive entrepreneurship may be productive or unproductive, thereby increasing or impairing social welfare, respectively. However, the most important effects of evasive entrepreneurship are likely to be dynamic, as it often functions as a remedy for the inertia of political and economic institutions. As we have mentioned, technological or economic change can make adaptability difficult or impossible if actors invariably abide by existing institutions (Etzioni 1987; Thierer 2016). In such circumstances, evasive entrepreneurship prevents existing institutions from stifling economic development.

Unlike institution-altering entrepreneurship, evasive entrepreneurship is not directly aimed at changing institutions through political means. Nevertheless, the same person can perform both functions, and evasive entrepreneurship is often followed by institution-altering entrepreneurship. Silvio Berlusconi is a salient example. He influenced Italian institutions, both in his role as a businessman and as a politician. As a businessman, he acted as an evasive entrepreneur when he established a system of local stations to broadcast the same TV programs simultaneously. This entrepreneurial activity in the market challenged the public monopoly on national broadcasting and eventually led to free competition in broadcasting. Berlusconi later acted as an institution-altering entrepreneur when he exploited his media platform to launch his political career and employed his political power to substantially alter Italian institutions and to further his business interests (Henrekson and Sanandaji 2011, p. 66).

In addition, the relevance of evasive entrepreneurship as a second-best solution when institutions stifle commercial activity is evident throughout economic history (Jones 2003; Acemoglu et al. 2005; Acemoglu and Robinson 2012). In section 2.2 we discussed the importance of ignoring and evading obsolete rules and regulations in Britain during the Industrial Revolution (Mokyr 2010), but an

abundance of other examples tell a similar story. For example, in a time when Elizabeth I refused to grant inventor William Lee patents for his stocking frame knitting machine due to her concern over the employment effects from such mechanization, the benefits of evading the formal institutional system were substantial. According to Jones (2003, p. 96), "[t]he lure of profit was sufficient in already commercialized economies to bite into the 'cake of custom' or to get around regulations," and (p. 100) "[w]hat happened in Britain was that growth itself stimulated individuals to find ways around customary and legislative barriers to free market activity. Regulations often ceased to be enforced by justices of the peace who had connections with local business."

For example, many town guilds were undermined when new merchants relocated their activities to the countryside, where the guilds could not restrict entry, control labor or dictate the quality and price of output. Much of the rural activity was organized by urban entrepreneurs, who split the production process into simple discrete stages and gradually developed a division of labor despite the dispersion of production sites. After the removal of a considerable proportion of industry from cities, the guilds were faced with a source of competition that weakened their capacity to conserve inefficient modes of production. According to Mokyr (1992, p. 76–77), this de-urbanization of industry is likely to have significantly affected the rate of technological progress.

In fact, a key part of Jones' (2003) argument about why Europe got rich before other parts of the world concerns its fragmented structure. This fragmentation meant that inventors, philosophers and others could evade institutional strictures by leaving an oppressive or inflexible polity in favor of a more lenient one.[8] While the Chinese emperor could decree that the entire navy be banned and destroyed in 1430, the Genovese navigator Christopher Columbus could woo several monarchs until he found a sponsor for his venture. The resulting Atlantic trade became an important arena for evasive entrepreneurship, which would, in turn, lead to institution-altering entrepreneurship. Acemoglu et al. (2005, p. 550) conclude the following:

[8] The benefits of cross-country institutional diversity were observed already by Hume (1777, p. 120): "divisions into small states are favourable to learning, by stopping the progress of authority as well as that of power."

> From 1500, and especially from 1600, onward, in countries with non-absolutist initial institutions and easy access to the Atlantic, the rise in Atlantic trade enriched and strengthened commercial interests outside the royal circle and enabled them to demand and obtain the institutional changes necessary for economic growth.

As another example of this phenomenon, consider Eggertsson's (2005, p. 124) account of how Iceland overcame an almost millennium-long stagnation:

> The slow transition to a new economic system that would be based on an independent modern fishing industry with a specialized labor force lasted almost a century. Economic forces gradually overcame the restrictive regulations in the labor market, which usually were abolished only after they had become obsolete. The economic actors that destroyed the status quo were not empowered by sophisticated social models of structural change. Rather, they found themselves in an environment where the pursuit of personal gain initiated the long-term economic growth.

Large-scale evasion is an important feature also of today's developing world. The works of de Soto (1989, 2000) particularly illustrate the informal sector's relevance in many developing countries, where firms operate without legal titles due to excessive regulation. Certainly, such firms are seldom entrepreneurial, but they are nevertheless important as a means of alleviating poverty. Likewise, Tooley (2013) has drawn attention to "private schools for the poor" and the fact that millions of parents in the slums of developing countries send their children to private schools—typically at a cost of no more than 10 percent of the minimum wage—with clearly superior results compared with the public alternatives. In many instances, these schools operate in a legal gray area; they are often not officially recognized, and, to the extent that they are, it is because they bribe their way through thousands of pages of regulations with which neither they nor the state schools comply.

Although valuable, such evasive activities are not necessarily entrepreneurial. If evasion is widespread and part of the routine operations of the economy, it is no more entrepreneurial than the activities of small, non-growing firms that abide by institutions (Henrekson and Sanandaji 2014). As such, evasive activities must contain a Schumpeterian element of organizational and/or technological innovation to be considered entrepreneurial.

The Schumpeterian innovations of evasive entrepreneurs can take many forms. Elert and Henrekson (2016) provide a number of examples, ranging from a secret agreement among Chinese farmers in the 1970s, through the challenges of the Swedish stock-market monopoly in the 1980s by means of exploiting a legal void for a certain type of financial instruments, to the activities of rides-for-hire startups in the modern sharing economy. Elert et al. (2016) discuss the specific case of The Pirate Bay (TPB), a file-sharing site. Recent research on the informal economy (cf. Webb et al. 2014) provides additional examples of activities that qualify as evasive entrepreneurship. For example, Lee and Hung (2014) offer a case study of the emergence of the informal Chinese Shan-Zhai mobile phone industry, which grew to threaten the market shares of state-licensed national champions.

