

Off the mark? What we (should) know about the bright and dark sides of corporate trademark practices

Carolina Castaldi *

Department of Human Geography and Spatial Planning, Utrecht University, Princetonlaan 8a, Utrecht 3584 CB, The Netherlands. e-mail: c.castaldi@uu.nl

*Main author for correspondence.

Abstract

Corporate trademark practices play a key role in the intangible reputation-based economy and are increasingly being scrutinized by societal stakeholders. Yet, research on the effects of trademarks has mostly focused on private returns, while insights on their societal returns are scattered and resting on limited empirical evidence. This study integrates existing research in a framework connecting suggested mechanisms to the available evidence. The integrative framework lays bare clear gaps in our theoretical understanding and the empirical support, with the dark sides of corporate trademark practices being critically under-investigated. Based on this analysis, I propose a research agenda stemming from two broad questions: (i) how do corporate trademark practices deal with societal pressures? and (ii) how do corporate trademark practices enable or hinder competition and innovation? The envisioned research lines bear relevance for organizations, society, and research alike.

JEL classification: L1, O3, E22

1. Introduction

Intangibles are by now some of the most crucial corporate assets (Haskel and Westlake, 2017), and hence the strategic relevance of intellectual property rights (IPRs) for firms is also increasing. Intellectual property disputes account for a significant share of litigation (Norton Rose Fulbright, 2021), and trade deals are increasingly about IPRs. At the same time, questions around the societal impact of the transition to an intangible economy are emerging, for instance in relation to the financialization of intangible assets and the development of intellectual monopolies (Pagano, 2014). In this broad discourse, most critiques and empirical investigations target the (mis)use and societal costs of patents and copyrights (Dosi *et al.*, 2006; Boldrin and Levine, 2008). Instead, little is known about the societal implications of corporate trademark practices. This is peculiar, given that trademarks are the most widely used IPR globally (WIPO, 2013; Zolas *et al.*, 2017) and they have played a crucial role in the making of modern corporations (Wilkins, 1992). Trademarks legally protect signs that allow goods and service producers to flag their offerings in the marketplace. As such, they are the legal counterpart of brands and a key tool in reputation-based markets (Griffiths, 2011).

There is ample empirical evidence and a rather solid understanding of how trademarks generate private returns for firms (Schauschick and Greenhalgh, 2016; Castaldi *et al.*, 2020), but similar evidence on the societal returns of trademark activities is missing. At a conceptual level,

the mechanisms through which corporate trademark practices might impact society have been suggested rather independently across disciplines as diverse as economics, law, management, and cultural studies. A comprehensive understanding is still missing. Economic studies have tended to emphasize the *bright side* of trademarks, in the form of positive welfare effects associated to how trademarks help the well-functioning of markets (e.g. Landes and Posner, 1987). Instead, several legal scholars have expressed more concerns about the *dark side* of corporate trademark practices and the larger implications for society as trademarks end up operating as sheer rent-generating devices. Unfortunately, many of their critiques have been rather normative and only partially based on empirical analyses. Moreover, economic and legal discourses have hardly connected to each other, or to other disciplines, including business ethics, critical geography, or cultural studies. Hence, a comprehensive understanding of private and social returns of corporate trademarking, with due attention to both bright and dark sides, has failed to take shape. A complicating factor, which is somehow common to all IPRs, is that trademarks have both private and public good elements and that it remains challenging to balance the two, let alone clearly separate them (Ramello and Silva, 2006). Nonetheless, the extent to which trademarks have supported troublesome rent-generating practices, particularly in industries with a crucial public function like the pharmaceutical industry (Dutfield, 2021), warrants further efforts in understanding the drivers and implications of corporate trademark practices.

This paper has a twofold objective. First, it aims at connecting existing pieces of research on the societal returns of trademarks into an integrative framework that outlines key mechanisms and critically discusses the emerging evidence. Returns to trademarks include private returns and social ones, grouped into returns to buyers, other firms, and society at large. Second, it aims at leveraging such framework to indicate avenues for further research on the societal implications of corporate trademark practices. Specifically, the envisioned research agenda defines two broad emerging questions: (i) how do corporate trademark practices deal with to societal pressures? and (ii) how do corporate trademark practices enable or hinder competition and innovation? The lines of research prompted by these questions bear relevance for managers, society, and researchers alike, which will be discussed in the concluding section.

2. Trademarks between business and society: integrating mechanisms and evidence

2.1 A brief introduction to trademarks

Trademarks are distinctive signs (of any kind: from words to graphics to sounds) that can be claimed by producers to signal the origin of goods or services in specific markets. The main rationale for the existence of trademark systems is an economic one: trademarks reduce information asymmetries between buyers and sellers and hence help avoid market failures. This happens when trademark owners use them as a credible signal of the quality of their goods and services. The informal use of signs as “marks in trade” goes back in time: ancient Greek pottery makers were already using recognizable seals to flag their artifacts (Johnston, 1974). Modern trademark systems are much more recent (Sáiz and Castro, 2022), and they involve formal procedures of filing and registration at dedicated offices. The key requirements for successful registration are two. The first one is distinctiveness: the sign should be distinctive, i.e., it should not be similar to the existing trademarks used in the same country and market by other companies. This requirement implies that any consumer confusion should be avoided and trademark legal cases often include claiming and testing consumer confusion to establish distinctiveness. The second requirement is use in commerce or the intention to do so within a specified time period. This requirement should ensure that registered signs are those actually needed in clearly defined markets so that ownership rights are not unnecessarily and inefficiently awarded to signs without an actual economic function.

Compared to other IPRs, trademarks can be renewed indefinitely upon payment of renewal fees, which makes them attractive for companies as a strategy to counteract the expiration of patents and copyrights. Trademark registration is also less costly and complex than patent registration, which means that small and young companies often turn to trademarks as accessible IPR (Castaldi *et al.*, 2020). Trademarks are also of relevance for all economic sectors, not just

those with a strong linkage to new technology development. The bulk filings comes from private companies, but public organizations, like universities or municipalities (Squicciarini *et al.*, 2012; Rooksby, 2016), make increasing use of trademarks and individuals can register them too (Heikkilä, 2019).

2.2 Private returns to trademarks

The benefits of trademarks for companies can be traced to the very motives why companies file and register trademarks (Block *et al.*, 2015; Castaldi *et al.*, 2020). A first motive, highlighted in the traditional industrial organization literature, is to gain monopoly rights related to the exclusive use of the chosen sign. Such rights allow companies to claim a distinctive market position and charge higher prices (Landes and Posner, 1987). At the same time, trademarks fulfill an informational role. Not only are they meant to reduce search costs by minimizing consumer confusion, but they also act as quality assurance mechanisms (Ramello and Silva, 2006). Indeed, they introduce incentives for sellers to invest in the quality of their product. In this sense, trademarks also become reputational assets that allow consumer persuasion and reinforce corporate status, resulting in increased sales and market power (Economides, 1988). An old political economy literature has studied the incentives for companies to invest in building trademark capital using arguments from industrial organization and contract theory (Jarrell and Peltzman, 1985). The “quality assurance” hypothesis was complemented with a specific performance hypothesis, to explain reputational incentives even in markets where buyers and sellers are equally well informed, like business-to-business contexts.

An additional benefit comes from the fact that trademarks are ownership rights that can be traded (Graham *et al.*, 2018). This can lead to licensing, leveraging them into franchising, or simply selling them (Ferrucci *et al.*, 2020). Specialized “markets for brands” have emerged in the last decades for this type of transactions (Frey *et al.*, 2015).

