

WIPO Economics & Statistics Series

2013

World Intellectual Property Report

Brands - Reputation and Image in the Global Marketplace



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FOREWORD

Brands pervade everyday life. They are an indispensable guide for consumers and a means for companies to build a reputation and an image in the marketplace. A product's brand appeal can be as important for determining competitive success as its quality or price tag. In short, a recognized brand is among the most valuable intangible assets a company can own.

From its humble beginning as an identifier of origin, branding has evolved into a sophisticated business tool employing professionals as diverse as data analysts, lawyers, linguists, graphic artists, psychologists and celebrity actors. Companies in all economic sectors – whether small or large, in more developed or less developed economies – rely on brands when they commercialize their goods and services. Trademarks – the legal incarnation of brands – are by far the most widely used form of registered intellectual property (IP).

Despite this cross-cutting importance, evidence of how branding and trademark use affect economy-wide performance is still limited – especially when compared with the large volume of studies carried out on the patent-innovation nexus. I am therefore pleased that WIPO's second World Intellectual Property Report explores the role that brands play in today's global marketplace. As with our first Report, we aim to explain, clarify and offer fresh insights into the role that the IP system plays in market economies, hoping to facilitate evidence-based policymaking. We do this in three different ways.

First, the Report seeks to set the scene by establishing how branding behavior and trademark use have evolved in recent history, and how they differ across countries. It rethinks how branding investments of firms should be measured and capitalized as an intangible asset, and presents new estimates of the magnitude and growth of such investments. It also explores what lies behind the rapid growth in the number of trademark filings worldwide. Finally, it takes a look at markets for brands; while few data are available to capture their size and growth, it is nonetheless clear that they constitute an increasingly important instrument for companies to broaden the reach of their brands.

Second, the Report takes a closer look at the trademark system, reviewing the foundations of why governments protect trademarks, and how key features of trademark laws and institutions determine competitive outcomes. One of the central messages emerging from this discussion is that the design of the trademark registration process shapes how companies use the trademark system. Policymakers are well advised to promote an institutional framework that carefully balances the interests of applicants, third parties, and the public at large.

Finally, the Report explores how branding affects market competition and innovation. It shows that companies which invest heavily in branding are also often highly innovative. Indeed, branding can be an important complement to product innovation. By generating demand and willingness to pay, branding enables firms to profit from investing in technology and design. Branding thus emerges as an important element of a vibrant innovation ecosystem.

As always, a report of this nature leaves several questions open. For example, while we hope to have made a contribution towards better measuring investments in branding, fully capturing all company activities that further a brand's image and reputation remains a daunting task. In addition, in reviewing institutional approaches towards trademark protection, this Report cannot do full justice to the rich institutional frameworks that have emerged in different parts of the world. However, we hope that this Report lays the foundation for additional research in this area and we look forward to addressing remaining knowledge gaps in our future work and in our continuous dialogue with Member States.

Francis GURRY

Director General

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This Report was developed under the general direction of Francis Gurry (Director General). It was prepared and coordinated by a team led by Carsten Fink (Chief Economist) and comprising Intan Hamdan-Livramento (Economist) and Sacha Wunsch-Vincent (Senior Economist), all from WIPO's Economics and Statistics Division.

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DISCLAIMER TECHNICAL NOTES

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TECHNICAL NOTES

COUNTRY INCOME GROUPS

This Report relies on the World Bank income classification of 2011 to refer to particular country groups. The classification is based on gross national income per capita, and it establishes the following four groups: low-income economies (USD 1,025 or less); lower middle-income economies (USD 1,026 to USD 4,035); upper middle-income economies (USD 4,036 to USD 12,475); and high-income economies (USD 12,476 or more).

More information on this classification is available at http://data.worldbank.org/about/country-classifications.

IP DATA

The majority of the IP data published in this Report are taken from the WIPO Statistics Database, which is primarily based on WIPO's annual IP statistics survey and data compiled by WIPO in processing international applications and registrations filed through the Patent Cooperation Treaty, Madrid, and the Hague systems.

Data are available for download from WIPO's Statistics webpage at: www.wipo.int/ipstats/en. WIPO's annual World Intellectual Property Indicators, freely available on the same webpage, provides additional information on the WIPO Statistics Database.

Every effort has been made to compile IP statistics based on the same definitions, and to ensure international comparability. The data are collected from IP offices using WIPO's harmonized annual IP statistics questionnaires. However, readers must keep in mind that national laws and regulations for filing IP applications or for issuing IP rights, as well as statistical reporting practices, differ across jurisdictions.

Please note that, due to the continual updating of missing data and the revision of historical statistics, data provided in this Report may differ from previously published figures and the data available on WIPO's webpage.

EXECUTIVE SUMMARY

Brands are an important aspect of everyday life. Consumers have strong preferences for which smartphones offer the best functionality, which airlines provide the best service, which fashion accessories garner the most attention from friends and colleagues. Brands help consumers to exercise their preferences in the marketplace. They come with a reputation for quality, functionality, reliability and other attributes, ultimately enabling consumers to exercise choice in their decision-making. Equally important, they come with a certain image – whether for luxury, trendiness or social responsibility – which consumers care about, and which in turn influences which goods and services they purchase.

For companies, in turn, brands are valuable strategic assets and a source of competitive advantage. Accordingly, companies have gained rich experience in determining how their branding choices affect their sales and profits. A large volume of academic studies across a variety of disciplines offer many insights into successful branding practices. Numerous specialized consulting firms stand ready to offer advice – whether on broad questions of branding strategy or narrow questions of advertising effectiveness.

By comparison, evidence on the economy-wide implications of branding is still limited. For example, how much do companies invest in branding relative to other tangible and intangible assets? In which ways are there markets for brands? How do branding choices affect the functioning of market competition? Do branding activities affect the pace of product innovation?

For policymakers, it is important to understand the ways in which branding activities interact with the broader economy. Branding investments affect consumer welfare and, in the long term, can influence the rate of economic growth. In addition, governments have some influence on the branding activities of companies – including through the protection of trademarks. In order to promote consumer choice and maintain vibrant competition in the marketplace, governments need to assess the effectiveness of existing policies and adapt them in light of the evolving needs of the marketplace and new evidence on the behavior of companies and individuals.

This Report endeavors to make an analytical contribution in this respect. It does so in three ways. First, it sets the scene by describing key trends and patterns of branding activity across the globe. Second, it reviews the role of trademarks – the form of intellectual property (IP) that protects the exclusivity of brands – and presents evidence informing trademark policy choices. Finally, it explores how branding activities affect market competition and innovation, thus relating branding to broader company strategies and industrial organization.

THE CHANGING FACE OF BRANDING

The face of branding has changed throughout history. In order to set the scene, Chapter 1 reviews available evidence and assembles new data to explore how the economic contribution of brands has shifted and how branding behavior has evolved.

Globalization and technology have left their mark on branding

While informal forms of branding already played some role in long-distance cross-border trade during the Middle Ages, it was the creation of mass markets during the Industrial Revolution that made branding a core element of economic activity. Overall, three interrelated trends stand out:

- First, globalization and the rise of the Internet have prompted brands to more easily transcend national borders. At the same time, companies in low- and middle-income economies increasingly seek to develop their own brands – or to acquire them from abroad.
- Second, today, rather than just advertising a product, companies work to create and deliver a "brand experience" for the consumer. Companies increasingly have to manage not only product quality, but also their reputation as good global citizens, paying attention to how socially and environmentally responsible they are perceived to be.
- Third, brand communication takes place through a larger number of more fragmented, frequently changing and more interactive channels. In addition, the increasing availability of detailed customer data harbors the promise of more targeted and thus more efficient branding strategies.
- Fourth, branding is no longer the purview of companies alone. Increasingly, individuals, civil society organizations, as well as governmental and intergovernmental organizations are adopting an active approach to branding.

Global branding investments approach half a trillion dollars...

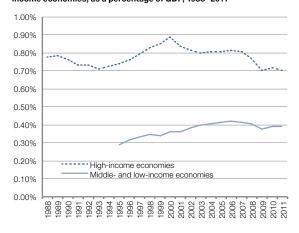
Available data on advertising expenditures reveal that they make up between 0.6 and 1.5 percent of GDP in most high-income countries, and are growing towards similar levels in fast-growing middle-income economies. Globally, advertising expenditures stand at a level that is equivalent to about one-third of global research and development (R&D) expenditures.