Here, we will restrict ourselves to discussing the case of firms in the sharing economy (economic activities built around the sharing of human and physical assets) because it is an emerging sector whose importance for local and global economies is increasing rapidly; in 2014 it generated about US$15 billion in global revenue and is projected to grow to US$335 billion by 2025 (Koopman et al. 2015). Many firms in this sector are also inherently evasive. Consider, for example, a rides-for-hire application company such as Uber. Its business idea centers on enabling customers to summon rides for hire via smartphone applications by combining the latest information technology with knowledge of local demand in a Schumpeterian fashion. Crucially, the application enables users to circumvent regulations in the local taxi market. Such markets are typically heavily regulated with licensing systems that create high entry barriers. In New York City, the cost of a taxi medallion amounts to more than US$1 million, and prices are high in other cities as well. Therefore, it is hardly coincidental that Uber has not framed itself as a taxi company; CEO Travis Kalanick is fond of asserting that Uber is a technology company instead of a transportation company, and, as such, it should not be regulated as a taxi service (Scheiber 2014).

The peer-to-peer accommodation site Airbnb functions in a similar fashion, connecting residents who want to make extra money to out-of-towners looking for cheaper alternatives to traditional hotels. Hence, hosts on the site are

competing with hotels, but, because the two parties involved in Airbnb rentals are in most cases private individuals, they typically do not pay the taxes or comply with the zoning and safety regulations that apply to firms in the hotel industry. Jenelle Orsi, director of the Sustainable Economies Law Center, notes that the sharing economy exists in an "economy sandwich," a gray area located somewhere between less regulated private ownership and highly regulated public commerce (*Guardian* 2013). Firms in the sharing economy purposefully shape their innovations in a manner that creates ambiguity in terms of which institutions apply to them.

Is the role of such firms productive or unproductive? Returning to the notion of thinking in second-best terms (Rodrik 2008), we note that one of the main reasons for the emergence of sharing economy ventures is likely the need to reduce information and transaction costs in markets where these costs are high. The role of Uber and Lyft, for example, is to facilitate and coordinate rather than to produce. They add value by connecting and coordinating knowledge among their users and by mitigating costs associated with asymmetric information. This function is akin to the one that economists ascribe to the price mechanism in regular markets, which enables the coordination of local knowledge that is not known to anyone in its totality (Hayek 1945). Sharing economy platforms do so by lowering transaction costs for users by, for example, substantially shortening the time that it takes to search for and find a resource of interest by providing an easy-to-use digital matchmaking tool.

As such, they serve as private market solutions to potential market failures related to information asymmetries by enabling reputation- and trust-building mechanisms (Thierer et al. 2015). On the one hand, rating systems and user reviews are a valuable source of information for transacting parties, thereby lowering monitoring costs; on the other hand, electronic payment systems often decrease enforcement costs, i.e., ensuring that all parties hold up their end of the bargain. These phenomena illustrate that economic constraints are not a given; they can change, and such change does not have to be implemented from the top down. In fact, it may not require any government involvement at all (Ellickson 1991; Djankov et al. 2003).

4.2 Institutional conditions enabling evasive entrepreneurship

Conceptually, it is possible to distinguish four types of interplay between (formal and/or informal) institutions (Voigt 2017; Voigt and Kiwit 1998). The first three relationships offer little scope for evasive entrepreneurship, since they refer to instances when institutions are *neutral* (regulating separate areas of social interaction), *complementary* (in that non-compliance is sanctioned in the same way by both institutions), or *substitutive* (non-compliance is sanctioned in the same way by either the one or the other). In none of these instances is there any real ambiguity, and the institutional signal can be said to be both clear and strong. By contrast, it becomes weak and muddled when the institutional relationship is *conflicting*, and the two institutions prescribe opposed courses of action. In such instances, evasion becomes likely or even inevitable, since by observing one of the rules an entrepreneur might at the same time be more or less forced to break the other.

Such contradictory instances are not rare. While a formalist approach to the law assumes that the law is an intelligible entity that is consistent, predictable and logically coherent, research and theory points to indeterminacy in rules, broad or narrow, and to the scope within the law to legitimize contradictory decisions (McBarnet and Whelan 1991; Johnston 1991). Seo and Creed (2002, p. 225–226) describe such 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" (cf. DiMaggio and Powell 1991).

Institutional contradictions give rise to Kirznerian arbitrage opportunities for evasive entrepreneurship.[9] Institutions may prevent or raise the costs of exploiting business opportunities, and entrepreneurs may thus earn rents if they can use their innovations to sidestep the institutional framework (Li et al. 2006; Boettke and Leeson 2009). As such, the probability of evasive entrepreneurial

[9] Although Kirzner (1973) is mainly known for touting entrepreneurial alertness as a way of objectively identifying existing arbitrage opportunities, he (1982, 1985) also emphasizes that the entrepreneur can act to create imagined opportunities (cf. Korsgaard et al. 2016). As Kirzner (1985, p. 84–85) writes, alertness covers "the perception of existing arbitrage opportunities" and "the perception of intertemporal opportunities that call for creative and imaginative innovation." Both views of opportunities are applicable with respect to institutional contradictions.

action is likely to increase the greater the institutional contradiction. The ability to perceive, act on or even create such contradictions depends on the entrepreneur's ingenuity (cf. Alvarez 2005), and what ultimately matters is how entrepreneurs use their innovations to act on these contradictions.

The literature on contract incompleteness has long recognized that the cost of writing a contract to cover all contingencies approaches infinity (Hart and Moore 1988). The same reasoning applies to government regulations (Streeck and Thelen 2005): they are open to interpretation, and may not apply to exceptional cases. Theoretically, we may think of a regulation as a written document that prescribes a sanction to some behavior/activity. The level of consistency depends on the extent to which a given behavior/activity is unambiguously mapped onto a sanction, within or between regulations as well as within and across polities. If rules differ across cities, states or countries, an entrepreneur can exploit these institutional contradictions by locating areas in which rules are less binding or less enforced—provided that free movement exists. Such cross-border institutional arbitrage is becoming increasingly important as internationalization progresses, as is the tension that occurs when two cultural or institutional systems come into contact (Alvarez and Barney 2013). While such "institutional friction" is generally considered a challenge to the entrepreneur, it can also be an advantage.[10]

Another source of institutional contradictions concerns the government's monitoring and enforcement costs with respect to regulations. If the costs related to regulations are sufficiently high, the government may not have the capacity to monitor and enforce them. Undoubtedly, ambiguous formal rules can hinder enforcement because it becomes unclear how to mandate compliance (Edelman 1992). However, even if a set of laws or regulations are consistent *de jure*, contradictions may still exist in practice if a lack of resources in the judicial system makes monitoring and enforcement impracticable. For instance, although