Finally, trademarks can allow firms to profit from their innovation (Flikkema *et al.*, 2019; Hsu *et al.*, 2022). They can do so as complements to patents since they can be unleashed in the commercialization and diffusion of patented inventions (Llerena and Millot, 2020). They can also act as substitute to patents: this is particularly the case for small- and medium-sized companies, which might lack the knowledge and resources to file for patents. It also applies to firms opting for secrecy strategies since filing for trademark does not entail full knowledge disclosure on the workings of the products (Castaldi *et al.*, 2020). At the same time, companies with strong, established trademarks have fewer incentives to come up with innovation if it means deviating from the successful products or company profile. Davis (2009) refers to “trademark traps,” something that can undermine the relation between trademarks and innovation.

On the negative side, sustaining the reputational value of trademarks comes with costs for firms. In fact, trademarks can be seen as enacting a “liability regime” forcing producers to bear costs to protect the reputational value of trademarks (Ramello, 2006). Damages to the reputational value of trademarks can come from the company’s own wrongdoings, in particular product fallacies. These can lead to costs of product recalls or other measures to counteract negative publicity. Another source of reputational damage is competing sellers that might file similar trademarks and free-ride on the focal trademark value or inappropriate use of trademarks by other actors than the owner. The implication is that trademark owners also have to take into consideration monitoring and litigation costs, next to filing costs. In particular, proactive monitoring helps reduce risks of “trademark dilution” (Simonson, 1993). Dilution refers to a decrease of the distinctive nature of a trademark that might come from actions of competitors. Trademark dilution can blur or change the association that consumers make between the trademark and the company or its products, hence denting the informational and reputational value of trademarks. Finally, companies that have invested in trademarks are also likely victims of counterfeiting: counterfeiting can substitute sales of the authentic products, but this substitution effect can also come with a positive advertising effect (Qian, 2014). In the digital world, this threat has also taken the form of trademark “poaching” for online search (Sayedi *et al.*, 2014): this happens when other firms use a company’s trademark to attract potential consumers to their own websites.

In terms of empirical evidence, most large-scale studies indicate significant and strong private positive returns. [Schauschick and Greenhalgh \(2016\)](#) provide a complete overview of the econometric studies in this direction. The empirical evidence relies on indicators of private benefits as diverse as market value, productivity, and survival, with some studies reporting mere correlations of overall trademark stocks and others leveraging quasi-experimental methods to establish causality (e.g., [Hsu et al., 2022](#)). When considering specific trademark strategies, the evidence becomes somewhat more nuanced. For instance, [Block et al. \(2014a\)](#) find evidence of trademark traps for a sample of world's largest publicly listed companies: market investors did not value new trademark filings but instead valued extensions of existing trademarks only. Similarly, [Castaldi and Giarratana \(2018\)](#) found that US management consulting firms only experienced a market performance premium when their new trademark portfolios aligned with their core service profile.

There is also some research on the actual costs incurred by trademark owners. The early economic literature produced evidence based on event studies of how negative events (product recalls, crashes, and fraud) would impact share prices. A famous study on the automotive and drug markets found that sellers bear reputational costs on top of product recall costs ([Jarrell and Peltzman, 1985](#)). [Hoffer et al. \(1988\)](#) reassessed the data and found no effect on share prices, suggesting that product recalls do not have a significant negative effect for companies; hence, they simply reinforce the positive returns of trademarks to companies.

In terms of the risks and costs of trademark dilution, the legal literature has often relied on experimental evidence of worse product recognition in cases of trademark dilution ([Morris and Jacoby, 2000](#)). A few studies do challenge this narrative, showing empirical evidence of insignificant effects for trademark owners of trademark dilution ([Beebe et al., 2017](#)) and game-theoretic evidence for trademark poaching ([Sayedi et al., 2014](#)). [Beebe et al. \(2017\)](#) argue that court decisions are over-punishing trademark dilution, as most claims of consumer confusion turn out not to be empirically sound. Finally, a few studies have looked at the costs of counterfeiting for trademark owners, finding that the net effects (balancing substitution and advertising effects) for firms depend upon several factors: in the short run, substitution effects may prevail, but producers of high-end products and/or products for which safety concerns are salient can unleash a range of effective corporate strategies, including innovation, raising prices, and self-enforcement through seizures, even in the absence of strong public enforcement ([Qian, 2008, 2014; Rullani et al., 2021](#)).

Overall, one could characterize the limited evidence on the costs and damages as pointing to a relative insignificance of negative private returns, while the broader evidence of positive private returns indicates that the balance of benefits vs. costs of trademarks is clearly on the benefits side. [Table 1](#) summarizes the underlying mechanisms and emerging evidence.

2.3 Social returns to trademarks

To discuss the social returns of corporate trademark practices, I distinguish here between the implications for buyers and other firms ([Table 2](#)) and society at large ([Table 3](#)).

2.3.1 The perspective of buyers

Trademark systems have been designed to protect both sellers and buyers, as the two sides of well-functioning markets. From the consumer perspective, sellers with trademarks should come with a guarantee of higher quality of offerings than sellers without trademarks ([Akerlof, 1970](#)). The use of trademarks will then decrease both consumers' search costs and transaction costs between buyers and sellers, leading to an overall decrease in uncertainty around market transactions. According to [Landes and Posner \(2003\)](#), the uncertainty reduction compensates for the higher prices that trademark owners can charge thanks to their monopoly position. The traditional view holds that higher prices are only a temporary cost born by consumers, which in the long run will also benefit from the incentives for trademark owners to innovate and develop new product varieties to maintain the higher quality of their offerings ([Besen and Raskind, 1991](#)). [Rob and Fishman \(2005\)](#) developed a formal economic model to predict that reputation incentives are strongest for incumbents that invested in product quality from the start: because consumers

Table 1. Private returns of trademarks to trademark owners: mechanisms and evidence

Private returns	Bright side	Dark side
Mechanisms	Monopoly rights, allowing to charge higher prices (Landes and Posner, 1987)	Filing and monitoring costs, litigation costs to avoid trademark dilution (Simonson, 1993)
	Reputational assets, linked to trademark's function as guarantee schemes (Economides, 1988)	Liability regime forcing producers to bear costs if expected quality is not met, to avoid reputational damages (Ramello, 2006)
	Ownership rights that can be traded in "markets for brands" (Frey <i>et al.</i> , 2015; Graham <i>et al.</i> , 2018)	Exposure to counterfeiting (not only negative substitution effect but also positive advertising effect), including trademark "poaching" for online search (Sayedi <i>et al.</i> , 2014)
	Effective appropriation strategy for innovative companies (Castaldi <i>et al.</i> , 2020; Hsu <i>et al.</i> , 2022)	"Trademark traps" (Davis, 2009)
Evidence	Econometric evidence of significant positive returns measured in market value, productivity, and survival (Schautschick and Greenhalgh, 2016, Hsu <i>et al.</i> , 2022)	Evidence of product recall costs and reputational costs on top of product recall costs for cars and drugs (Jarrell and Peltzman, 1985), but not affecting share prices (Hoffer <i>et al.</i> , 1988)
	Evidence of negligible to insignificant net effects for trademark owners of trademark dilution (Beebe <i>et al.</i> , 2017), trademark poaching (Sayedi <i>et al.</i> , 2014), and counterfeiting (Qian, 2014)	Experimental evidence of worse product recognition in case of trademark dilution (Morrin and Jacoby, 2000) Evidence of trademark traps for large public companies: trademark extensions valued by the market, but not new trademarks (Block <i>et al.</i> , 2014a)

can only imperfectly observe quality investments, reputation formation requires continuous investment from incumbents, at the benefit of consumers.

Other authors, like Lunney (1999), have been more critical about the costs that the monopoly rights impose on consumers. First, the actual informational value of trademarks might be limited, as consumers can gather clues on the products' quality from other information sources. Second, the "trademark monopolies" can have strong effects in long run, when network effects play a role and help enact the conditions for natural monopolies for the trademarks protecting the most popular brands.