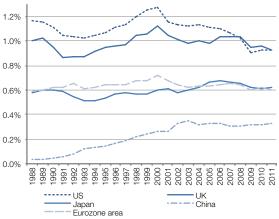
However, advertising expenditures only partially portray the multifaceted nature of modern branding activities. Ideally, one would like to capture all company expenses which contribute to the goodwill that brands command in the marketplace. Using such an approach, the Report estimates that global branding investments by companies stood at USD 466 billion in 2011. Across countries, branding investments correlate closely with the level of economic development. Interestingly, however, rapidly growing middle-income economies such as China and India today invest more in branding than high-income countries did when they were at a comparable stage of development.

Relative to GDP, branding investments are stable or falling for high-income economies, whereas they are increasing for low- and middle-income countries and, especially, for China (see Figure 1).

Figure 1: Branding investments have grown relative to economic output in low- and middle- income economics

Branding investments in high- versus low- and middleincome economies, as a percentage of GDP, 1988- 2011





See Figure 1.6

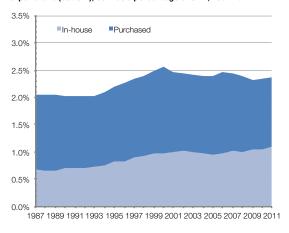
...although more complete data for the United States suggest that this is a lower-bound estimate

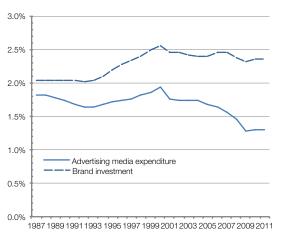
Due to data limitations, the Report's estimate of branding investments worldwide still does not completely capture all branding activities. In particular, they exclude strategic marketing, corporate communications and other boughtin services that contribute to brand perception. More importantly, they also exclude "own-account" branding expenditures.

Available data only allow for a more accurate estimate of branding investments for the United States (US). This estimate points to an overall magnitude of investments that is more than twice as large as the estimate generated by the less complete approach. In addition, instead of trending downward, branding investments have increased since the 1990s (see Figure 2), and stood at USD 340 billion in 2010. In the period from 1987 to 2011, investments in branding accounted for close to a quarter of all intangible asset investments in the US. Notably, they exceeded investments in R&D and design.

Figure 2: Better estimate of branding investments in the US shows higher magnitude and positive trend

Components of new metrics for US business branding investment (top) and US business branding investments versus advertising media expenditure (bottom), both as a percentage of GDP, 1987-2011





See Figure 1.7

Table 1: Brands account for a considerable share of companies' market capitalization

Value of the top 10 brands in absolute terms and as a share of companies' market capitalization, 2013

Interbrand			BrandZ			Brand Finance		
Company	Brand value 2013 (in billion USD)	Brand value as a percentage of market capitalization	Company	Brand value 2013 (in billion USD)	Brand value as a percentage of market capitalization	Company	Brand value 2013 (in billion USD)	Brand value as a percentage of market capitalization
Apple	98.3	58.0%	Apple	185.1	41%	Apple	87.3	19%
Google	93.3	20.7%	Google	113.7	39%	Samsung	58.8	32%
Coca-Cola	79.2	39.3%	IBM	112.5	56%	Google	52.1	18%
IBM	78.8	26.9%	McDonald's	90.3	94%	Microsoft	45.5	18%
Microsoft	59.6	22.9%	Coca-Cola	78.4	46%	Wal-Mart	42.3	18%
General Electric	47	19.9%	AT&T	75.5	43%	IBM	37.7	19%
McDonald's	42	43.9%	Microsoft	69.8	27%	General Electric	37.2	16%
Samsung	39.6	35.2%	Marlboro	69.4	NA	Amazon	36.8	27%
Intel	37.3	20.0%	Visa	56.1	49%	Coca-Cola	34.2	20%
Toyota	35.4	17.8%	China Mobile	55.4	25%	Verizon	30.7	23%
Average	61	30.5%		91	46.7%		46	21%

See Table 1.1

Some brands offer considerable value in the marketplace

Private sector estimates of the market value of different brands point to the considerable commercial weight of selected brands. The average value of the top 10 brands in three widely used brand rankings ranges from USD 46 billion to USD 91 billion. In addition, the total value of the top 100 global brands grew by between 19 and 24 percent in the period 2008 to 2013, despite the global economic downturn. The estimated brand values account for a significant share of companies market capitalization (see Table 1).

Among the top 100 brands, the technology sector – including brands such as Apple, Google, IBM, Intel, Microsoft and Samsung – dominates all three rankings. While most top brands are from high-income economies, brands from fast-growing middle-income economies are gaining some ground. In particular, the share of middle-income economies in the total value of the top 500 brands in the Brand Finance ranking increased from 6 percent to 9 percent between 2009 and 2013.

The demand for trademarks has grown substantially – in absolute terms and in proportion to economic activity...

Trademarks are the most widely used form of registered IP throughout the world. In particular, many low- and middle-income countries see companies intensively filing for trademarks, even if they make comparatively less use of other IP forms.

Over the course of the last four decades, the demand for trademarks has intensified to unprecedented levels. After a slow start in the early 20st century, trademark activity accelerated significantly in the mid-1970s at the United States Patent and Trademark Office (USPTO) and even earlier at the Japanese Patent Office (JPO); other IP offices followed suit in the 1980s. Middle-income economies, in turn, started to experience a rapid rise in trademark filings in the late 1980s and 1990s. In most economies, the number of trademark filings correlates with the business cycle; accordingly, there were sharp declines in the number of filings both following the dotcom boom in the late 1990s and following the onset of the most recent financial crisis. By 2001, China's trademark office had become the top recipient of trademark filings, a position China was not to gain in patent filings until 2011.

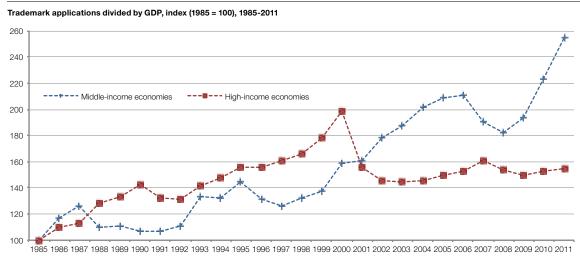


Figure 3: Most countries have seen use of the trademark system intensify

See Figure 1.12

For both high-income and middle-income economies, the use of trademarks relative to GDP increased considerably between 1985 and 2011. While high-income economies increased their trademark filing intensity by a factor of 1.6, middle-income economies increased it by a factor of 2.6 during this period (see Figure 3).

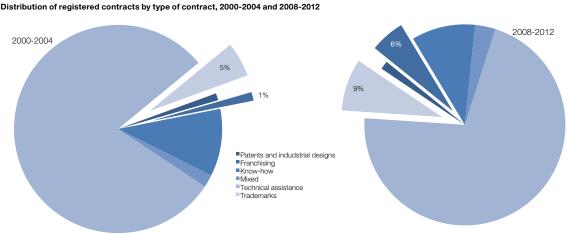
...driven by a multitude of factors

The Report identifies a multitude of factors that account for the growth in trademark filings:

- Economic growth has come along with the creation of new companies and the introduction of new goods and services, thus intensifying demand for trademarks.
- The shift towards services that are increasingly provided competitively – has prompted the rapidly growing use of trademarks in the service sector.

- The globalization of economic activity has prompted trademark holders to take their brands to more and more places. This includes trademark holders from low- and middle-income countries, who account for an increasing proportion of non-resident filings throughout the world.
- The emergence of the Internet has spurred trademark filings in a number of ways. It has spearheaded the creation of new firms, business models and services. The digital marketplace has increased the importance of brand reputation, as consumers engage in transactions at a distance. At the same time, brand owners face online sales of counterfeit goods and other forms of misuse of their trademarks, increasing their need for legal protection.

Figure 4: Trademark licenses and franchises account for a growing share of registered technology contracts in Brazil



See Figure 1.22

The precise empirical importance of these factors is not yet well understood. Other factors – such as increased strategic use of the trademark system and regulatory changes – may well have contributed to the rapid growth in filings.

Markets for brands enable companies to enlarge the reach of their brands

Markets for brands play an important but underappreciated economic role. Similar to patents, brands are increasingly licensed, bought and sold at the national and international levels. Markets for brands allow companies to diversify their business and to expand into additional product categories. In addition, they enable companies to access competences outside their own core strategic assets, and to generate new revenues without substantial investments into building or acquiring additional knowhow or manufacturing capability.