[10] Consider, for example, the many countries and states in which the use of soft drugs, such as cannabis, has been legalized or decriminalized in recent years. Oftentimes, producing or distributing these drugs for market transactions is still illegal (and penalized). Hence, the legal (or non-sanctioned) use of soft drugs cannot occur without previous illegal activity. Furthermore, under federal law in the United States, the use, possession, sale, cultivation, and transportation of cannabis is illegal. However, the federal government has given states the option to decriminalize cannabis for recreational and medical use, an option that a number of states have used to varying degrees.

the accommodations platform Airbnb maintains that it relies on its users to follow local laws (Airbnb 2015; Levy and Goldman 2012; Lieber 2012), an institutional contradiction often arises because of the costs of monitoring and enforcing to ensure that such activities abide by the law. In New York City, for example, fines levied on individual Airbnb hosts for noncompliance with regulations formally amount to thousands of dollars, but these laws are rarely enforced (Jaffe 2012).

Another condition enabling evasive entrepreneurship is the existence of an institutional void (Leff 1976), that is, a complete absence of regulation, and a lack of judicial precedence, making an activity's legality (or lack thereof) unclear. This is common in the emerging high-tech industry (Thierer 2016). In the extreme, an entrepreneur may enter an unregulated market niche by introducing a previously unknown innovation for which no regulation exists. In these situations, as we have seen, a fine line separates the activities that are downright illegal and the activities that are simply not regulated because they are new and unknown. One salient example is the emergence of India's IT sector, which was initially ignored by the typically quite interventionist government because the government did not understand the economic potential of the IT sector (Shah and Sane 2008, p. 318).

According to Downes (2009), emerging technology changes at the speed of Moore's law, meaning that "[l]aw will necessarily lag behind innovation since it cannot be adapted at its speed" (Ranchordás 2015, p. 28). This notion of a lag—the inability of the judicial machinery to keep up with dynamic business practices—may nevertheless confuse cause and effect. It may be less a matter of the law lagging behind entrepreneurship than of entrepreneurship being deliberately developed in a direction that positions it outside the reach of the law.

As such, existing regulations may be a major motivation for changes in business practices, as entrepreneurs adapt to the law not necessarily by complying with its aims but by changing their practices or even breaking completely new ground to stay outside the ambit of the law. As McBarnet (1988, p. 118) explains,

> [I]n order to create a legal loophole, a good deal of legal brainpower is being put into *finding* a variant—however outlandish—which has *not* been foreseen.

Thus, although the occupation of unregulated space may occur because the innovation is an unanticipated novelty for which no legislation exists, more often it occurs because an entrepreneur deliberately decides to introduce the innovation in a way that avoids regulated areas, suggesting that a thin line separates the perceived and created opportunities of evasive entrepreneurs (cf. Alvarez 2005).

In other instances, the institutional void simply means that outright criminal activity can flourish. In such situations, violence becomes part of the game. Zaitch (2002, p. 49) notes the following with respect to successful drug entrepreneurs in Colombia:

> Except for the readiness to use personal violence and the ability to shield oneself from it, other social or individual constrictions and qualities do not seem to differ that much from those encountered in successful legal businessmen: sex, age, personal or family contacts, entrepreneurial skills of all sorts, personal attributes such as creativity, alertness or charisma, skills to both exercise power and deal with existing power pressures, and luck.

In the extreme case, a lack of enforcement or an incomplete state monopoly of violence can be an entrepreneurial opportunity in and of itself. While organized crime is often mentioned as a prototypical example of violent extortion and appropriation of rents created by others, some scholars have argued that, under unstable institutional circumstances, or poor enforcement of property rights, organized crime can actually provide a substitute (Bandiera 2003), "an entrepreneurial response to inefficiencies in the property rights and enforcement framework supplied by the state" (Milhaupt and West 2000, p. 43). In these Hobbesian situations, mafia activity might actually make the environment at least somewhat more predictable for the productive entrepreneur.

Of course, evasive entrepreneurs can also bet that regulators will *choose* not to enforce the relevant laws. In the quotation in the introduction of this essay, Kevin Laws asserts that almost all startups try to be successful quickly to have "enough money to work with the regulators." His main message is that it is

easier to ask forgiveness than get permission. Hence, even when a law applies universally, its enforcement may be selective if the government finds it beneficial to spare or even subsidize firms or sectors that are regarded as key to economic development or that have acquired good political connections (Pistor 2002, p. 114). Uber is increasingly receiving such treatment, no doubt as a result of its market success (Meyer 2016).

In an overview of the institutional entrepreneurship literature, Lawrence and Suddaby (2006, p. 235) note that "most of the institutional work aimed at disrupting institutions that we found involved work in which state and non-state actors worked through state apparatus to disconnect rewards and sanctions from some set of practices, technologies or rules." Our account above suggests that evasive entrepreneurs can often achieve similar goals through their actions in the market.

To summarize, institutional contradictions and voids are features of the institutional framework that enable evasive entrepreneurship, and the degree and number of institutional contradictions and/or voids increase the probability of evasive entrepreneurship by increasing the degree and number of profit opportunities that evasive entrepreneurs can exploit. In the following section, we will explore the economic and institutional consequences of such behavior.

5. The effects of evasive entrepreneurship

5.1 The direct effects

As already noted, many scholars regard opportunism as one of the primary obstacles to economic development (Williamson 1979; Rose 2012). Almost by definition, it is assumed to hurt society. Our account of evasive entrepreneurship notes the existence of an important type of opportunism with potentially beneficial effects. Depending on the circumstances, evasive entrepreneurship can be productive or unproductive and thereby either increase or decrease social welfare.[11] To determine this potential, it becomes necessary to first consider the

[11] See Foss et al. (2007) for a related approach. They discuss entrepreneurial employees, or proxy entrepreneurs, and ask whether the firm's organizational structure can be designed to encourage proxy entrepreneurship if it increases firm value and to discourage it if it destroys value.

economic effects of the law or institution being evaded, as well as the motives or intentions behind them.