While it is common knowledge that trademark-protected products sell for higher prices, empirical studies unpacking pricing strategies in specific industries and their implications for consumers are lacking. Brennan (2015) is one exception, for the case of drugs. The study finds that trademarked drugs sell at significantly higher prices but are not of higher quality. Similarly, Heath and Mace (2020) found no evidence that products related to famous trademarks in the United States were of higher quality.

Overall, the hypothesized positive benefits of trademarks for buyers lack systematic empirical evidence. The limited empirical hints provide instead some support for questioning the idea that the higher prices warranted by trademarks also come with higher quality.

2.3.2 The perspective of other firms

Markets are typically populated by more than one seller, hence another crucial perspective when judging the effects of trademarks is the one of competing firms. Research in this direction has a strong policy relevance too, as competition authorities increasingly struggle with more and more sophisticated corporate strategies to increase market power, also including the deployment of savvy trademark strategies.

Here, two opposing views have emerged. The traditional industrial organizational literature posits that strong trademark strategies are effective at reducing competition, hence resulting in

Table 2. Societal returns to trademarks, from the perspective of buyers and other firms: mechanisms and evidence

	Bright side	Dark side
Buyers		
Mechanisms	Higher quality of products, given the underlying incentives for sellers (Akerlof, 1970) More product variety and innovation in the long run (Besen and Raskind, 1991) Less transaction costs and less uncertainty in consumer search (Landes and Posner, 1987)	Higher prices due to strategic opportunities for premium product differentiation (Reitzig, 2004) Less product variety in the short run due to “trademark monopolies” (Lunney, 1999)
Evidence	No evidence that branded drugs are of higher quality than generic ones (Brennan, 2015) Some evidence that branded products are of <i>not</i> of higher quality (Heath and Mace, 2020)	Evidence for drug industry that trademarks act as strategic barriers to entry of cheaper generic alternatives, but welfare effects limited (Appelt, 2009; Brennan, 2015)
Other firms		
Mechanisms	Spurring dynamic competition (Greenhalgh and Rogers, 2012) Knowledge spillovers, leading to imitation and eventually more innovation in the long run (Davis, 2009)	Reducing static competition: trademarks as “natural” and “network” monopoly (Lunney, 1999) Acting as barriers to entry (Porter, 1979) Strategic practices, including trademark squatting, submarine trademarks, and zombie trademarks (Castaldi <i>et al.</i> , 2020)
Evidence	Large-scale evidence for the UK firms of dynamic competition (Greenhalgh and Rogers, 2012) Evidence that trademark activity spurs imitation and diffusion of innovation in the United States (Semadeni and Anderson, 2010; von Graevenitz <i>et al.</i> , 2022) Evidence at the EU regional level that trademarks stocks can favor new firm formation (Belderbos <i>et al.</i> , 2022), but IPR strategies of incumbents matter	US court case evidence of owners of strong trademarks being favored (Chumney and Cowart, 2010; Beebe and Hemphill, 2017) US quasi-experimental evidence that increased trademark protection leads to less competition and less innovation (Heath and Mace, 2020) Evidence that trademark squatting is significant and leads to over-trademarking by firms (Fink <i>et al.</i> , 2018). Increase in trademark opposition cases and congestion (von Graevenitz, 2013; von Graevenitz <i>et al.</i> , 2020). Submarine trademarks reducing knowledge disclosure and affecting competitors (Fink <i>et al.</i> , 2022)

negative returns for other firms. On the one hand, trademarks are monopoly rights whereby companies can block, if not entirely, at least partially, imitation from competitors in the same market (Ramello and Silva, 2006). On the other hand, trademarks, and the related marketing investments, can be effectively used as barriers to entry (Porter, 1979; Sutton, 1991). A third argument comes from a more recent literature on what one could call strategic trademark practices, in line with parallel research on strategic patent practices (Greenhalgh and Rogers, 2010). These are practices whereby companies file for trademarks to explicitly block or deceive competitors. Such practices are legal yet reveal opportunistic behavior that can have social costs. They include practices that mostly damage brand owners, such as trademark squatting (Fink *et al.*, 2018) and zombie trademarks (Gilson and LaLonde, 2008). An interesting phenomenon is the one of submarine trademarks (Fink *et al.*, 2022): it concerns filing practices whereby companies delay disclosure of new products by filing trademarks at remote national offices.

An alternative, more positive, perspective holds that trademarks also benefit other firms in the same market. Greenhalgh and Rogers (2012) propose that trademarks can spur dynamic competition. By signaling innovation as the introduction of new product varieties, trademarks promote knowledge spillovers and trigger further imitation and innovation by competitors.

A few empirical studies have looked at trademark strategies in relation to competition policy questions. There is court case evidence that owners of strong trademarks are favored in courts

Table 3. Societal returns to trademarks, from the perspective of society at large: mechanisms and evidence

	Bright side	Dark side
Mechanisms	<p>Informational value, avoiding consumer confusion (Economides, 1988)</p> <p>Semiotic view: production of new meanings (Beebe, 2008)</p> <p>Complementary role to copyrights, supporting commercialization of creative work (Castaldi, 2018) and to patents, facilitating new technology diffusion (von Graevenitz et al., 2022)</p> <p>Facilitating the sustainability transition by helping consumers recognize sustainable products and companies flag them (Lane, 2011)</p>	<p>Distortions due to focus on persuasive instead of informational value (Lunney, 1999; Ramello and Silva, 2006)</p> <p>“Language monopoly” (Landes and Posner, 1987), name depletion (Beebe and Fromer, 2018), and “trademark banking” (Landes and Posner, 2003)</p> <p>Interference with copyright and patent systems, creating gridlocks (Heller, 2010)</p> <p>Frustrating the sustainability transition, through not only greenwashing but also interference with circularity goals (Eppinger et al., 2021)</p>
Evidence	<p>Trademarks becoming generic names, but sporadically so (Taylor and Walsh, 2002)</p> <p>Tech-startups with trademarks more likely to receive funding from venture capitalists (Block et al., 2014b)</p> <p>Evidence for the United States of diffusion of new technologies in space, following initial trademark filings (von Graevenitz et al., 2020)</p> <p>Evidence that social/sustainable startups leverage trademarks (Hirschmann and Block, 2022; Lall and Park, 2022)</p>	<p>Evidence on name depletion (Beebe and Fromer, 2018)</p> <p>Court case evidence of trademark infringement arguments used in copyright infringement cases (Calboli, 2014)</p> <p>Evidence of less creative reuse when combining trademarks and copyrights in the comics industry (Kaiser et al., 2023)</p> <p>Court case evidence of trademark arguments used against repair initiatives (Montello, 2020). Evidence that trademarks can be part of greenwashing strategies (Berrone et al., 2017)</p>

([Chumney and Cowart, 2010](#)). In particular, [Beebe and Hemphill \(2017\)](#) find that strong trademarks tend to receive stronger scope of protection, with their corporate owners winning court cases on the very premises of the very strength of their trademarks. This reinforces monopoly positions and works against other firms reaping the benefits of competition. If trademark protection endangers copying, for instance by tightening protection against trademark dilution, it might become inefficient for society. A recent study relying on quasi-experimental evidence leveraging the US Trademark Dilution Act finds that increased trademark protection has actually led to less competition and less innovation ([Heath and Mace, 2020](#)).

[Appelt \(2009\)](#) provides econometric evidence for the pharmaceutical industry that trademarks do decrease the probability of entry for generic drugs, but they also show a positive effect on successful market formation. [Brennan \(2015\)](#) finds evidence of strategic practices of pharmaceutical companies using trademarks to undermine competition from generic drug producers. In fact, trademark offices struggle with an exponential increase in trademark opposition cases and trademark congestion ([von Graevenitz et al., 2020](#)).