The limited and fragmented data points that are available suggest that the entertainment and sports sectors account for the greatest number of trademark licenses – including, for example, the licensing of cartoon characters and sport clubs to manufacturers of toys, food products, home decor, clothes and footwear. Other top licensors operate in the apparel, automotive, and consumer electronics sectors.

Franchising is an even bigger market – with a high level of activity in almost all countries. Europe accounts for the largest number of franchising brands, whereas Asia leads the field in the number of franchising establishments. Markets for franchises are, however, largely domestic – i.e., brand owners and franchisees reside in the same country.

While generally growing, the number of cross-border trademark licensing and franchising transactions seems modest when compared with other IP-based transactions. Receipts related to software, copyright and industrial processes account for the bulk of IP-related cross-border trade. This pattern also appears to hold in middle-income countries. For example, in Brazil – one of the few countries for which detailed data are available – royalty payments are mostly associated with know-how and technical assistance services, even if the share of trademark licenses and franchise agreements has increased over time (see Figure 4).

THE ECONOMICS OF TRADEMARKS

Against the background of these trends, Chapter 2 takes a closer look at the economics of the trademark system. It explores the reasons why governments protect trademarks and it also discusses the various choices facing policymakers in this area.

Trademarks reduce search costs

Economic research has shown that brands play an important role in bridging so-called asymmetries of information between producers and consumers. In many modern markets, product offerings differ across a wide range of quality characteristics. Consumers, in turn, cannot always discern these characteristics at the moment of purchase; they spend time and money researching different offerings before deciding which product to buy. Brand reputation helps consumers to reduce these search costs. It enables them to draw on their past experience and other information about products – such as advertisements and third party consumer reviews. However, the reputation mechanism only works if consumers are confident that they will purchase what they intend to purchase. The trademark system provides the legal framework underpinning this confidence. It does so by granting exclusive rights to names, signs and other identifiers in commerce. In addition, by employing trademarks, producers and sellers create concise identifiers for specific goods and services, thereby improving communication about those goods and services.

By lowering search costs, trademarks create incentives for companies to invest in higher quality goods and services: producers will be confident that consumers are able to identify higher quality offerings in the marketplace and not confuse them with lower quality ones. In short, where consumers are uncertain about the quality of the products they are considering buying, trademarks play an important role in preventing market failure.

Indeed, the market-enabling role of trademarks becomes evident when exploring the impact of counterfeiting activity. Where consumers are unable to distinguish fake goods from genuine goods, they can no longer rely on the reputation mechanism to guide their purchases. Producers, in turn, have a reduced incentive to invest in product differentiation, thus undermining product quality and diversity. Society is bound to be worse off.

Notwithstanding this general conclusion, there are cases of consumers purchasing counterfeit products fully aware that their purchases are not the genuine products. The welfare effects of this type of "non-deceptive" counterfeiting activity are more complex, as consumers of fake goods may derive image benefits from pretending that they own the genuine brand. Evidence suggests that the precise nature of these image benefits differs across products, and that they depend on consumer attitudes and social context, thus making few generalizations possible.

The design of the trademark registration process matters

As an economic principle, protecting trademarks generates little controversy. However, designing trademark laws and institutions entails choices that determine how effectively the system fulfills its market-enabling role. Over time, different approaches to trademark protection have emerged in different countries. New business models, the increased sophistication of branding, and the evolving nature of the marketplace constantly challenge existing practices and prompt new or refined approaches.

One key institutional choice concerns the design of the trademark registration process. The registration of a trademark is usually the most important vehicle for securing exclusive rights to a brand. The typical tasks of trademark offices consist of examining the applications they receive for registration, publishing those applications, considering possible third party oppositions against them, registering successful applications, and maintaining the register as the official record of trademark ownership.

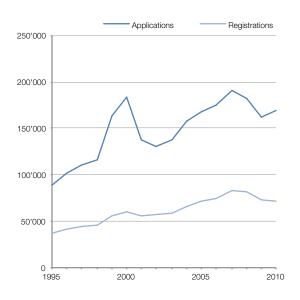
In performing these tasks, trademark offices need to promote accessibility to the trademark system - especially for smaller, more resource-constrained applicants. In addition, they need to ensure transparency and legal certainty, while balancing the interests of right holders and those of third parties. More recently, questions have arisen concerning the extent to which trademark offices should seek to limit the possible "cluttering" of their trademark registers; "cluttered" registers risk reducing the space of names and other signs available for new trademarks. While the precise extent of cluttered registers and their costs are uncertain, there is some evidence that they negatively affect at least some market participants. However, this question merits further study – especially in light of the rapid increase in the number of trademarks filed over the past decades, as described above.

One important question in relation to the design of the registration process is to what extent the registration of a trademark application should be conditional on the applicant actually using the trademark - notably, by selling products bearing the trademark in the marketplace. Some countries do not require any use of a trademark. Other offices – such as the European Union's Office for Harmonization in the Internal Market (OHIM) - require such use, but do not require the applicant to demonstrate use during the registration process. Yet again others are stricter, and require that applicants furnish proof of use before registering a trademark. For example, at the USPTO, applicants can file an "intent-to-use" application whereby they need to establish use within three years of the office approving the application; only after they have done so will the office actually register the application. Interestingly, more than half of the intent-to-use trademarks filed at the USPTO do not result in a registration (see Figure 5).

Figure 5: Intentions to use often do not result in actual use

Applications and registrations for intent-to-use trademarks at the USPTO, by filing year, 1995-2010

Intent-to-use applications



See Figure 2.3

Similarly, research which compares common trademark applications at OHIM and the USPTO suggests that many applications that see registration at the former office, do not do so at the latter office because applicants fail to establish use. In other words, the implementation of the use requirement has an important bearing on registration outcomes.

A second important design question is to what extent offices examine whether new applications pose a conflict with earlier trademarks in different ownership - in particular, whether their co-existence would likely cause confusion in the marketplace. One argument against examining all incoming trademark applications on such "relative grounds" is that it requires considerable resources; only a minority of new applications raise a conflict with a prior trademark, and those cases may be best resolved through opposition proceedings. An argument in favor of relative grounds examination is that not all trademark owners - especially small businesses - have the capacity to monitor and, if necessary, oppose conflicting new applications; more generally, relative grounds examination contributes to greater legal certainty. While less robust compared to the evidence on the use requirement, studies suggest that relative grounds examination matters: stronger relative grounds examination is associated with fewer registrations and fewer opposition proceedings.

At the international level, several instruments that facilitate the administrative process of obtaining trademark protection in several countries have emerged - notably the socalled Madrid registration system. One long-standing and challenging area of international cooperation concerns the protection of well-known trademarks - including household names such as Coca-Cola, Mercedes, and Sony that are recognized by a substantial part of the public. National laws provide special treatment for such trademarks, affording them protection even when they are not registered in a particular jurisdiction. However, what precisely qualifies as "well known" is context specific. Offices and courts consider a range of factors in order to determine whether a particular trademark is well known in the domestic context. One of those factors may be the extent to which a particular trademark is well known abroad, as a trademark's recognition easily transcends national borders. International cooperation can thus be helpful in providing information that can assist relevant authorities to evaluate a trademark's international reach. At a minimum, this can be done by providing information on where a trademark is registered and for how long. A more ambitious form of cooperation would be to establish a framework for exchanging information on well-known trademarks, possibly resulting in a directory of such trademarks.

BRANDING, INNOVATION, AND COMPETITION

Having focused on the function of the trademark system, Chapter 3 takes a wider perspective and explores how companies' branding strategies interact with their innovation strategies and how they affect market competition.

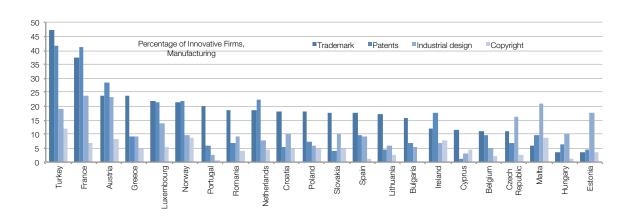
Branding generally complements innovation...