Was a particular regulation enacted to enhance social welfare, and can it still be said to do so despite changing economic circumstances? If so, evasive entrepreneurship may reduce welfare. Was the regulation enacted for other reasons, such as serving the regulators' self-interests? Or has the regulation become entrenched and non-adaptive over time, perhaps because its beneficiaries thwart change to preserve their rents, irrespective of its efficiency (Etzioni 1985)? In such cases, evasive entrepreneurship can become a welfare-enhancing, second-best substitute for inefficient institutions, enabling the reallocation of resources to the pursuit of profitable business activities that are productive and that would not have occurred without the evasion. The idea of the second-best alternative thus looms large over this issue. *Table 1* provides some examples of institutions and the potential economic effects when evasive entrepreneurship is used to circumvent them.

Table 1 Examples of evasive entrepreneurship vis-à-vis certain key institutions.

Economic institution	Example of evasive activity	Entrepreneurs	Productive/ Unproductive
Tax code	Tax avoidance, the legal use of the tax regime to one's own advantage, e.g., by purchasing municipal bonds in the U.S.	Tax consultants	P/U
	Tax evasion, illegal evasion of taxes, e.g., by deliberately misrepresenting the true state of affairs to tax authorities.	Business firms	P/U
Employment protection legislation	Hiring labor from staffing service companies to circumvent employment regulations.	Staffing service companies	P
Competition policy	Establishing peer-to-peer networks, e.g., in housing and transportation, to avoid hotel and taxi market regulations.	Peer-to-peer firms	P
	Secret agreements to circumvent poor economic policies, e.g., by Chinese farmers.	Chinese farmers	P
Capital market regulation	Creating new financial instruments not covered by the existing legal code to manage risk.	Financial innovators	P
	Credit default swaps to help firms avoid capital requirements by technically removing risk from the balance sheet.		U
Trade policy	Cross-border smuggling.	Smugglers	P/U
Enforcement of contracts	Selling contractual arrangements that change the impact of a certain institution.		P/U
	Bribing a government official to obtain a contract.		U
Law and order/ property rights	Protection enhancing the workings of beneficial—but poorly implemented—institutions.	Mafia, security service firms	P
	Extortion, theft.	Mafia, warlords	U
	An informal sector in which firms operate without legal titles due to excessive regulation.	The poor in developing countries	P/U
	Self-governing in the commons, dividing up commons into private ownership.	Property rights entrepreneurs	P

For a longer discussion of the welfare effects of different institutions, we refer the reader to Elert and Henrekson (2016). Here, we will simply reiterate the status quo serving nature of many regulations; a significant body of literature suggests that regulatory policy often reflects powerful economic interests rather than public needs. Therefore, regulatory agencies may advance the commercial interests of firms that dominate the industry that they are commissioned to regulate rather than the public interest (Stigler 1971). Such preferential treatment may result in barriers to entry and innovation, high prices, reduced product quality and fewer choices (Koopman et al. 2015).

For example, the District of Columbia Taxicab Commission has been criticized for being beholden to incumbent taxi companies. Notably, in 2012, the Commission proposed the Uber Amendment, which would force sedan services to charge substantially higher prices, explicitly with the purpose of preventing the rides-for-hire firm Uber from competing with taxi companies (Eldon 2012). More generally, excessive rules and procedures are likely to discourage potential entrepreneurs (Gnyawali and Fogel 1994; Begley et al. 2005) and hamper the process of creative destruction (Caballero and Hammour 2000). Thus, there is a considerable risk that such policies are welfare-reducing. Here, the institutional contradictions often arise because regulations are industry-specific. The evasive strategy of firms in the sharing economy—framing an innovation to avoid being classified as belonging to a particular industry—may contribute positively to production and welfare.

Of course, regulations can also be well motivated, for example when they relate to health and safety, and evading such rules can have grave consequences (Wicks 2001). For instance, green criminology observes that corporate environmental crimes are widespread and "often eclipse the scope and reach of the criminal law" (Sollund 2012, p. 3). This is often because companies arm themselves with knowledge of a weak environmental regulatory regime (both nationally and internationally) and use it to subvert environmental regulation and its enforcement (Nurse 2015). The result may be persistent law-breaking with respect to pollution, toxic waste disposal and the misuse of environmental resources (Lynch and Stretesky 2014; Pearce and Tombs 1998).

As the discussion above suggests, when institutions and regulations are obsolete or exist for reasons other than efficiency, evasive entrepreneurship can increase productivity and welfare. By contrast, if evasive entrepreneurship enables lobbying, rent seeking, tax avoidance, risk obfuscation, outright theft, litigation, or more sophisticated economic and environmental crimes, it is likely to have a negative effect on productivity and welfare. Nevertheless, the value of an evasive innovation can be difficult to assess in advance, which is arguably the case with respect to Uber and other rides-for-hire firms.[12] While regulations

[12] Their success has undoubtedly been disruptive for the taxi industry in many cities in which the companies operate. Incumbent taxi drivers sometimes respond fiercely, which is not

pertaining to the taxi market may be justified on welfare and safety grounds, the evasion of some of the most stifling entry regulations may serve to increase consumer choice and welfare.

The welfare effects of specific cases of evasive entrepreneurship can be more or less easy to evaluate, but the basic philosophy for doing so is easily understood. However, welfare analysis is not the only standard for judging the effects of evasive entrepreneurship. Other moral and ethical considerations must also be reckoned with when evasive actions are judged (Warren 2003). Brenkert (2009, p. 462) notes that a society may be headed down a path toward legal and moral dissolution if people believe that their own actions are exceptions to laws and rules, but he also argues that a society in which the rules are so fixed and rigidly followed that no change occurs may face similar dangers.

In addition, the consequences of evasive entrepreneurship do not have to end where our analysis ends, as we will discuss in the next section, which concerns itself more explicitly with the role of evasive entrepreneurship in institutional change.

5.2 Institutional change

As the discussion above suggests, the effect of evasive entrepreneurship on institutions is generally indirect; it alters the *de facto* effect of institutions. However, its effect on institutions does not necessarily end there. As mentioned, each use of an institution is in a sense a renewal of that institution (Searle 1995, p. 57). From this perspective, evasive entrepreneurship and other deviations can imply that the institution in question gradually loses its significance to the point that it becomes meaningless to speak of it as a constraint on people's behavior (Ostrom 1990). This view is arguably in line with Mokyr's (2010) account of the transformation of British formal institutions, recounted in section 2.