Some evidence for the more positive perspective is there. [Greenhalgh and Rogers \(2012\)](#) analyze the welfare effects of the use of trademarks for a large sample of the UK firms. Their study, the only one providing large-scale evidence on social returns to trademarks, finds evidence of dynamic competition effects. A couple of interesting regional studies offer a geographical take on these imitation mechanisms. [von Graevenitz et al. \(2020\)](#) track the diffusion of innovations in space, following initial trademark filings, and they find evidence of knowledge spillovers mediated by geographical distance. [Belderbos et al. \(2022\)](#) analyze European regions and find that regional trademark stocks can favor new firm formation. Yet, this study also finds that IPR strategies of incumbents matter: the more they are strategically focused on appropriation, the less the positive

effect on new firm formation. This result resonates with [Drivas \(2021\)](#), where trademark oppositions capture firm rivalry and represent a force going against knowledge spillovers and diffusion. Moreover, the knowledge disclosure effect of trademark filing can be distorted by strategic practices such as submarine trademarks. [Fink et al. \(2022\)](#) find that submarine trademarks bear costs for competitors that might find their trademarks invalidated, hence they negatively affect the extent to which competitors can rely on the information published by trademark offices.

In sum, the mechanisms and evidence point at both significant positive and significant negative returns of corporate trademark practices for other firms. Whether the negative effects become dominant and stand in the way of the positive ones is likely to depend on the specific context of action, but we currently only have scattered empirical evidence on the processes at play.

2.3.3 The perspective of society

The role of trademarks in everyday life is massive. In the first place, we speak, wear, and look at trademarks, more than we realize. As part of their informational role, trademarks can become new words or give new meanings to the existing words ([Beebe, 2008](#)). In time, trademarks can shape language, even beyond the information-oriented communication attached to market transactions. As such, trademarks can enrich language, but at the same time, they can restrict expression. As trademark law gives owners the right to exclude others from using certain names and symbols, it actually implies a “language monopoly” ([Landes and Posner, 2003](#)). Not only companies turn out to have a shrinking set of names or signs to choose from ([Beebe and Fromer, 2018](#)), but limitations can also affect individuals. Inappropriate use of trademarks by, for instance, journalists, fiction writers, or comedians can prompt legal actions by owners of valuable trademarks ([Dogan and Lemley, 2013](#); [Brown and Nagy, 2015](#)). Still, some trademarks can become so ingrained in language that trademark owners lose their rights and trademarks become generic names that everyone can use. Companies will typically fight genericide,¹ and indeed, only a handful of trademarks end up being declared as generic ([Taylor and Walsh, 2002](#)).

Some observers have argued that the informational value of trademarks might be limited ([Lunney, 1999](#)), especially given the increasing distortions due to focus on persuasive instead of informational advertising ([Economides, 1988](#); [Ramello and Silva, 2006](#)). Still, this informational role can represent a critical signaling function when trademarks are used by companies to draw attention to something new, for which there is no clear market yet. In this sense, trademarks can complement copyrights by signaling commercialization of creative work ([Castaldi, 2018](#)), and they can complement patents by signaling new products stemming from patented technologies ([Flikkema et al., 2019](#)). By helping diffusion of creative and innovative work, they also benefit society. Yet, these complementarities between IPRs can turn into perverse gridlocks, when the combination of IPRs happens for the strategic purpose of blocking competitors or whole industries. [Heller \(2010\)](#) has drawn the attention to cases of gridlocks in several contexts, where companies have hijacked arguments from different IPR regulations to push forward legal barriers. For instance, trademark arguments of consumer confusion can be used in copyright-intensive industries like movies to block forms of imitation which would otherwise simply be allowed by copyright laws ([Heymann, 2007](#); [Calboli, 2014](#)). [Kaiser et al. \(2023\)](#) show evidence that trademarking of comic characters is associated with a decrease in creative reuse, against the spirit of copyright law. If patents are combined with trademarks, this may also block further inventive activity because incumbents can prolong their monopoly positions after patent expiry ([Hurwitz and Caves, 1988](#)). The societal impact of such combined strategies is particularly troublesome when it endangers access to medicines ([Dutfield, 2021](#)).

Finally, a scattered but emerging literature offers clues on the role of trademarks in sustainability transitions, albeit only as part of a broader discussion on the role of IPRs. There are indications that trademarks could have a role in market formation processes and in supporting sustainability startups and social ventures ([Hirschmann and Block, 2022](#); [Lall and Park, 2022](#)). Sustainability is a property of goods and services that is hard if not impossible to establish, and hence markets have resorted to trademarks and certification marks to alleviate information asymmetries

¹ For interesting exceptions, see [Contreras \(2020\)](#): in specific contexts, companies might seek the transition of trademarks to generic term, for instance in case of technical standards.

(Berrone *et al.*, 2017). Yet, there is also evidence that sustainable innovators do not benefit from trademarks (Morales *et al.*, 2022). In fact, trademarks are even used by companies to frustrate the transition to sustainability, in at least two ways. On the one hand, legitimate claims are difficult to separate from greenwashing since trademark registration does not entail any check on whether green or sustainable claims in trademarks correspond to actual practices. On the other hand, trademarks concern proprietary rights that can clash with the openness needed to achieve circularity goals, in particular through repair and reuse of components. In this realm, scattered court case evidence (Lane, 2009; Montello, 2020) demonstrates that some strong incumbents are indeed using trademark arguments to block sustainability initiatives.

Overall, many of the mechanisms discussed earlier rest on conjectures and normative positions, and there is simply not enough research on the broader societal implications of corporate trademark practices.

3. Toward a research agenda on the societal returns of corporate trademark practices

The framework presented earlier has integrated theoretical insights on suggested mechanisms and available empirical evidence in support or against those mechanisms. The overall picture is one of the evident gaps in the understanding of the implications of corporate trademark practices. As already noted, research on private returns to firms is quite mature and rests on solid stylized facts. On the contrary, all dimensions of social returns, including effects on buyers, other firms, and society at large, are rather contested and in need of further critical assessment. In some cases, one finds rather elaborate theoretical arguments, resting on well-established perspectives, yet the arguments find little empirical support or lack a clear operationalization. In other cases, a convincing theoretical understanding is also missing.

Given the scientific and societal relevance of further understanding the societal returns of corporate trademark practices, I propose here a research agenda resting on two pressing sets of research avenues (see Table 4). The two broad questions inspiring the two research trajectories are (i) how do corporate trademark practices deal with societal pressures? and (ii) how do corporate trademark practices enable or hinder competition and innovation?

3.1 Corporate trademark practices and societal pressures

The role of business in society is increasingly monitored by corporate stakeholders, hence the pressure for many companies to develop societally responsible practices. If trademarks represent key reputational assets for companies, then one would expect alignment between the information signal that companies send through their trademarks and the related practices on the one hand and their vision and actions regarding their position in society on the other hand. External and internal stakeholders can make claims and accusations on corporate trademark practices when a misalignment emerges. The idea that trademarks can be “liability regimes” and offer grounds for retaliation is part and parcel of the economic view on trademarks and their role in buyer–seller market transactions. Yet, the implications for the broader set of stakeholders that influence corporate decisions remain to be understood.