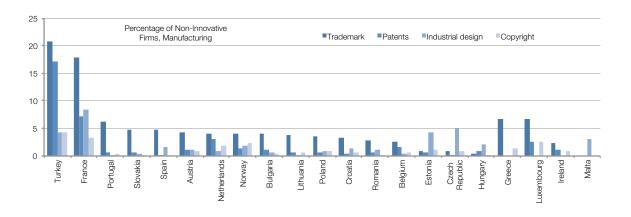
Through branding, companies can increase the demand for their products and enhance the willingness of consumers to pay for them. In particular, advertising activities raise awareness of a company's products among interested consumers. Strong brand reputation - and at the extreme, outright brand loyalty – makes consumers willing to accept higher prices, as switching to a competing brand would entail additional search costs. Moreover, branding enables firms to associate an image with their offerings. For many products – especially luxury goods - image is an important product feature in and of itself that consumers may care about when deciding which offering to purchase. Through image-focused branding, companies can carve out a niche and can generate a higher willingness to pay among consumers whose preferences align with the product's image.

Branding can therefore be an important source of market power from which companies can benefit when they innovate. In particular, evidence has shown that branding is one of the most important mechanisms for firms to secure returns on investments in R&D. Accordingly, firms that invest more in innovation also invest more in branding. Similarly, innovative firms that most frequently rely on patents, industrial designs and copyright also most frequently rely on trademarks (see Figure 6).

Figure 6: Innovative firms rely most frequently on trademarks

Manufacturing firms using different IP instruments, as a percentage of all manufacturing firms





See Figure 3.2

This evidence suggests that branding generally complements innovation. How precisely branding activities support innovation investments depends, however, on a number of product-specific and industry-specific characteristics. One such characteristic is whether consumers can immediately ascertain a product's innovative features upon purchase, or whether they need to experience the product before assessing how useful those features are. Research has shown that advertising mainly plays an informative role in the former case, whereas it plays a persuasive role in the latter case. To the extent that advertising leads to repeat purchases in

the latter case, companies have a stronger motive to invest in advertising. Indeed, some studies have argued that, for this reason, the highest quality products should attract the most advertising.

...even if at times they can be substitutes

While evidence generally supports a complementary relationship between branding and advertising, in certain situations companies may find it more profitable to differentiate themselves through image rather than through product innovation. Much depends on market-specific circumstances, such as the importance of product image

for consumers and the scope for technological innovation. For example, companies are more likely to compete on the basis of brand image rather than product innovation for mature and inexpensive convenience goods, such as ready-to-eat cereals, soft drinks and chocolate bars.

Occasionally, strong brands can raise competition concerns

As highlighted above, brands can be an important source of market power. In most cases, this does not raise any concerns about brand owners behaving in an anticompetitive manner. Consumers generally benefit from the reputation of brands, even if it makes them less price sensitive. Similarly, trademark exclusivity generally promotes orderly competition in the marketplace by preventing consumer confusion. In particular, trademarks only prevent one company from selling its product under another company's name; it does not prevent companies from selling otherwise identical products.

However, in certain situations, strong brands can create high barriers to market entry, as new competitors may not be able to bear the high advertising costs of inducing consumers to switch to their products. There are two particular circumstances where competition authorities have assessed the competitive consequences of strong brands and, at times, have intervened:

- Mergers and acquisitions (M&As) can lead to the concentration of brands in the hands of one or a few companies, posing the risk of collusive behavior and the formation of dominant market positions.
- When licensing their trademarks, owners of strong brands may impose certain restrictions on their licensees – such as resale price maintenance or limits on carrying the products of competitors – that can unduly extend the brand owners' market power.

CONCLUSION

The evidence presented in this Report is intended to offer insights into the economy-wide role of branding. The Report highlights that branding has become a central strategic asset for companies; it explores how the trademark system supports consumer choice and orderly competition in the marketplace; and it explains why branding is a key element of a vibrant innovation ecosystem. Unquestionably, certain trends in branding strategy and trademark use are better understood than others. The Report points to a number of areas where more statistical data and new investigations could offer fresh insights, and thus lays the foundation for future research work.

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CHAPTER 1 BRANDING IN THE GLOBAL ECONOMY

Introduction

Brands are an important aspect of everyday life. Consumers tend to have strong preferences for which smartphones offers the best functionality, which airlines provide the best service, which fashion accessories garner the most attention from friends and colleagues. Brands help consumers to exercise their preferences in the marketplace. They come with a reputation for quality, functionality, reliability and other attributes, ultimately enabling consumers to exercise choice in their decision-making. Equally important, they come with a certain image – whether for luxury, trendiness or social responsibility – which consumers care about, and which in turn influences decision-making on which goods and services consumers purchase.

For companies, in turn, brands and trademarks have become strategic assets and a source of competitive advantage (see Box 1.1 for the relationship between brands and trademarks). Successful branding campaigns generate demand and willingness to pay, helping to increase profit margins, as well as increase companies' market share and value. Brand leaders thus spend considerable resources on maintaining their brand values. Similarly, companies without powerful brands invest heavily in order to create consumer goodwill towards their brands. Moreover, markets for brands have emerged, thus enabling brands to be licensed, franchised or acquired.

Despite their importance to consumers and businesses, relatively little is known about the economy-wide significance and role of branding activities. How much do companies invest in branding, and what proportion of company value can be accounted for by brand goodwill? What lies behind the increase in the number of trademark filings worldwide which protect brands? What are markets for brands, and is there any way of measuring these markets?

This chapter sets the scene for the 2013 edition of the *World Intellectual Property Report* by offering a perspective on key trends and cross-country patterns of branding behavior and trademark use. The chapter first discusses how brands and trademarks came into existence, how they have evolved, and what new developments stand out (Section 1.1). It then sheds light on the importance of brands to companies, both in terms of investment and in terms of their contribution to company value (Section 1.2). Finally, it explores what accounts for the surge in trademark filings worldwide (Section 1.3) and provides some insights into the evolving nature of markets for brands (Section 1.4).

In relation to terminology, it is important to point out that this Report employs the term "trademark" when referring to the specific instrument of intellectual property (IP) protection; the term "brand" is employed for more general discussions on the use of product and business identifiers in the marketplace. While there are no unique definitions of these terms, this approach appears to be in line with their ordinary meaning, as described in Box 1.1.

Box 1.1: What is a brand? What is a trademark? Is there a difference?

Everyday discourse often treats the English terms "brand" and "trademark" as synonyms. Dictionary definitions of these two words confirm their close relation, but point to some differences.¹

The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), as part of the agreement establishing the World Trade Organization (WTO), defines a trademark as a "(a)ny sign, or any combination of signs, capable of distinguishing the goods or services of one undertaking from those of other undertakings, shall be capable of constituting a trademark".²

The American Marketing Association states that "a brand is a name, term, sign, symbol or a combination of them, intended to identify the goods and services of one seller or a group of sellers and to differentiate them from their competitors", stressing the similarity of both terms. In their seminal treatise on the economics of trademarks, Landes and Posner (1987) also indicate that trademarks and brand names are "rough synonyms".

Subsequent economic research clarified the distinction between a trademark as a legal instrument and a brand as a business tool. Legal scholars have similarly described trademarks as the legal anchor for the use of the commercial functions of brands.³ Indeed, often a brand is protected by several trademarks, and the management of brands inevitably involves trademark law.⁴

The marketing literature and the business community in turn stress the distinct significance of brands. In particular, they emphasize the image and reputational value of brands. To the business community and to marketing scholars, a brand is clearly more than a trademark alone. Brands are not merely viewed as instruments for differentiation, but relate to consumer perceptions, determining brand loyalty, brand awareness and brand associations.5 Urwin et al (2008), for instance, defined a brand as "a 'reputational asset' which has been 'developed over time so as to embrace a set of values and attributes', resulting in a 'powerfully held set of beliefs by the consumer' and a range of other stakeholders". Brand value thus comprises the collection of past experiences and perceptions that the enterprise stands for, including for employees, customers, investors, suppliers and society as a whole. Brands thus distil the meaning and value of other intangible assets of the company into one meaningful identity.6

As a consequence, multiple competencies and business functions at the company level – as opposed to marketing and advertising alone – contribute to brand value and brand development (see also Section 1.2.1). Similarly, not only trademarks but also other IP forms, such as industrial designs, patents, copyrights and others, contribute to brand value.

- 1 The Merriam-Webster Dictionary defines
 a "brand" as, among other things:
 "3 a (1): a mark made by burning with a hot iron to attest
 manufacture or quality or to designate ownership (2): a
 printed mark made for similar purposes: trademark
 4a: a class of goods identified by name as the
 product of a single firm or manufacturer: make
 b: a characteristic or distinctive
 kind: 'a lively brand of theater'
 c: brand name"
 It defines a "trademark" as:
 "1: a device (as a word) pointing distinctly to the
 origin or ownership of merchandise to which it
 is applied and legally reserved to the exclusive
 use of the owner as maker or seller
- 2: a distinguishing characteristic or feature firmly associated with a person or thing 'wearing his trademark bow tie and derby hat'".
- 2 TRIPS, Section 2, Art. 15. See also (WIPO, 1993).
- 3 See Phillips (2003).
- 4 See, for example, Sullivan (2001) and Lemper (2012).
- 5 See Faust and Eilertson (1994), Aaker (1995), and Moore (2012).
- 6 Moore (2012) notes that a brand collects, assembles, associates and articulates the meaning from other intangibles of the firm "into a highly faceted and nuanced entity and complex identity that distils meaning and creates brand equity".