Concerning the relationship between custom and law, researchers have claimed that customary "breach is the mother of law as necessity is the mother of

surprising given their investment in taxi licenses. However, large companies that face disruption from sharing firms have embraced the business model and acquired shares in sharing rivals (*The Economist* 2013). Furthermore, existing taxi companies have responded through imitation by, for instance, establishing their own smartphone dispatch services, which demonstrates how evasive entrepreneurship has considerable disruptive effects both on the market equilibrium and on the institutional equilibrium.

invention" (Seagle 1941, p. 35; quoted in Hodgson 2016, p. 92). Deviations from an institution can thus provide the impetus for new lawmaking, and also have an important effect on norms and perceptions of what is acceptable, even honorable (Thierer 2016; McCloskey 2016).

In fact, evasive entrepreneurship may provide guidance in situations when the gains from institutional reform are uncertain (Fernandez and Rodrik 1991; Alesina and Drazen 1991). The actions of evasive entrepreneurs serve as an educational source under such uncertainty, as they may demonstrate, on a smaller scale, the economic consequences that might result from institutional change. According to Coase (1988, p. 30), "without some knowledge of what would be achieved with alternative institutional arrangements, it is impossible to choose sensibly among them."

The cost of foregone innovations due to regulatory obstacles is often high, but always shrouded in uncertainty because it concerns something that, in Frédéric Bastiat's (2007/1850) words, is "not seen." Calculating the commercial potential of innovations in light of the existing uncertainty has never been an easy task (Verspagen 2007, p. 487),[13] but evasive entrepreneurship gives an indication of how high this opportunity cost actually is. In a given institutional setting, we see only those market transactions and those entrepreneurial activities that the institutional setting allows; innovations that do not conform to the existing economic order are suppressed, unless individuals ignore or circumvent the rules and introduce them anyway.

If this happens, the innovation in question becomes "seen"; the deviator provides valuable information about the opportunity cost of the current institutional structure by showing what could be accomplished under a structure that is more permissive vis-à-vis this type of innovations. Hence, widespread evasive activities and/or large rents accruing to evasive entrepreneurs can be regarded as diagnostic indications that institutional reform is needed. As such, evasive

[13] Thierer (2016, p. 13) provides a striking example: until the early 1990s, commercial use of the Internet was *de facto* prohibited: "[T]hose who imposed restrictions on commercial use of the Internet probably were simply unable to imagine the enormous benefits that would be generated by allowing it to become an open platform for social and commercial innovation. Regardless, the opportunity costs of those prohibitions were enormous. […] Only when this mistake was corrected in the early 1990s through commercial opening of the net did the true opportunity costs of the original restrictions become evident."

entrepreneurship may be useful as a source of ideas for public policies that aim to foster entrepreneurial compliance and economic prosperity by creating an economic environment that is conducive to value-enhancing activities in the face of uncertainty (Link and Link 2009; Leyden and Link 2015).

If it becomes sufficiently disruptive, evasive entrepreneurship may induce reforms of existing institutions. Precisely because of its evasive nature, evasive entrepreneurship can be an important source of market feedback for the institutions that govern it. This feedback can be transmitted in different ways and for different reasons. As we pointed out above, one reason may be that evasive entrepreneurship is sufficiently successful to draw the attention of politicians. Another cause of feedback can be a conscious effort on the part of the evasive entrepreneur, who begins to act like an institution-altering entrepreneur in order to achieve legitimacy and legal acknowledgement from the state (cf. Lee and Hung 2014).

A third, and somewhat paradoxical, reason for change is that discontented competitors lobby for protection against evasive entrepreneurs, arguing, for example, that they still face various regulatory burdens that new entrants are evading—an understandable "level playing field" problem that often arises in sectors undergoing rapid technological change (Thierer 2016). However, as Bauer (1995, p. 28) notes, resistance to new technologies can set the legal system in motion, but a legal process initiated on those grounds is subject to different constraints.. Those who object to a new innovation may initiate the legal battle, but they cannot control its outcome any more than the innovators can. Therefore, the type of regulation that results may just as well make matters worse for the incumbents.

Many of these institutional struggles are intense and ongoing and illustrate that institutional change in response to evasive entrepreneurship depends on many factors, such as the strength of incumbent competitors, the existing legal code, and the tenacity of lobby groups, political activists, and politicians. The outcome of the change process is difficult to foresee, as it may entail an intense political tug-of-war over the new institutional status-quo (Seo and Creed 2002). The long-term welfare effects that result when policymakers respond to evasive

entrepreneurship depend on the direction and magnitude of the institutional change, but the gains may be substantial (Elert and Henrekson 2016).

Adaptive policymaking and continual adjustments of relevant laws and regulations are thus essential for policymakers who aim to enact sustainable and efficacious economic policies with respect to innovation (Cherry 2008). As such, regulators and policymakers should act as adaptive agents who adjust regulations and policies to reflect the evolution of markets and technologies (Whitt 2009). By experimenting, they can draw valuable lessons from their legislative acts and later change these laws accordingly (Listokin 2008). Such learning is particularly important with respect to evasive entrepreneurship. In the following section, we will develop a conceptual model to illustrate the interplay between entrepreneurs and regulators.

5.3 A conceptual model

In this section we present a slight reformulation of a conceptual model developed by Elert et al. (2016), who argue that evasive entrepreneurship can be seen as a vehicle of regulatory and legislative change; in and of itself, it is a means to test and provoke, as well as to indirectly bring about adaptations within and beyond existing institutional frameworks. Regulators can respond by trying to adapt the institution either to accommodate or to eliminate the evasion.[14] However, the market and institutional outcome of an evasion is highly interdependent, and neither entrepreneur nor regulator can fully control it. The evasion may end up as a celebrated innovation, or as a criminal offense.

Interdependent outcomes in decision-making processes are hallmark characteristics of game-theoretic models. Each player's payoff depends on both their own choices and those of the other players. *Figure* 2 models the interplay between an entrepreneur contemplating an evasive strategy with respect to an institution and a regulator controlling said institution. The players' decisions are framed by rules and previous moves. Understanding evasive entrepreneurship as part of an ongoing game puts the spotlight on the manner in which regulators respond to evasion, and possibly on how they could become better at it. It is a

[14] By regulators, we mean the decision makers who shape, implement and monitor the workings of formal institutions. Their activity usually takes place in the legislative, judicial or bureaucratic branches of the (local, regional, national or supranational) governmental system.

question not only about adapting regulatory frameworks to shifting circumstances, but also about promoting entrepreneurship that drives development in markets (Leyden and Link 2015).

Figure 2 The interaction between entrepreneur and regulator.