A *first* line of research could tackle questions related to trademark licensing. Licensing offers opportunities for trademark owners to monetize on their reputational assets, in several ways, ranging from third-party licensing for production to franchising agreements of different kinds. At the same time, licensing comes with risks: reputational damages can be borne when “bad” actions by licensees get associated to the company owning trademarks. Ideally, companies only license trademarks when they can expect the same quality of products or services from the licensees than their own. Objective product quality might be relatively easy to assess, but quality of production in terms of workers’ safety or fair pay is much harder to monitor. After the collapse of a Bangladesh sweatshop made the global media headlines in 2013, major apparel brands received accusations of irresponsible practices. Some firms signed the so-called Bangladesh accord and included labor right requirements in their trademark licensing agreements (Hensler and Blasi, 2013). This type of agreement, relevant for companies operating in global production chains or

Table 4. A research agenda on the societal returns of corporate trademark practices

Research question	Research lines	Theoretical inputs	Empirical efforts
(i) How do corporate trademark practices deal with societal pressures?	Trademark licensing and liabilities	CSR, business ethics, global strategy	Arrangements in global value chains, conditions of franchising
	Trademarks and sustainability transition	Legitimacy, symbolic vs. substantive actions, stigma and controversial industries	Discourse analysis of legal intelligence, public claims, and external accusations; “toxic trademarks”
	Trademarks and public goods	Social justice, critical geography, marketing ethics	Mapping patterns of misappropriation vs. responsible appropriation
(ii) How do corporate trademark practices enable or hinder competition and innovation?	Trademarks and dynamic competition	Industrial organization, innovation, and entrepreneurship theories	Comprehensive industry analyses, economic ones, and complementary emerging industry/technology perspectives
	Trademarks as rent-generating devices	Strategic management, international business	Mapping strategic practices across industries and geographies
	Trademarks and digital platforms	Platform-based entrepreneurship, intellectual monopoly	In-depth analysis of specific platforms, comparison across platforms

international franchising, has emerged as a responsible standard of practice but is far from being widely adopted by companies. Hence, most firms appear not to be sensitive to such normative pressures or they undertake purely symbolic actions when it comes to adapting their corporate trademark practices. Trademark law does not imply formal mechanisms of control and hence is of little help to induce responsible behavior (Griffiths, 2019). Theoretical clues on how trademark owners choose to take into account normative pressures or not can be derived from the business ethics literature in general and the corporate social responsibility (CSR) literature in particular, and from international business and global strategy. Empirical work could reveal motivations and strategies in specific industries or across geographies. Multinational companies increasingly aspire to achieve legitimacy as global “social brands” (Asmussen and Fosfuri, 2019), which means that they in principle acknowledge societal calls for a responsible role of companies in society. The actual practice might highlight several strategic practices that companies unleash to circumvent or shift responsibilities.

A *second* line of research, partly related to the previous one, could analyze corporate trademark practices in relation to the sustainability transition. Existing research has started to expose the complex relation between IPRs and the transition to more sustainable systems of production and consumption, but much more research is needed (Eppinger *et al.*, 2021). In terms of theories, a rich literature strand has found it useful to distinguish between substantive and symbolic actions to understand how companies may react to pressures toward more sustainable behavior. Yet, separating substantive from symbolic actions in corporate trademark practices is challenging. The very action of going to court to protect trademarks could be associated with the legitimate efforts by a truly environmental conscious company defending their reputational assets. However, companies also go to court and leverage their trademark rights to frustrate efforts toward more environment-friendly behavior. The latter has happened in instances where companies, including Apple, have sued independent repair outlets for not using original components. Even these instances are not straightforward to classify as irresponsible, given that the companies claim product quality and safety as arguments behind their trademark enforcement efforts. Given all this, a salient direction of research could be to unleash discourse analysis methods to map how companies navigate the complex relationship between sustainability pressures and corporate trademark

practices. Here, legal intelligence of arguments used in court, public claims in reports, media appearances, or in response to activists' accusations provides key sources of empirical material.

That trademark practices are not peripheral issues, but rather prominent actions can be illustrated by the fact that activist organizations often choose “name-shaming” actions for exposing unsustainable behavior and greenwashing: see the Greenpeace campaign on social media #IsThisYours, inviting people to post pictures of plastic litter showing the brand name of the product. In this sense, external stakeholders fulfill the societal function of checking the legitimacy of the message conveyed by trademarks, but their actions and campaigns might not be enough to generate a credible counter-narrative against the one produced by the powerful lobbying and marketing machines of some companies. Additionally, in so-called controversial industries, including many unsustainable industries, it is likely to prompt increasing scrutiny and lead to organizational stigma (Aqueveque *et al.*, 2018). Yet, companies in these industries still file trademarks and enforce them vigorously, but we lack a systematic mapping of their practices. A fruitful endeavor could be to replicate the efforts in defining and measuring “toxic patents” (Biggi *et al.*, 2022) and to map “toxic trademarks” too, as an additional tool that companies leverage to make profits out of unsustainable technologies.

A *third* line of research could take stance with how corporate trademark practices entail appropriation of public goods. When trademarks are resting on assets and knowledge built by the companies over time, claims to appropriate returns would typically be considered legitimate. However, when trademarks are used to appropriate returns from assets and knowledge that are at least partially public goods, things become more complex. Examples are trademarks enacting cultural appropriation of indigenous knowledge (Orozco and Poonamallee, 2014; Kennedy and Makkar, 2021), exploiting reputation of places, including different territorial assets (Pike, 2009; Sáiz and Castro, 2018) or even social movements (Lince, 2020). All these instances suggest that stakeholders might have in mind a logic of “responsible” appropriation, hence condemn monetization of collective assets, while applauding companies' respect of what is public good. Not only theories of social justice but also insights from cultural studies, critical geography, and marketing ethics could be leveraged to make sense of the forces shaping appropriation logics. Empirical efforts could be directed toward mapping not only how companies withdraw or update their corporate trademark practices to align private and public interests but also how communities and not-for-profit organizations develop alternative models of appropriation that are compatible with a shared value logic, for instance collective trademarks (Jimenez *et al.*, 2022). At the same time, not-for-profit organizations themselves can be scrutinized on the extent to which they might engage in trademark practices fitting a for profit logic. The small research strand on trademark practices of universities, municipalities, and non-governmental organizations could develop further and investigate the scale and implications of this phenomenon.

3.2 Corporate trademark practices and competition and innovation

The integrative framework discussed in the literature review revealed that the relation between corporate trademark practices and competition and innovation critically lacks empirical evidence. At the same time, the competitive landscape is being disrupted by the emergence of digital platforms, something that also requires new theoretical perspectives.

A *first* line of research could engage with the relationship between trademarks and dynamic competition. Several insights are there from industrial organization, innovation studies, and entrepreneurship theories (Castaldi *et al.*, 2020) to make sense of corporate trademark practices and link them to matters of static and dynamic competitions. Industrial organization studies have tended to focus on questions related to barriers to entry, while an innovation perspective is critical to assess dynamic competition (Greenhalgh and Rogers, 2012). Rich analyses of specific industries could offer clues here. Such analyses could take an economic perspective and collect detailed information on price dynamics, number and type of firms, and variety and quality of offerings. The few studies on the pharmaceutical industry could be extended to match efforts to reconstruct monopolistic practices of Big Pharma using patent data (Dosi *et al.*, 2023). Complementary investigations could unpack strategies of either incumbents or entrants. An interesting example is the lobbying activities of agricultural producers to block entry of vegan products: names like milk and yogurt are already banned from use by vegan producers, but a further attempt to block the

use of terms like veggie burger was not successful ([The Guardian, 2020](#)). The example illustrates that trademarks play a role in legitimization processes that are critical to structural transformations, where new categories need to emerge before a transition can happen. Not only work on category formation in emerging industries ([Grodal et al., 2015](#)) but also research on sustainability transitions ([Heiberg et al., 2022](#)) can offer a complementary approach to economic analyses.

A *second* and related line of research would be to develop a more systematic understanding of how and when strategic and opportunistic trademark practices turn trademarks into sheer rent-generating devices. A few studies already identified such practices, often concentrated in specific industries, like the pharmaceutical one ([von Graevenitz, 2013](#); [Dutfield, 2021](#)). One could integrate the scattered evidence, to classify and monitor such practices, over time and across geographies and industries. That would enable attempts to understand motivations and implications of those practices. Historical reconstructions of how IPR protection was extended to items for which patenting or trademarking were considered unethical could also shed light on the complex relationship between industry evolution, corporate practices, and legal discourses (see the historical analysis of the pharmaceutical industry by [Gabriel, 2014](#) and [Dutfield, 2020](#)). In terms of timely monitoring of strategic practices, the public records of IPR offices could be exploited more, by analyzing patterns of filing (also in terms of scope), registrations, and oppositions. Clusters of filings on the same day can indicate not only strategic practices but also systematic filing practices at specific national offices. Many of these practices are on the radar of IPR offices since they generate critical inefficiencies, but most attention has been focused on patents (e.g., [Torrisi et al., 2016](#)).