1.1.

TRADEMARKS AND ADVERTISING THROUGH HISTORY, AND RECENT TRENDS

Trademarks and the advertising of brands have a long, related history and have exerted influence on the way reputation and image are built. Trademarks satisfy the need for producers to identify their products to the consumer, whereas advertising satisfies the desire of producers to make their products valued and demanded by consumers.

The use of distinctive signs existed in the ancient world, even when goods or services were acquired from local producers – and long before the rise of a formal, legally grounded trademark system. In fact, the use of distinctive, visual marks can be traced back thousands of years; they can be found on pottery, porcelain and swords dating from ancient Greece and the period of the Roman Empire, and also on goods produced by Chinese and Indian craftsmen in ancient times.

In addition to these early examples of the use of visual marks, one can identify three later timelines in history when distinctive marks were used extensively. The first of these was the Middle Ages, which saw the development of more intense long-distance cross-border trade. The second was the Industrial Revolution, which saw the creation of mass markets and the rise of advertising. The third timeline is today's globalized economy, spurred by a brand-driven market and the Internet.

In the Middle Ages, the emergence of international trading networks, more complex distribution channels and intermediaries created the need to verify quality and to build trust through the use of signs associated with particular producers. In guilds in the Middle Ages, craftsmen and merchants affixed unique, observable traits to goods, in order to distinguish their work from the makers of low-quality goods, and also in order to maintain trust in the guilds. In the absence of a formal trademark system, this allowed guilds to prevent the sale of low-quality products and to build a reputation for the guilds. Good reputations assuaged consumers' fears about purchasing products with hidden defects, and encouraged consumption of manufactured merchandise. The cost to counterfeiters of copying products increased.

With industrialization, trademarks started to play an even more important economic role. While industrialization delivered benefits as a result of specialization and economies of scale, it also meant that consumers became even more distanced from producers than had been the case in Medieval times. With the addition of many more steps between producers and sellers, the greater transactional distance created increased incentives for producer identification. Gradually, the modern trademark system emerged; it contained provisions such as making it illegal to copy somebody else's trademark, and it also focused on preventing fraud. During the 19th century and early 20th century - by which time 'marks of origin' had become a well-established practice - trademark laws were passed in a number of European countries and also in the United States of America (US).9

⁷ For a summary of the history of trademarks see WIPO (1993), Ono (1999), Bittlingmayer (2008), Richardson (2008), and Corrado and Hao (2013).

⁸ See WIPO (1993 and 2004), and Richardson (2008).

⁹ See WIPO (1993) and Ono (1999).

The history of advertising and other promotional activities to increase brand awareness is an equally ancient practice, and there is evidence that the Babylonians were using advertising as early as 3000 BC. Throughout history, advertising has been highly influenced by innovations in communication technologies – from the printing press to radio, to TV and to the Internet. In particular, the rise of advertising has been spurred by the rise of the printed press and the advent of inexpensive mass-circulation newspapers.

The advertising industry, as we know it today, did not emerge until the mid-18th century, when the Industrial Revolution got under way. Large quantities of goods produced and stored in warehouses were sold as a result of creating consumer demand. Some of the most notable trademarks and brands, such as Bass Pale Ale (UK, 1840), Louis Vuitton (France, 1854), Nokia (Finland, 1871), Lucky Strike (US, 1871), Lipton (United Kingdom (UK), 1871), and Coca-Cola (US, 1886) were developed during this period and have weathered the ups and downs of various economic cycles until this day.¹⁰ In particular, the tobacco industry and the pharmaceutical industry, as well as companies manufacturing consumer products, began the practice of advertising their products during the period of the Industrial Revolution.

The 20th century saw another growth spurt in advertising, helped by the expansion of radio broadcasting from the 1920s onwards; by the advent of television broadcasting in the 1940s, and, later, the proliferation of the Internet in the late 20th century.

In today's interconnected global economy, with rising world incomes, trademarks and brands are reaching new levels of omnipresence. Global advertising expenditures are steadily rising, in part driven by the uptake in middle-income economies. New channels for communication and marketing are flourishing.

Since the beginning of the 21st century, a number of trends have influenced branding strategies worldwide. When it comes to the business world, three major, interrelated developments are worth highlighting.

First, today's companies are adopting a more holistic marketing approach than was used in the past. Rather than just advertising a product, companies work to create and deliver a "brand experience" for the consumer, while simultaneously maintaining active relationships with the companies' diverse networks and communities. Increasingly, companies have to manage not only to maintain product quality but also to maintain their reputation and conduct as good global citizens, paying attention to their image in fields such as social and environmental responsibility. The rise of independent labels for environmental standards, energy efficiency, fair trade, and other quality seals based on conformity assessments and tests - coupled with companies' aspiration to co-brand their company or product with such attributes - has gained importance.

Second, globalization and the rise of multinational companies have triggered increased internationalization of brands. Companies aim to develop brand strategies with global reach while simultaneously trying to maintain local context that is attuned to domestic culture. While some companies, notably Internet companies, are born global, the majority of companies invest in building brand image and reputation regionally or worldwide. In particular, companies from middle- and low-income economies work at developing brands that are appreciated both at home and abroad. Brands emanating from high-income economies in turn adapt to consumers in middle- and low-income economies that have good prospects for future economic growth.

- 10 See Corrado and Hao (2013).
- 11 See Nayaradou (2006).

Third, communication channels have evolved from a small number of standardized, one-way communication methods to a large number of more fragmented, constantly changing, more interactive channels. Media diversification, which began in the 1960s, initiated this trend. Arguably, however, the biggest changes are yet to come, due to the Internet and social media, which will result in an increasing number of digital interactions. On the one hand, the increasing availability of detailed customer data harbors the promise of more targeted, and thus more efficient, branding strategies. New advertising possibilities - such as viral videos, banners, advertorials, sponsored websites, branded chat rooms and others - have emerged. The "distance" between consumer and producer – introduced as consequence of new production and distribution systems during the 19th and 20th century - can be bridged once again through the creation of new communications technologies. The latter enable the producer and the consumer to interact with each other - just as they did in the 18th century, when producers and consumers frequently lived in the same village.

The advent of modern communications technologies not-withstanding, reputation is much harder to control today than it was in the past; it can be earned or lost much more quickly. Even without the Internet, there are numerous examples and a great deal of evidence showing how fast a brand's value can be destroyed, either due to neglect on part of the brand holder or as a result of external circumstances beyond the control of the company. The new online and instantaneous communications environment is just adding another layer of complexity. Managing online communities and associated "word-of-mouth" on social media, blogs, comment threads and reviews is indeed proving to be a challenge for companies and others who are managing their reputation and image online.¹²

As result of the three trends outlined above, companies are now more actively involved in looking after their brand portfolios and how to leverage their brands.

While some of the most well-known brands are more than a century old, and have demonstrated considerable staying power (see Section 1.2.2), arguably, the speed of the rise and eventual decline of brands has also increased.

Coupled with the pressure to manufacture goods in ever-shorter production cycles, and to offer ever-greater product diversity, companies have to manage their brands carefully. They have to decide what products to introduce under a particular brand name, how to extend the brand name to other product categories, if and how to co-brand their product with another company, and whether to acquire, sell or license brands (see Section 1.4).

In addition, some overarching trends must be emphasized in order understand branding trends and strategies. One important issue is the fact that branding is no longer the purview of companies alone. Increasingly, individuals and civil society organizations, such as charities; the world of sports and entertainment (e.g. celebrities), and governmental or inter-governmental organizations are adopting an active approach to branding.

As part of this phenomenon, cities, regions and nations are more actively seeking to develop branding strategies (see Box 1.2). Emphasis is placed on the country origin or local origin of products – often influenced by particular local skills or traditions. As part of this development, one can also witness an increasing trend and interest in the use of collectively-owned brands in branding strategies.