		Regulator's decision		
Entrepreneur's decision		1) No response	2) Harsh response	3) Accommodating response
	A) Abide			
	B) Alter			
	C) Evade			

The entrepreneur's decision on how to act is contingent on the regulatory status quo. When deciding how to act, the entrepreneur's options are listed in the three rows: A) to act as most market actors do and abide by current regulations, which would be the case if the entrepreneurial activities clearly fall within the scope of the law; B) to act as an institution-altering entrepreneur and use lobbying or similar means to try to trigger an adaptation of regulations, which would typically be the case if current regulations make his or her activities illegal or too expensive; or C) to act as an evasive entrepreneur and evade regulations, which usually occurs for the same reason as B), but may be a more viable option if, for example, the entrepreneur lacks the resources that lobbying requires.

Upon observing an entrepreneurial act, the regulator has the options listed in the three columns: 1) First, to remain inactive, i.e., leave the affected regulation unchanged, which should be the obvious response when an entrepreneurial act abides by existing regulations. In the case of an evasion, this response usually implies that the regulator does not try to enforce the evaded regulation, whereas in the case of an entrepreneurial attempt to alter the regulation it can be considered a refusal to do so. 2) The second option is a harsh response, which can take the form of a stricter enforcement of current laws, or if necessary, the passing of new legislation to make something illegal. This response usually occurs with respect to evasive activities, but can also take place with respect to institution-abiding or institution-altering activities upon which the regulator looks unfavorably. 3) The third option is an accommodating response, which can

either mean that a decision is made to enforce existing regulations less harshly, or that a previously forbidden activity is legalized, thereby promoting competition and market expansion. This usually takes place as a compliant response to institution-altering or evasive activities on the part of the entrepreneur, but can occasionally occur to further encourage and develop institution-abiding entrepreneurship, as discussed in section 3.2.

An entrepreneur would probably be happy to evade regulations if he or she knows that the regulator will remain inactive (C1: evade/no response) or will adapt to accommodate the evasion (C3: evade/accommodating response). However, if the regulator attempts to enforce current laws, the entrepreneur may have to try either to alter regulation (B2: alter/harsh response) or to abide by the current state of regulation (A2: abide/harsh response).

With respect to evasive entrepreneurs, box C3 (evade/accommodating response) can be considered an equilibrium that promotes change, since neither the entrepreneur nor the regulator would have wished to change their strategy had they known what the other player would do. Box B1 (evade/no response) is a possible equilibrium for the entrepreneur, who essentially has monopoly in his or her 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 box A2 (abide/harsh response) is an equilibrium that blocks institutional change.

Certainly, both players can change their strategies: being evasive is not necessarily a constant state over time. Rather, an entrepreneur may start out by attempting to alter an institutional structure, but choose to become evasive when the regulator remains inactive or resists by enforcing current regulations. Conversely, an entrepreneur may start out as evasive, but switch to an altering strategy if the regulator enforces current regulations in a way that makes it necessary to discontinue the evasive activity. Regulators can also proactively reform either by enforcing current regulation or by accommodating new types of market solutions, thereby encouraging entrepreneurs to explore the new opportunities or to adapt to a stricter regulation.

This model is first applied to the case of The Pirate Bay (TPB) analyzed by Elert et al. (2016). We refer the reader to that paper for a more detailed discussion, but, suffice it to say, TPB is arguably one of the most influential and well-known digital Swedish innovations in recent times. 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 ruled that its activities were unlawful. Ultimately, its founders were imprisoned and received million-dollar fines.

When modelled in the game, TPB's interaction with the Swedish government followed a straight path to conflict from C1 (evade/no response) to C2 (evade/harsh response). TPB adopted an evading strategy, and its representatives also signaled that they had no interest in shifting toward an altering or abiding strategy. For instance, they publicly discredited and ridiculed warnings and seize-and-desist orders, thereby effectively burning their bridges to alternative strategies. While these actions may have helped develop their status as political activists, they also tied themselves to the mast and made TPB an antagonist among legislators and policymakers in the institutional framework.

Regulators were initially passive, but they soon moved toward an enforcing strategy. At least partially, they were pushed to make this move by incumbents and by other governments that were lobbying for it. Arguably, because of TPB's openly defiant approach, regulators were further prevented from seeking a constructive interaction like B3 (alter/accommodating response) because doing so would not only alienate actors who were lobbying for harsher enforcement but also involve "losing" or giving in to TPB. In some sense, this strategy served the TPB founders' interests—for example, after a 2006 raid in which two founders were arrested, the number of TPB users doubled (Norton 2006), propelling the newly founded Pirate Party to global media prominence (Rydell and Sundberg 2009, p. 136). Nevertheless, if they compromised, regulators risked ending up with enemies on both sides. Furthermore, the enforcement strategy was to obtain a legal interpretation of the evasive activity that rendered it illegal rather than to enact new legislation. By prosecuting, regulators essentially closed the door on the accommodating approach, making TPB's move towards an altering strategy pointless.

Consequently, the players ended up with mutual defection and suboptimal payoffs; a potentially productive but evasive venture was criminalized, permanently excluding it (and possibly other similar ventures) from the legal economy, and the entrepreneurs were both fined and imprisoned. Cooperation, to the extent possible, would most likely have required compromises from both parties. The TPB founders could have lobbied specifically for new legislation to fully or partially accommodate the evasion, while the regulators could have mediated between the incumbents and the evader by providing a regulatory framework that changed their incentives to adapt, interact and cooperate with one other.[15]

As a second application, we apply the model to rides-for-hire firm Uber. Now it may be said that we are dealing with more than one game. Like TPB, Uber is global in reach, but, unlike TPB, it is local in its use. That is, the firm may encounter different regulatory responses in different cities and thereby obtain very different outcomes through its evasive activities. The company appears to have followed a strategy of maximizing the number of establishments, and users from all over the world have been able to use its services. Uber can thus 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, the company is now mixing its evasion with altering strategies and increased lobbying to get regulators to accommodate its evasion.

The learning aspect adds an important dimension to the evaders' strategy. As in a chess game, the outcome may not be known from the start, but each player can learn to relate to a set of standard openings. Furthermore, these companies can leverage success from one place across the entire global market, giving them an extremely valuable data source, business knowledge (largely tacit and thus difficult to imitate), and arguments for their cause.