A *third* line of research could engage with new questions related to the emergence of digital platforms. Many of such platforms basically represent new marketplaces where independent sellers, referred to as “complementors,” may compete with products (goods and services) sold by the platform company itself. While platforms may entail critical opportunities for entry of small actors, as captured in the idea of “platform-based entrepreneurship,” participation in platforms is not without risks ([Cutolo and Kenney, 2021](#)). Complementors entering digital platforms may see their products imitated by platform owners, particularly when those products are successful. [Zhu and Liu \(2018\)](#) document how Amazon monitors the sales of products by independent vendors and strategically uses that information to enter markets and offer imitations of best-selling products. At the same time, Amazon also enacts self-preferencing strategies to rank their own products higher in search results ([Farronato et al., 2023](#)). Complementors can develop strategies to better face competition: those independent vendors owning IPRs, including trademarks, are supposed to be in a stronger position ([Huang et al., 2013](#); [Miric et al., 2019](#)). Yet, how specific trademark strategies of complementors and platform owners interact is an open question, with clear relevance for the monitoring of dynamic competition. Hence, further research could dissect processes across different platforms and fruitfully link to critical narratives on the strategies of Big Tech (see for instance [Rikap, 2021](#)).

4. Conclusion

This paper has engaged with the broad question of the societal implications of corporate trademark practices, claiming that bright and dark sides of such practices both exist. I have offered an integrative framework that connected scattered strands of research, both conceptual and empirical ones. The literature review demonstrated that many insights are already there, but they have not been connected in a systematic way. Also, many of them rest on a single empirical study that brought forward that specific research question. The integration of the existing pieces of research resulted in identifying evident gaps. Starting from those gaps, I have developed a research agenda outlining two main avenues for further research. The efforts needed to tackle the emerging research questions are both theoretical and empirical ones. I have suggested which disciplines, theoretical approaches, and original data sources and methodologies could be leveraged to frame and answer the envisioned questions.

The research agenda is relevant for organizations, society, and research alike. First, organizations should be alerted of the risks and fallacies of treating trademark practices as peripheral matters. The discussion in this paper showed that trademarks bring clear benefits to companies

and entrepreneurs, but their risks and costs are equally evident. In reputation-based markets, including digital marketplaces and markets for sustainable products, companies are likely to find themselves increasingly exposed to normative pressures about the legitimacy of the claims associated with their trademarks and trademark practices. Litigation involving trademarks is on the rise and can also have major consequences for the economic actors involved. Second, societal stakeholders can learn to better recognize the intricate relationship between corporate trademark practices and societal returns. Competition authorities, activist organizations, and communities resting on valuable collective assets are all societal actors that have a say in the debates sketched in this paper. Finally, researchers can develop original insights in a relatively uncharted territory. In the first place, the research agenda extends the focus on private returns of most prior trademark research and the focus on patents and copyrights of research dealing with the societal returns of IPRs. The envisioned research avenues allow engaging with the non-trivial role that trademarks play in the intangible economy, pointing at critical dark sides of corporate trademark practices that are need of further inquiry.

Acknowledgments

I wish to thank Sandro Mendonça, Marco Giarratana, Georg von Graevenitz, Giovanni Dosi, and Christian Helmert for the many discussions that shaped this paper. All errors remain my own.

References

- Akerlof, G. (1970), 'The market for lemons,' *Quarterly Journal of Economics*, 84(3), 488–500.
- Appelt, S. (2009), 'Early entry and trademark protection: an empirical examination of barriers to generic entry,' *Paper Presented at the DRUID Summer Conference 2009*.
- Aqueveque, C., P. Rodrigo and I. J. Duran (2018), 'Be bad but (still) look good: can controversial industries enhance corporate reputation through CSR initiatives?' *Business Ethics: A European Review*, 27(3), 222–237.
- Asmussen, C. G. and A. Fosfuri (2019), 'Orchestrating corporate social responsibility in the multinational enterprise,' *Strategic Management Journal*, 40(6), 894–916.
- Beebe, B. (2008), 'The semiotic account of trademark doctrine and trademark culture,' in G. B. Dinwoodie and M. D. Janis (eds), *Trademark Law and Theory*. Cheltenham, UK: Edward Elgar Publishing.
- Beebe, B. and J. Fromer (2018), 'Are we running out of trademarks? An empirical study of trademark depletion and congestion,' *Harvard Law Review*, 131, 945–1045.
- Beebe, B., R. Germano, C. J. Sprigman and J. Steckel (2017), 'Testing for trademark dilution in court and in the lab (April 28, 2017),' *NYU Law and Economics Research Paper No. 18-06*.
- Beebe, B. and S. Hemphill (2017), 'The scope of strong marks: should trademark law protect the strong more than the weak?' *New York University Law Review*, 92, 1339–1398.
- Belderbos, R. A., M. Kazimierczak and M. Goedhuys (2022), 'Trademarks, patents and the appropriation strategies of incumbents: the scope of new firm formation in European regions,' *Regional Studies*, 56(2), 210–226.
- Berrone, P., A. Fosfuri and L. Gelabert (2017), 'Does greenwashing pay off? Understanding the relationship between environmental actions and environmental legitimacy,' *Journal of Business Ethics*, 144(2), 363–379.
- Besen, S. M. and L. J. Raskind (1991), 'An introduction to the law and economics of intellectual property,' *Journal of Economic Perspectives*, 5(1), 3–27.
- Biggi, G., E. Giuliani, A. Martinelli and E. Benfenati (2022), 'Patent toxicity,' *Research Policy*, 51(1), 104329.
- Block, J. H., C. O. Fisch, A. Hahn and P. G. Sandner (2015), 'Why do SMEs file trademarks? Insights from firms in innovative industries,' *Research Policy*, 44(10), 1915–1930.
- Block, J. H., C. O. Fisch and P. G. Sandner (2014a), 'Trademark families: characteristics and market values,' *Journal of Brand Management*, 21(2), 150–170.
- Block, J. H., G. De Vries, J. H. Schumann and P. Sandner (2014b), 'Trademarks and venture capital valuation,' *Journal of Business Venturing*, 29(4), 525–542.
- Boldrin, M. and D. K. Levine (2008), 'Against intellectual monopoly,' *Cambridge University Press*, 27(1), 3–22.
- Brennan, H. (2015), 'The cost of confusion: the paradox of trademarked pharmaceuticals,' *Michigan Telecommunications and Technology Law Review*, 22, 1–52.
- Brown, E. J. and P. F. Nagy (2015), 'That's not fair! Clarifying copyright and trademark fair use for business managers,' *Business Horizons*, 58(1), 17–24.