For example, geographical indications (GIs) (see Box 2.2 in Chapter 2) can be described in a non-legal sense as collectively-owned brands. In particular, the producers of agricultural products, food products, wines and spirits, as well as the producers of craft products, hope to denote the origin and the quality of products by the use of a GI to garner particular attention and a greater willingness by consumers to pay a premium for such products. While traditionally the use of GIs was commonplace in some European countries, increasingly, GIs are being used in non-European countries, with the establishment of associations focused on locally produced coffee, alcoholic beverages or local handcrafts, just to name a few examples.¹³

1.2.

INCREASED IMPORTANCE OF BRANDS TO COMPANIES OPERATING IN THE GLOBAL ECONOMY

Today, investments in intangible assets often exceed investments in physical assets at the company level and at the country level.¹⁴ These intangibles have become a primary source of value creation and wealth.

The importance of brands – and thus trademarks – as intangible assets is universally acknowledged by both business practitioners and the marketing literature.¹⁵ Research provides evidence for the positive impact of strong brands and customer loyalty on company value, revenues and profits.¹⁶ Good reputation and image builds customer loyalty and the ability to garner a price premium. In addition, a company can use the reputational advantage of a brand not only to extract a premium price, but also to grow market share – and therefore its revenue stream - at the expense of its competitors.¹⁷ The associated additional earnings can help to finance long-term investments, including research and development (R&D) (see Chapter 3).18 Furthermore, marketing is often an integral part of the innovation process and how new products are introduced to the market. Additionally, strong brands can play a key role in helping companies to both attract and retain talented employees.

- 14 See Box 1.1 in WIPO (2011a) based on Corrado *et al* (2006), and Hulten and Isaksson (2007).
- 15 See Kallapur (2004), Urwin *et al* (2008), Morgan and Rego (2009), Day (2011), Yarbrough *et al* (2011), Bharadwaj (2011).
- 16 See Simon and Sullivan (1993), Cobb-Walgren (1995),
 Askenazy et al (2010), and Keller (2011). Economists
 have also found a positive correlation between trademark
 use and firm value, but the causality is difficult to
 establish. Greenhalgh and Schautschick (2013) found
 that higher trademark intensity has some positive
 associations with productivity growth in services, but
 the results are relatively weak for manufacturing firms.
- 17 See Kashani *et al* (2000).
- 18 See Askenazy *et al* (2010).

Brands, reputation and image also matter in increasingly global production networks, and in international trade. In global value chains, production processes have disintegrated and have been dispersed across countries.¹⁹ Often, branded companies or large branded retailers with a known trademark play the lead role in sourcing from decentralized networks of independent suppliers, defining product and process specifications and standards, and capturing the maximum profits along the way.²⁰ The ability to control high value-added activities in global value chains often rests in upstream activities such as concept development, R&D, or the manufacture of key parts and components; alternatively, it may rest in certain downstream activities such as marketing, branding or customer service. These upstream and downstream activities are characterized by high barriers to entry; moreover, they command high returns - usually reaped by 'lead companies' in high-income countries.21 The actual physical production of goods is often left to globally operated turnkey suppliers with low margins and large production volumes.22

In certain sectors, such as the automotive industry, food industry, computer industry, textile industry and others, building a strong brand has become an important element in the process of moving up the value chain in the globalized economy. In particular, companies in fast-growing, middle-income economies aim to make the leap from contract manufacturing and low-value tangible production activities to becoming own-brand producers of innovative products.²³

- 19 See Feenstra (1998), Koopman et al (2008), OECD and Inno-Tec (2009), Lanz et al (2011), WTO and IDE-JETRO (2011) and IMF (2012).
- 20 See Feenstra (1998) and UNESCAP (2007).
- 21 See Kaplinsky (2000), Cattaneo *et al* (2010), Draper *et al* (2012), and OECD (2013b).
- 22 See Humphrey and Schmitz (2001), Wortmann (2004), UNESCAP (2007), and OFCD and Inno-Tec (2009)
- 23 See Humphrey and Schmitz (2001), Chattopadhyay and Batra (2012), and Kumar and Steenkamp (2013).

Countries seem more aware today of the leveraging effect of a strong national brand, and many have been working on developing strong 'nation brands'.²⁴ Indeed, the literature shows that consumers respond to the country of origin of a brand and the perceptions associated with it.25 A country of origin can therefore be a key factor in a decision to purchase a product from a particular country, as the country of incorporation forms part of a company's image. In this context, richer and poorer economies alike are keen to improve their reputation and image (see Box 1.2). Emerging companies strive to establish brands that are valued at home and abroad, competing against strong established brands. In low- and middle-income economies, brands coming from highincome countries are often preferred to local brands, a phenomenon that is linked not only to perceived quality but also to social status.26

Box 1.2: Nation branding – old story or new trend? What impact does it have?

Nations have always created their own brands – by default or deliberately – directly and indirectly, including through diplomacy, their leaders, their history and their people.²⁷

Throughout the past decade, however, countries seem to be much more aware of the leveraging power of a strong national brand. Just as companies manage their brands, countries too are increasingly involved in promoting their "brand" – and in a more active and deliberate fashion. ²⁸ Promoting tourism was – and often still is – the main objective of these national branding strategies. Indeed, many of these activities started at the subnational level – as exemplified in the "I love New York" campaign in 1977. Increasingly, however, the idea is to promote a strong nation brand with a certain quality image and reputation, in order to positively influence broader economic issues such as foreign direct investment, trade and the presence of skilled workers. As part of this strategy, since the late 1990s, many countries have succeeded in creating a distinctive country of origin sign (see Figure 1.1). ²⁹

- 24 Nation branding can be defined as "a compendium of discourses and practices aimed at reconstituting nationhood through marketing and branding paradigms", according to Kenava (2011).
- 25 See Bilkey and Nes (1982), and Han and Terpstra (1988).
- 26 See Batra *et al* (2000).
- 27 See Loo and Davies, (2006).
- 28 See Anholt (2007) and Fan (2010).
- 29 See the protection of country names and examples (WIPO, 2013b).

Figure 1.1: Nations are adopting distinctive logos and campaigns













Note: The logos featured here are for illustrative purposes only. Source: National sources on the Internet.

In addition, countries have been undertaking more comprehensive branding strategies in order to improve perceptions that consumers, business partners and investors may have about producers who are based in the particular country in question. Several rankings which measure the value of a nation's brand over time have emerged. Such rankings include the Anholt-GfK Nation Brands Index (NBI) and the Country Brand Index.³⁰

More work is needed, however, in order to assess the economic case, and thus the efficacy of subnational or national branding strategies in terms of growth, exports, employment and other economic variables.

Branding investment (i.e. the input) is leading to brand value and equity (i.e. the output). Both issues are discussed in turn in the next two sections of the Report.

30 The Anholt-GfK Roper Nation Brands Index measures the image of 50 economies. See www.simonanholt.com. The FutureBrand Country Brand Index measures the image of 118 economies. See www.futurebrand.com.

1.2.1

INCREASED INVESTMENT IN BRANDS

If brands are so central, how much are companies investing in brands and what contribution are brands making to economic growth? While the question seems straightforward, offering a reply, backed up with solid statistical evidence, is not possible for two reasons.

First, it is difficult to clearly single out all the diverse efforts that companies make in order to build a strong brand and an associated trademark. By simply quantifying companies' advertising budgets, it is not possible to capture the full range of a company's investments that are specifically aimed at maintaining or creating a strong brand. High spending on advertising and marketing alone, without achieving customer quality advantage or sufficient scale, often results in low returns on investment.31 Brands are reputational assets - a promise to consumers - which largely depend on investment and the excellence of the company in all strategic business functions (see Box 1.1).32 As such, brands are said to "distill the value of other intangible assets into a one meaningful identity of the firm".33 All customer-facing aspects of a company's performance – including product quality, production innovation and the underlying technology, product design, product cost, managerial know-how, human capital in the company, research, service and other issues - have an impact on brand value, as well as on the company's image and reputation.³⁴ The alignment of performance with customer expectations is central to maintaining brand value.³⁵ One such example is the hotel industry, where reputation is built over a long period and is based on promotional efforts, and, importantly, is also based on excellence in management, operations and other business functions.

- 31 See Kashani *et al* (2000).
- 32 Idem.
- 33 See Moore (2012).
- 34 See Clayton and Turner (1998), Kashani et al (2000), Smith et al (2004), Kapferer (2008), and Corrado and Hao (2013). Recently, the literature has also underlined the profound convergence between a brand and its design. Indeed, brand leaders are also often design leaders, see (Prahalad, 2011).
- 35 See Gregory (2003).