[15] Among the suggested reforms for the copyright system in a liberalizing direction is the idea of freeing up creative works sooner by requiring that copyright holders pay a fee at frequent intervals to retain their rights (Lessig 2008). Another suggestion involves imposing 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 television licensing fees in many EU countries. Others suggest imposing levies on broadband connections and/or taxes on internet service providers and then distributing the proceeds to rights holders (Burke 2010, p. 89). Time will tell whether such changes will materialize.

Feedback to regulators and politicians often seems to come from incumbent firms in traditional industries, who find their market positions threatened. Regulatory responses have varied. Uber has been banned in many locations, and it is involved in legislative conflicts in several other locations (Nguyen 2013; BBC 2014). Sometimes, extreme responses have backfired in a manner reminiscent of the TPB case. For example, following a major strike by French taxi drivers in 2015, two Uber executives were arrested in France, but downloads of the Uber mobile application hit an all-time high following this incident (Primack 2015).

In September 2013, California became the first U.S. state to establish a set of regulations to govern the rides-for-hire companies, including licensing, driver-training programs, and mandatory insurance policies (CPUC 2013). These regulations increase the cost for rides-for-hire drivers, but they are less rigid than those that apply to regular taxi drivers and are unlikely to entirely cripple the new technologies or companies. Other local and state governments have imitated this approach. In addition, as previously mentioned, Uber is increasingly being embraced by (local) governments; in fact, the firm has recently begun receiving subsidies in some places where it has established itself (Meyer 2016).

This development is reminiscent of the idea of a technological cycle (Mokyr 1992, p. 262). In the initial stage, a new technology breaks through and supplants the previous technology. In the second stage of maturity, the new technology is in control, but creative destruction by new technologies take an increasing toll, which gives those who are currently in control an incentive to protect themselves. In the last stage, the old technology develops social or political mechanisms with which to protect itself from innovation, e.g., to prevent existing firms from adopting new ideas, by preventing would-be innovators from entering an ossified industry and by stopping the inflow of new ideas from abroad. If this protective measure is successful, Mokyr argues, technological creativity will come to an end. If it fails, the cycle begins anew.

However, TPB demonstrates that all occurrences of evasive entrepreneurship do not attain the same legitimacy. Its founders were sentenced to prison and fined millions of dollars. The technology never moved beyond the first stage in

Mokyr's cycle, not because of its inferiority relative to the predominant technology but because of the political economy of the game between the evader and the regulator.

At one end of the spectrum of possible reform outcomes is the failure to transcend existing institutional arrangements in a manner that reduces institutional contradictions (Edwards 1979; Seo and Creed 2002). Such a failure is likely to make the institutional system increasingly vulnerable (Uzzi 1997). At the other end of the spectrum, we find reforms and other arrangements that dissolve the institutional contradictions or fill the institutional void that created the evasive opportunity by legally recognizing and codifying the entrepreneurial activity. The outcome usually ends up somewhere between these extremes. Either way, these changes at the higher institutional levels will affect the conditions for actors at the market level, including the evasive entrepreneurs who created the impetus for change in the first place.

Furthermore, past conflicts related to evasive entrepreneurial activities can inform policymakers, irrespective of the final outcome, because they may be central to interpreting how today's evasive entrepreneurs can challenge and affect regulatory frameworks and to highlighting how regulators should (and should not) respond to such challenges. This holds especially true for digital, data-driven services that cut across industries and/or national borders because they are especially prone to encounter institutional contradictions and difficulties in complying with several different or fragmented sets of regulations.

6. Concluding remarks

Institutions shape entrepreneurship, but the reverse is also true. On the one hand, entrepreneurs choose how to employ their entrepreneurial talent depending on the incentive structure, which is determined by relevant rules and regulations. In this way, as highlighted by Baumol (1990), institutions fundamentally determine the distribution of entrepreneurial talent across productive, unproductive and destructive activities. On the other hand, entrepreneurs respond actively to the environment in which they operate, which tends to affect institutions.

6.1 Implications for policy

The exploration of the effects of evasive entrepreneurship has important implications for policymaking that aims to promote economic development. Our research suggests that institution building must be informed by the rulebreaking of evasive entrepreneurs, who create alternative arrangements in response to rules that restrict the scope for profitable venturing. Nevertheless, our study does not disagree with the argument in the institutional economics literature that improved regulatory efficiency stimulates economic development. Instead, it identifies a mechanism for circumventing malfunctioning institutions and mitigating their negative consequences.

This question is perhaps more relevant than ever, in today's "permission-based regulatory culture of innovation and economic renewal" (Erixon and Weigel 2016, p. 18). It seems doubtful that such a culture can cope in a socially beneficial manner with high-paced advances in areas such as the sharing economy, commercial drones, cryptocurrencies, 3-D printing, and robotics, to name just a few, making it reasonable to assume that deviations from the institutional status quo are likely to increase in scope and significance in the foreseeable future. These deviations can be important as sources of growth in their own right, and, more importantly, as diagnostic indications of the need for institutional change—provided that such indications are heeded.

Economic and social progress requires openness to constant change and a willingness to embrace new ideas, norms, business models and public policies (Mokyr 1992). However, their status quo serving nature mean that institutions tend to lag behind technology-driven innovation and entrepreneurship, and this problem is likely to become even more serious in the future. If this legal gap continues to grow, the prevalence of institutional contradictions is likely to increase, as will the potential—or even the need—for challenging existing, obsolescent institutions. Evasive entrepreneurship may increasingly become a necessary strategy for entrepreneurs who seek to test new ideas in highly dynamic markets and cannot afford to wait for regulatory green light.

When regulatory frameworks are updated too slowly, it becomes increasingly complex to interpret whether a specific innovation or venture is legal—what laws apply and how they should be interpreted. Such increased institutional

uncertainty will particularly affect small and new firms, which are seldom able to afford the cost, or cope with the suspense and delay caused by these legal processes.

Regulation imposes profound tradeoffs and opportunity costs. Taking them into consideration is not easy, since no one can foresee or plan for every conceivable outcome. Innovation causes rapid changes that do not jibe well with rigid top-down rules, especially not in the inherently unpredictable and fast-moving information-technology markets (Manne and Wright 2011). Furthermore, as described in the previous section, a strategic component makes the regulatory exercise even more difficult: entrepreneurs can explicitly tailor their innovations to circumvent extant regulation. This increased risk for incorrectly targeted regulation can have costly consequences (Frischmann 2000); even laws that were originally designed to promote innovation often produce the opposite result (Carrier 2013).