- Calboli, I. (2014), 'Overlapping rights: the negative effects of trademarking creative works,' in S. Frankel and D. Gervais (eds), *The Evolution and Equilibrium of Copyright in the Digital Age (Vol. 26)*. Cambridge, UK: Cambridge University Press, pp. 52–68.
- Castaldi, C. (2018), 'To trademark or not to trademark: the case of the creative and cultural industries,' *Research Policy*, 47(3), 606–616.
- Castaldi, C., J. Block and M. J. Flikkema (2020), 'Why and when do firms trademark? Bridging perspectives from industrial organisation, innovation and entrepreneurship,' *Industry and Innovation*, 27(1-2), 1–10.
- Castaldi, C. and M. S. Giarratana (2018), 'Diversification, branding, and performance of professional service firms,' *Journal of Service Research*, 21(3), 353–364.
- Chumney, W. M. and T. W. Cowart (2010), 'iEthics,' *Journal of Business Ethics*, 93(3), 471–482.
- Contreras, J. L. (2020), 'Sui-Genericide,' *Iowa Law Review*, 106, 1041–1090.
- Cutolo, D. and M. Kenney (2021), 'Platform-dependent entrepreneurs: power asymmetries, risks, and strategies in the platform economy,' *Academy of Management Perspectives*, 35(4), 584–605.
- Davis, L. (2009), 'Leveraging trademarks to capture innovation returns,' *Paper Presented at the DRUID Summer Conference 2009*.
- Dogan, S. L. and M. A. Lemley (2013), 'Parody as brand,' *University of California, Davis Law Review*, 47, 473–513.
- Dosi, G., L. Marengo and C. Pasquali (2006), 'How much should society fuel the greed of innovators?: on the relations between appropriability, opportunities and rates of innovation,' *Research Policy*, 35(8), 1110–1121.
- Dosi, G., L. Marengo, J. Staccioli and M. E. Virgillito (2023), 'Big pharma and monopoly capitalism: a long-term view,' *Structural Change and Economic Dynamics*, 65, 15–35.
- Drivas, K. (2021), 'Which travels farther? Knowledge or rivalry?' *The Annals of Regional Science*, 67(2), 299–333.
- Dutfield, G. (2020), *That high design of the purest gold: a critical history of the pharmaceutical industry 1880–2020*. World Scientific Publishing: Singapore.
- Dutfield, G. (2021), 'Not just patents and data exclusivity: the role of trademarks in integrated IP strategy—where lies the public interest?,' in S. Ragavan and A. Vanni (eds), *Intellectual Property Law and Access to Medicines*. London, UK: Routledge, pp. 431–445.
- Economides. (1988), 'The economics of trademarks,' *Trademark Reporter*, 78, 523–539.
- Eppinger, E., A. Jain, P. Vimalnath, A. Gurtoo, F. Tietze and R. H. Chea (2021), 'Sustainability transitions in manufacturing: the role of intellectual property,' *Current Opinion in Environmental Sustainability*, 49, 118–126.
- Farronato, C., A. Fradkin and A. MacKay (2023), 'Self-preferencing at Amazon: evidence from search rankings,' *NBER Working Paper 30894*.
- Ferrucci, E., M. I. Leone, M. Romagnoli and A. Toros (2020), 'From a distinctive sign to an exchangeable asset: exploring the US market for trademark licensing,' *Industry and Innovation*, 27(1–2), 25–51.
- Fink, C., A. Fosfuri, C. Helmers and A. F. Myers (2022), 'Submarine trademarks,' *Journal of Economics & Management Strategy*, 31(4), 818–840.
- Fink, C., C. Helmers and C. J. Ponce (2018), 'Trademark squatters: theory and evidence from Chile,' *International Journal of Industrial Organization*, 59, 340–371.
- Flikkema, M., C. Castaldi, A. P. de Man and M. Seip (2019), 'Trademarks' relatedness to product and service innovation: a branding strategy approach,' *Research Policy*, 48(6), 1340–1353.
- Frey, C. B., A. Ansar and S. Wunsch-Vincent (2015), 'Defining and measuring the "Market for Brands": are emerging economies catching up?' *The Journal of World Intellectual Property*, 18(5), 217–244.
- Gabriel, J. M. (2014), *Medical Monopoly*. Chicago, US: University of Chicago Press.
- Gilson, J. and A. G. LaLonde (2008), 'The zombie trademark: a windfall and a pitfall,' *Trademark Reporter*, 98, 1280–1310.
- Graham, S. J., A. C. Marco and A. F. Myers (2018), 'Monetizing marks: insights from the USPTO trademark assignment dataset,' *Journal of Economics & Management Strategy*, 27(3), 403–432.
- Greenhalgh, C. and M. Rogers (2010), *Innovation, Intellectual Property, and Economic Growth*. Princeton, NJ: Princeton University Press.
- Greenhalgh, C. and M. Rogers (2012), 'Trade marks and performance in services and manufacturing firms: evidence of Schumpeterian competition through innovation,' *The Australian Economic Review*, 45(1), 50–76.
- Griffiths, A. (2011), *An Economic Perspective on Trade Mark Law*. Cheltenham, UK: Edward Elgar Publishing.
- Griffiths, A. (2019), 'Brands, 'weightless' firms and global value chains: the organisational impact of trade mark law,' *Legal Studies*, 39(2), 284–301.
- Grodal, S., A. Gotsopoulos and F. F. Suarez (2015), 'The coevolution of technologies and categories during industry emergence,' *Academy of Management Review*, 40(3), 423–445.

- The Guardian. (2020), 'European Farmers Lose Attempt to Ban Terms Such a Veggie Burger,' <https://www.theguardian.com/world/2020/oct/23/european-farmers-lose-attempt-to-ban-terms-such-veggie-burger>.
- Haskel, J. and S. Westlake (2017), *Capitalism without Capital*. Princeton, NJ: Princeton University Press.
- Heath, D. and C. Mace (2020), 'The strategic effects of trademark protection,' *The Review of Financial Studies*, 33(4), 1848–1877.
- Heller, M. (2010), 'The gridlock economy: How too much ownership wrecks markets stops innovation, and costs lives,' *ReadHowYouWant.com*.
- Heiberg, J., B. Truffer and C. Binz (2022), 'Assessing transitions through socio-technical configuration analysis—a methodological framework and a case study in the water sector,' *Research Policy*, 51(1), 104363.
- Heikkilä, J. (2019), 'IPR gender gaps: a first look at utility model, design right and trademark filings,' *Scientometrics*, 118(3), 869–883.
- Hensler, B. and J. Blasi (2013), 'Making Global Corporations' Labor Rights Commitments Legally Enforceable: The Bangladesh Breakthrough,' Workers Right Consortium. <https://wsr-network.org/wp-content/uploads/2018/02/Making-Global-Corporations2019-Labor-Rights-Commitments-Legally-Enforceable-The-Bangladesh-Breakthrough-6-18-13.pdf>.
- Heymann, L. A. (2007), 'The trademark/copyright divide,' *Southern Methodist University Law Review*, 60, 55–102.
- Hirschmann, M. and J. H. Block (2022), 'Trademarks and how they relate to the sustainability and economic outcomes of social startups,' *Journal of Cleaner Production*, 376, 134320
- Hoffer, G. E., S. W. Pruitt and R. J. Reilly (1988), 'The impact of product recalls on the wealth of sellers: a reexamination,' *Journal of Political Economy*, 96(3), 663–670.
- Hsu, P. H., D. Li, Q. Li, S. H. Teoh and K. Tseng (2022), 'Valuation of new trademarks,' *Management Science*, 68(1), 257–279.
- Huang, P., M. Ceccagnoli, C. Forman and D. J. Wu (2013), 'Appropriability mechanisms and the platform partnership decision: evidence from enterprise software,' *Management Science*, 59(1), 102–121.
- Hurwitz, M. A. and R. E. Caves (1988), 'Persuasion or information? Promotion and the shares of brand name and generic pharmaceuticals,' *The Journal of Law & Economics*, 31(2), 299–320.
- Jarrell, G. and S. Peltzman (1985), 'The impact of product recalls on the wealth of sellers,' *Journal of Political Economy*, 93(3), 512–536.
- Jimenez, A., D. Delgado, R. Merino and A. Argumedo (2022), 'A decolonial approach to innovation? Building paths towards Buen Vivir,' *The Journal of Development Studies*, 58, 1–18.
- Johnston, A. W. (1974), 'Trademarks on Greek Vases,' *Greece & Rome*, 21(2), 138–152.
- Kaiser, F., A. Cuntz and C. Peukert (2023), 'Batman forever? How trademarks affect reuse in the comics industry, mimeo,' mimeo.
- Kennedy, A. M. and M. Makkar (2021), 'Cultural appropriation,' *The SAGE Handbook of Marketing Ethics*. Thousand Oaks, CA: Sage, pp. 155–168.
- Lall, S. A. and J. Park (2022), 'How social ventures grow: understanding the role of philanthropic grants in scaling social entrepreneurship,' *Business & Society*, 61(1), 3–44.
- Landes, W. M. and R. A. Posner (1987), 'Trademark law: an economic perspective,' *Journal of Law and Economics*, 30(2), 265–309.
- Landes, W. M. and R. A. Posner (2003), *The Economic Structure of Intellectual Property Law*. Harvard University Press: Cambridge, MA.
- Lane, E. L. (2009), 'Consumer protection in the eco-mark era: a preliminary survey and assessment of anti-greenwashing activity and eco-mark enforcement,' *John Marshall Review of Intellectual Property Law*, 9, 742–773.
- Lane, E. L. (2011), *Clean Tech Intellectual Property: Eco-Marks, Green Patents, and Green Innovation*. Oxford, UK: Oxford University Press.
- Lince, T. (2020), 'Controlling Black Lives Matter: The Battle to Trademark a Movement, World Trademark Review,' <https://www.worldtrademarkreview.com/article/controlling-black-lives-matter-the-battle-trademark-movement>.
- Llerena, P., V. Millot (2020), 'Are two better than one? Modelling the complementarity between patents and trademarks across industries,' *Industry and Innovation*, 27(1–2), 52–79.
- Lunney, G. S. Jr (1999), 'Trademark monopolies,' *Emory Law Journal*, 48, 367–488.
- Miric, M., K. J. Boudreau and L. B. Jeppesen (2019), 'Protecting their digital assets: the use of formal & informal appropriability strategies by App developers,' *Research Policy*, 48(8), 103738.
- Montello, S. K. (2020), 'The right to repair and the corporate stranglehold over the consumer: profits over people,' *Tulane Journal of Technology and Intellectual Property*, 22, 165–184.
- Morales, P., M. Flikkema, C. Castaldi and A. P. de Man (2022), 'The effectiveness of appropriation mechanisms for sustainable innovations from small and medium-sized enterprises,' *Journal of Cleaner Production*, 374, 133921.