Second, even if one wanted to measure advertising and communication-related branding investments alone, currently, in cases where standard accounting procedures are applied, communication-related branding investments are not classified as investments. On income statements, in order to comply with standard accounting reporting requirements, companies treat related expenditures as purchased intermediate costs. On the aggregate level, branding-related efforts are not currently treated as productive capital to be factored in as investments in national accounts. As a result, the accounting statements of many modern companies tend to substantially underreport branding investments. Hence economic reality is also not reflected properly on the aggregate level.

Clearly, overcoming the first challenge is not practicable. Measuring the direct and indirect specific contribution of all business functions, and their interaction with a brand, is a difficult proposition for statisticians and economists.

Some headway can be made, however, on the second challenge by ensuring that promotional expenditures and other communication-related expenditures related to brand building are capitalized as intangible investments. This approach would put branding expenditures on a par with R&D, software, training and other expenditures that expand a company's revenue-generating capacity.³⁶ The idea is that investments in communication activity enhance reputation and image when such investments are made in tandem with other "complementary investments" - for example, R&D, design and after-sales service - which help to deliver on the brand promise. Knowledge about a product's existence, about a company's characteristics, or about service quality, accumulates as a reputational asset based on consumer trust, which the company can appropriate. When it is positive, this stock of assets is thought to generate a positive return in terms of a company's sales, or its market value.

For some time, there has been a growing consensus that all intangible assets of a company need to be more appropriately captured. Measurement frameworks for intangible assets have been developed.³⁷ Specifically, experts on intangible assets have included branding investments as subsets of the intangible assets group "economic competencies" alongside (1) organizational capital i.e. the value of overall managerial competencies, and (2) company-specific human capital i.e. the value of competencies stemming from investments in company-specific training. Next to economic competencies, the other two pillars of the intangible assets framework are "computerized information" and "innovative property", including R&D.

Statisticians and economists have started measuring what national accounts do not measure. Figure 1.2 shows existing estimates of tangible versus intangible investments across a number of high-income countries and China. In some countries, intangible investments are larger than tangible investments – for example, in the UK, the US, and also within the Eurozone, in Denmark, Finland, France, Ireland and the Netherlands. The broad category of intangible investment that includes brand equity, namely economic competencies, is the largest component of intangible investment for Eurozone area countries, the UK and the US. For half of all countries for which data are available, economic competencies account for slightly more or just about equal the investments in other intangible assets as a proportion of value added.³⁸

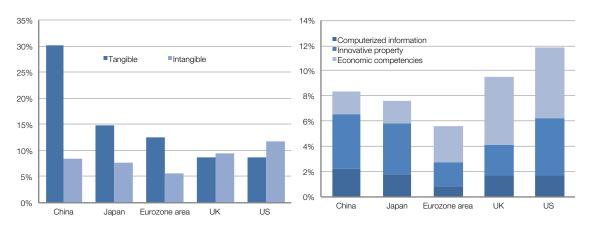
³⁶ This section draws on a background report prepared for the *2013 World Intellectual Property Report*, see Corrado and Hao (2013).

³⁷ See Corrado et al (2006).

³⁸ See OECD (2013b).

Figure 1.2: Increasingly, in high-income countries, intangible investments exceed tangible investments; economic competencies make an important contribution

Investment in tangible and intangible assets (left) and types of intangible investments (right), both as a percentage of gross domestic product (GDP), 2007



Note: The Eurozone area, as defined in this graph, comprises Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain. Luxembourg, officially part of the Eurozone, is missing from this graph.

Source: Corrado and Hao (2013), drawing on various contributions, including Corrado et al (2013), Miyagawa and Hisa, (2013), and the INTAN-Invest database. Estimates for China are based on The Conference Board's unpublished research.

The above methods are refined further in the following analysis. Companies' expenditures for bought-in advertising and market research services are used in the following analysis, the so-called "bought-in component" to shed light on promotional branding expenditures.³⁹ Importantly, a longer depreciation schedule of four years is used to calculate branding investments. The rationale for this calculation is described in Box 1.3.

Box 1.3: How long-lived are branding investments? Proposal for an updated depreciation schedule within the intangible assets framework

Branding has been part of the suggested intangible asset frameworks for some time. Yet, the current intangible asset literature struggles to appropriately identify the depreciation rates to be used for branding investments. An investment is an outlay made today in order to achieve benefits in the future, which, in the case of R&D expenditures, seems fairly obvious. However, when capturing investment over time, one needs to factor in a certain "depreciation" of the asset's value in order to properly assess the stock of the respective intangible assets produced. Economists and accountants have a fair understanding of how to account for depreciation of physical assets. Approaches on how to discount intangible assets, such as R&D, have also emerged. In the case of branding investments, however, economists struggle to capture how long-lived related investments actually are.

39 Data on market research expenditures generate survey data and other outputs to help understand specific consumer needs improving the ability to tailor products and services. These data may not include production costs and may exclude certain forms of direct marketing (e.g., mail). Present approaches – and statistics used, such as in Figure 1.2 – currently assume a high rate of depreciation for branding investments (55 percent per year), much faster than R&D (15 percent per year). The high depreciation rate used in the past reflects the fact that, in existing approaches, advertising is the dominant component of measured investments in brands, and thus other elements are ignored.⁴⁰ Specifically, it is assumed that branding investments stimulate demand for approximately three years before buyers forget, or competitors imitate the brand and offset the investment, thus resulting in the asset having no residual value.⁴¹

Nevertheless, practitioners know that efforts relating to the creation of a strong brand can have lasting impacts, sometimes over decades (see Section 1.1). While other assets of the company, such as new technologies, may go out of date quickly, the lifespan of a brand can be long. ⁴² In order to reflect these factors, a longer depreciation schedule of about four years is used for branding investments.

Source: WIPO based on Corrado and Hao (2013).

Based on the analysis of advertising expenditures and new estimates of branding investments, a few lessons emerge.

First, similar to the use of trademarks, on average, advertising expenditures are cyclical in nature; they correlate well with company revenues and general economic activity (Box 1.4).⁴³ This explains the recent, pronounced fall in global advertising in the context of the economic crisis and its current recovery. Advertising budgets can be quickly amended, unlike costs for staff, production, housing, equipment or R&D. That said, different sectors and different advertising outlets, such as newspapers versus television, respond differently to economic conditions.⁴⁴

Second, expenditures on advertising have risen to significant levels. ⁴⁵ According to private sector sources, the global advertising market for 2012 and 2013 is worth between USD 525 and 560 billion, and therefore about one-third of global R&D expenditures. ⁴⁶ The growth of advertising before and after the economic crisis of 2009 was fuelled largely by expenditures outside of high-income economies. While television and print media still constitute the bulk of advertising outlets, the strongest driver of advertising spending is now the Internet, accounting for between 15 and 20 percent of the global advertising market in 2012. ⁴⁷ The Internet proportion is considerably higher in countries such as the UK and the US.

- 40 This refers to the rates used to develop the INTAN-Invest dataset available at www.INTAN-Invest.net.
- 41 See Corrado and Hao (2013).
- 42 See Clayton and Turner (1998), and Moore (2012).
- 43 See Picard (2001), and Hall (2012). For trademarks, see WIPO (2010a).
- 44 See van der Wurff et al (2008).

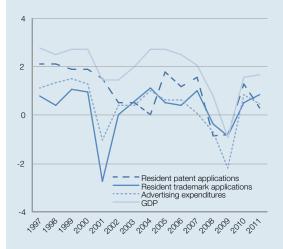
- 45 See Nayaradou (2006).
- 46 On global advertising, see PriceWaterHouse Coopers (PwC), Global entertainment and media outlook: 2013-2017; Strategy Analytics, Global Advertising Forecast from Strategy Analytics (February 2012), ZenithOptimedia (2013) Advertising Expenditure Forecasts, and Nielsen's quarterly Global AdView Pulse report, first quarter 2013. On global R&D, see Battelle (2012) with an estimate of USD 1.5 trillion in 2013. See WIPO (2011a) for an estimate for 2009, evaluated at USD 1.2 trillion.
- 47 Idem.