However, non-action on the part of regulators is seldom an option. While the problems of regulatory capture are all too real, incumbents in sectors undergoing rapid technological change may also have quite legitimate "level playing field" concerns, since many new technological innovations are, if not overtly evasive, so at least occupying a legal gray area. In such instances, it is often easier and less costly to put everyone on a roughly equal footing by deregulating the old rather than excessively regulating the new (Koopman et al. 2015).

The overarching and highly permissive 1990s framework regulating Internet activities stands out as a prime manifestation of such a regulatory mentality of "permissionless innovation" (Thierer 2016, p. 13–15). In view of the ubiquity of evasive entrepreneurship, and the fact that many firms simply do not ask for permission before launching their services, such a permissive framework appears as one of few viable options if innovation and growth is not to be strangled.

A case in point is 3-D printing of prosthetics; in a traditional regulatory sense, they are medical devices, but few people are asking the FDA for permission to create new limbs and other life-enriching innovations of this type. The FDA has yet to act on the matter, but whether the agency or other regulators can stop such

innovation is unclear, given its highly decentralized and even non-commercial nature (Thierer 2016, p. 119). Furthermore, the intellectual property issues that could potentially arise from products being so easily replicated could make conflicts over online piracy seem like a soft breeze in comparison. Given the complexities involved, simple legal principles akin to the ones established for the Internet are likely preferable to a detail-oriented case-by-case approach (cf. Braithwaite 2002, p. 47). One possibility is to strive for the sort of "simple rules for a complex world" advocated by Epstein (2009).

Such an approach will not be foolproof. The emergence of new technologies can and will be cause for legitimate safety concerns, notably with respect to security and privacy. Nevertheless, such concerns imply a demand for solutions, and, in such circumstances, non-regulatory approaches often prove more beneficial—or at least more viable. Informal, bottom-up efforts to coordinate Internet security responses offer several advantages over top-down government solutions: they are cheaper and more flexible while also being less adversarial (Dourado 2012).

In many instances, such bottom-up regulation is already a *fait accompli* (PricewaterhouseCoopers 2015; Thierer et al. 2015). Mechanisms of this kind are an integral part of most of today's social web applications, and, although no such system is completely safe or manipulation-resistant, community administrators constantly monitor such systems and organically develop their designs (Dellarocas 2011). Success can never be guaranteed, but, given what we know about the lag of the law, it is even more unlikely that legal measures can be taken promptly enough to tackle manipulations.

The institutional response to entrepreneurship affects its supply, and how potential entrepreneurs choose to channel their efforts. Slow institutional adaptation may not only hold back or slow down technology-driven entrepreneurship but may also reduce the number of entrepreneurs who are willing to devote the necessary effort to overcome these thresholds. High-quality evidence shows that policy uncertainty reduces corporate investment 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 may also hinder entrepreneurship, although more research is needed to establish this link.

If regulators and policymakers fail to develop appropriate response strategies, large parts of the potential benefits of evasive entrepreneurship are unlikely to be reaped. If, by contrast, they are successful in developing such strategies, the greater institutional adaptability can offset deficiencies in the existing institutional framework, and force incumbents to adapt to a changing market.

6.2 Implications for future research

This paper contributes to existing theory by conducting an in-depth analysis of entrepreneurial responses to institutions, with a special emphasis on evasive entrepreneurship. This previously underappreciated and understudied type of entrepreneurship often serves as a second-best substitute for inefficient institutions and may prevent economic development from being stifled by existing institutions in times of rapid economic change. Furthermore, evasive entrepreneurship can provide the impetus for institutional change with potentially important welfare consequences.

We rely mainly on illustrative examples to illuminate our theoretical reasoning. Admittedly, this can be considered a weakness in terms of explanatory value, as we risk overstating the importance of evasive entrepreneurship by focusing on "winners," that is, on evasive entrepreneurs who are easy to identify and whose contributions are easy to quantify because of their far-reaching accomplishments. Undoubtedly, a great many people who engage in evasive activities perform poorly, and their ventures often have little or no economic impact and thus exert little or no institutional pressure.

With these considerations in mind, we identify several broad agendas for future research. First, there is a need for in-depth, qualitative studies of specific economies, industries and markets, framed by the notions of evasive entrepreneurship and institutional contradictions. In this respect, a fruitful line of research may be to consider the importance of drivers other than profits in evasive ventures, such as social or ideological motivations. Another step would be to put a spotlight on the relationship between evasive entrepreneurship and institutional change. Such research could include more rigorous theoretical or

conceptual examinations and empirical studies that examine how institutional change processes triggered by seemingly similar types of evasive entrepreneurship unfold in different institutional contexts.

Systematic, quantitative studies could address similar questions. For example, they could examine how evasive entrepreneurship among firms in the sharing economy interacts with existing institutions. Although firms such as Uber, Lyft and Airbnb may be international in scope, the evasive service that they provide is local and thus subject to local laws. This contextual variability could provide fertile empirical ground and broaden our knowledge of the mechanisms that underlie the interaction between evasive entrepreneurship and institutional evolution, when (or if) the smoke from these regulatory struggles settles. Doing so could reveal how varying degrees of institutional contradictions and voids interact with evasive entrepreneurship and various institutional players to produce different effects on institutional change processes and outcomes.

In addition, the existence of evasive entrepreneurship may elucidate the thus far unexplained variation found in regression studies on the link between institutions and economic growth. In other words, this phenomenon may offer insight into why some countries function better than expected. For example, GDP per capita in Greece is approximately 40 percent lower than that in in Sweden (World Bank 2016), but a much greater income difference might be predicted based on the difference in institutional quality between the two countries (Rodrik et al. 2004). Entrepreneurs' evasive actions may provide second-best substitutes when institutions are inefficient, thus accounting for some of the previously unexplained variation. This argument, while tentative, may also be a fruitful avenue for future research.

Several issues pertaining to identification need to be addressed in such empirical studies. Notably, substantial selection problems exist because an evasive entrepreneur's choice to operate in a given country or market depends on the institutional setting, including institutional contradictions and the perceived likelihood of institutional change. Then again, many empirical studies face similar problems.

Finally, we invite both conceptual and empirical studies that expand our framework by either strengthening or relaxing the conditions under which evasive entrepreneurship operates. We hope that our contribution will pave the way in furthering our understanding of what we believe is an important and underappreciated function of the entrepreneur.

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