- Morrin, M. and J. Jacoby (2000), 'Trademark dilution: empirical measures for an elusive concept,' *Journal of Public Policy & Marketing*, 19(2), 265–276.
- Norton Rose Fulbright. (2021), 'Litigation Trends Annual Survey,' <https://www.nortonrosefulbright.com/-/media/files/nrf/nrfweb/knowledge-pdfs/2020-litigation-trends.pdf?la=en-us&revision=bb734ca2-6d8d-48bb-8a69-57867c6da1bf>.
- Orozco, D. and L. Poonamallee (2014), 'The role of ethics in the commercialization of Indigenous knowledge,' *Journal of Business Ethics*, 119(2), 275–286.
- Pagano, U. (2014), 'The crisis of intellectual monopoly capitalism,' *Cambridge Journal of Economics*, 38(6), 1409–1429.
- Pike, A. (2009), 'Geographies of brands and branding,' *Progress in Human Geography*, 33(5), 619–645.
- Porter, M. E. (1979), 'The structure within industries and companies' performance,' *The review of economics and statistics*, 214–227.
- Qian, Y. (2008), 'Impacts of entry by counterfeiters,' *The Quarterly Journal of Economics*, 123(4), 1577–1609.
- Qian, Y. (2014), 'Counterfeiters: foes or friends? How counterfeiters affect sales by product quality tier,' *Management Science*, 60(10), 2381–2400.
- Ramello, G. B. (2006), 'What's in a sign? Trademark law and economic theory,' *Journal of Economic Surveys*, 20(4), 547–565.
- Ramello, G. B. and F. Silva (2006), 'Appropriating signs and meaning: the elusive economics of trademark,' *Industrial and Corporate Change*, 15(6), 937–963.
- Reitzig, M. (2004), 'Strategic management of intellectual property,' *MIT Sloan Management Review*, 45(3), 35–40.
- Rikap, C. (2021), *Capitalism, Power and Innovation: Intellectual Monopoly Capitalism Uncovered*. London, UK: Routledge.
- Rob, R. and A. Fishman (2005), 'Is bigger better? Customer base expansion through word-of-mouth reputation,' *Journal of Political Economy*, 113(5), 1146–1162.
- Rooksby, J. H. (2016), *The Branding of the American Mind: How Universities Capture, Manage, and Monetize Intellectual Property and Why It Matters*. Baltimore, US: John Hopkins University Press.
- Rullani, F., K. Beukel and M. De Angelis (2021), 'Anti-counterfeiting strategy unfolded: a closer look to the case of a large multinational manufacturer,' *Strategic Management Journal*, 42(11), 2084–2103.
- Sáiz, P. and R. Castro (2018), 'Trademarks in branding: legal issues and commercial practices,' *Business History*, 60 (8), 1105–1126.
- Sáiz, P. and R. Castro (eds), (2022), *The Brand and Its History: Trademarks, Branding and National Identity*. New York: Routledge.
- Sayedi, A., K. Jerath and K. Srinivasan (2014), 'Competitive poaching in sponsored search advertising and its strategic impact on traditional advertising,' *Marketing Science*, 33(4), 586–608.
- Schautschick, P. and C. Greenhalgh (2016), 'Empirical studies of trade marks—the existing economic literature,' *Economics of Innovation and New Technology*, 25(4), 358–390.
- Semadeni, M. and B. S. Anderson (2010), 'The follower's dilemma: innovation and imitation in the professional services industry,' *Academy of Management Journal*, 53(5), 1175–1193.
- Simonson, A. (1993), 'How and when do trademarks dilute: a behavioral framework to judge 'likelihood' of dilution,' *The Trademark Reporter*, 83(2), 149–174.
- Squicciarini, M., V. Millot and H. Dernis (2012), 'Universities' trademark patterns and possible determinants,' *Economics of Innovation and New Technology*, 21(5-6), 473–504.
- Sutton, J. (1991), 'Sunk costs and market structure: Price competition, advertising, and the evolution of concentration,' *MIT press*.
- Taylor, C. R. and M. G. Walsh (2002), 'Legal strategies for protecting brands from genericide: recent trends in evidence weighted in court cases,' *Journal of Public Policy & Marketing*, 21(1), 160–167.
- Torrisi, S., A. Gambardella, P. Giuri, D. Harhoff, K. Hoisl and M. Mariani (2016), 'Used, blocking and sleeping patents: Empirical evidence from a large-scale inventor survey,' *Research policy*, 45(7), 1374–1385.
- von Graevenitz, G. (2013), 'Trade mark cluttering—evidence from EU enlargement,' *Oxford Economic Papers*, 65(3), 721–745.
- von Graevenitz, G., S. Graham and A. Myers (2020), 'The problem of earlier rights: evidence from the European trademark system (No. 2020-02),' Centre for Competition Policy, University of East Anglia: Norwich, UK.
- von Graevenitz, G., S. J. Graham and A. F. Myers (2022), 'Distance (still) hampers diffusion of innovations,' *Regional Studies*, 56(2), 227–241.
- Wilkins, M. (1992), 'The neglected intangible asset: the influence of the trade mark on the rise of the modern corporation,' *Business History*, 34(1), 66–95.

- WIPO. (2013), *World intellectual property report 2013 – brands – reputation and image in the global marketplace*. World Intellectual Property Organization: Geneva, Switzerland.
- Zhu, F. and Q. Liu (2018), 'Competing with complementors: an empirical look at Amazon. com,' *Strategic Management Journal*, 39(10), 2618–2642.
- Zolas, N., T. J. Lybbert and P. Bhattacharyya (2017), 'An 'Algorithmic Links with Probabilities' concordance for trademarks with an application towards bilateral IP flows,' *The World Economy*, 40(6), 1184–1213.