Box 1.4: Economic growth, advertising and trademark filings are correlated, and move with the business cycle

Economic growth, advertising and trademark filings are correlated. As shown by Figure 1.3, US advertising and trademark filing activity is shown to move cyclically with the business cycle; indeed, in many countries these two indicators are a leading indicator of economic activity. Around the dotcom crisis in 2000, US advertising and trademark filings fell sharply, but recovered in a speedy fashion. Patent filings, in turn, fell after GDP started to decline; and this drop in patent filings and their recovery took longer and was shallower. During the most recent economic crisis in 2009, US advertising expenditures fell first, and were followed by trademark filings. Interestingly, the fall in trademark filings was not as vigorous as that for advertising, and it was less vigorous than that experienced following the 2001 crisis. Similarly, the 2010 recovery in patent filings seems to have been quicker than the recovery in trademark filings during previous economic crises.

Figure 1.3: Trademark applications and advertising expenditures move cyclically with economic growth

GDP, direct resident patent/trademark applications by filing office and advertising expenditure growth rates, in percentages, divided by their respective standard deviations, 1997-2011, USPTO, US



Note: GDP data are in constant 2005 purchasing power parity (PPP) dollars.

Source: WIPO based on data in the WIPO Statistics Database, the World Bank, and the WARC AdSpend Database used in Corrado *et al* (2013).⁴⁸

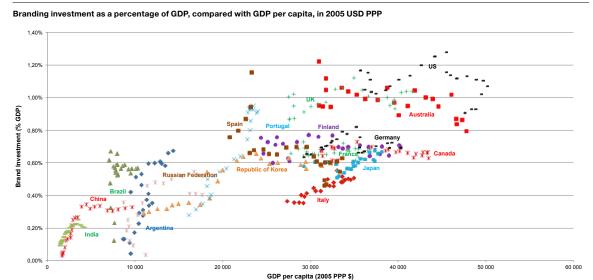
48 For earlier analysis along these lines, see WIPO (2010a), and Guellec and Wunsch-Vincent (2009).

Third, in the most conservative estimates, the proportion of expenditures on advertising in terms of a percentage of GDP has risen to considerable levels, accounting for 0.6 to 1.5 percent of GDP in most high-income economies, and increasing towards similar levels in fast-growing middle-income economies.⁴⁹

In fact, the evidence shows that economic growth as measured by real GDP per capita goes hand in hand with increasing branding investments. This is also shown in Figure 1.4 which plots the proportion of branding investment as a percentage of GDP against the GDP per capita for various high- and middle-income economies. Research produced in the preparation of this Report have shown that a doubling of real GDP per capita is, on average, associated with an increase in advertising and market research expenditures of around 0.3 percent of GDP.51

- 49 The shares are higher in Nayaradou (2006), for example, as advertising expenditures are larger when other data sources are used.
- 50 Regressions of propensities on the natural logarithm of real GDP per capita and dummies for fixed effects confirm the positive relationship described above. For an earlier analysis with similar findings, see Chang and Chan-Olmsted (2005).
- 51 See Nayaradou (2006), and Corrado and Hao (2013).

Figure 1.4: Branding investment increases compared with economic development, 1988-2011



≭Canada

Italy

+uk

XChina

Japan

-us

Note: Comparable data on advertising and market research spending (purchased component excluding strategic marketing) for 17 countries. PPP refers to purchasing power parities.

×Russian Federation

▲Brazil

-India

■Spain

Australia

-Germany

Source: WIPO, based on Corrado and Hao (2013).

Argentina

+France

× Portugal

The underlying relationship is plausible for several reasons, chief among them that, as countries grow and develop from agrarian to dynamic innovative economies, markets cease to be local. This is the result of improved infrastructure and, in particular, transportation systems, increased economies of scale in production and greater product differentiation – all within the context of economic development. This effect can be seen in the data for the Republic of Korea, for example, in Figure 1.4. As the country's economic structure shifted to high-tech manufacturing and related exports from the late 1980s onwards, branding increased as a share of GDP.

Whether economic development triggers increased advertising, or whether advertising is a driver of economic growth, is an open question, however. On the one hand, research reveals that it is economic growth that triggers more advertising, and not the other way around.⁵² The argument here is that companies just spend a fixed

proportion of their revenues on advertising. On the other hand, scholars and consultancies have argued that a more complex pattern of interactions between economic growth and advertising is at play; the direction of effects and causality might actually be quite different from what has been assumed.53 In this view, advertising makes it possible for companies to sell their products and to achieve better performance levels in terms of sales and value added. Branding strategies work along with technical knowledge obtained via R&D, competencies at transforming research results into useful products or processes, impacting demand through impacts on tastes or product quality, or by meeting needs in new or improved ways.54 In particular, advertising via digital media is said to help companies increase their revenues, market share and profit margins, thus boosting economic growth.55

Finland

▲ Republic of Korea

52 See Schmalensee (1972), and van der Wurff et al (2008).

⁵³ See Nayaradou (2006), and McKinsey & Company (2012).

⁵⁴ See Smith et al (2004), and Corrado and Hao (2013).

⁵⁵ See McKinsey & Company (2012).

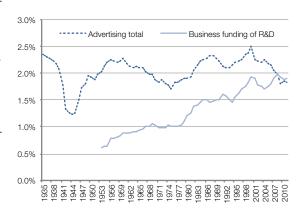
Irrespective of the direction of causality, the data show that the richest countries seem to reach a threshold for advertising, and then decrease their advertising efforts as a proportion of GDP once they attain the highest development levels. In the US, advertising as a proportion of GDP first increased with GDP per capita, and then decreased after GDP per capita exceeded a certain level. The UK, Canada and Australia follow a similar pattern.⁵⁶

As discussed later, this trend might be due to the fact that advertising expenditures, i.e. the "bought-in component" only, are an imperfect way of capturing today's investments in brands. It might also be linked to the fact that Internet competition has reduced advertising charge rates significantly over the last ten years.

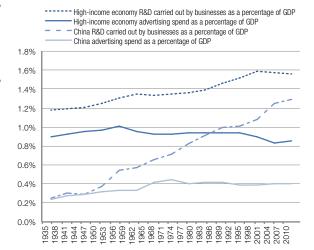
Figure 1.5 shows that the proportion of advertising spending as a proportion of GDP is rather flat for the US (top), fluctuating at around 2 percent of GDP from the 1950s to the present, but with an actual fall in more recent years. This flat spending pattern was reflected generally among high-income economies during 1996-2010 (Figure 1.5, bottom). In comparison, R&D expenditures in the US have had a different trajectory since the 1950s, with a rapid increase shown as a percentage of GDP (Figure 1.5, bottom), suggesting a disconnect – at least in the US – between R&D and advertising spending.

Figure 1.5: In high-income countries advertising is constant as a percentage of GDP, while R&D increases

US advertising and business R&D, as percentage of GDP



High-income and China advertising and business R&D, as percentage of GDP



Note: Countries included in the sample for high-income economies on the right were Australia, Canada, Finland, France, Germany, Italy, Japan, Republic of Korea, Portugal, Spain, UK and US.

Source: Left: Corrado and Hao (2013) based on advertising estimates originally developed by Robert J. Coen, and R&D estimates issued by the US Bureau of Economic Analysis for its R&D Satellite account. Right: WIPO, based on WARC and the UNESCO Institute for Statistics database.

- 56 2005 PPP USD GDP based on The Conference Board's Total Economy Database, January 2013 release.
- 57 See Bittlingmayer (2008).

Looking at the same graph plotted for a group of highincome economies (Figure 1.6, top), one also sees flat development for the advertising component and a more rapid increase of business R&D spending during 1988-2010. There are important country-specific differences, however, with flat expenditures in Japan and the Eurozone area, and falling expenditures in the UK and in the US, over this shorter time period (see also Figure 1.6, bottom).

Also, and despite the high correlation between GDP and advertising, the advertising rates relative to GDP vary greatly among the major high-income countries. The US, for example, has a higher advertising propensity relative to GDP than most European countries; Japan's advertising-to-GDP intensity, in turn, is particularly low. While this variation might also be due to measurement differences across countries, the reasons for these varying intensities – e.g., the level of competition, culture, industrial composition etc. – are not well understood. Remarkably, countries with similar levels of development also use trademarks, with greatly varying intensity (see Section 1.3.1).

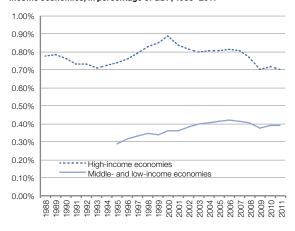
In Figure 1.4 middle-income economies are located at the lower left section of the graph. China's and India's advertising propensity increased steeply with GDP per capita for a time, but has leveled off or declined in recent years. The steep increase for China and India are similar to the trajectory for Portugal, with the latter recording a relatively low GDP per capita in the 1980s. At the same time, in the 1980s Portugal had a higher GDP per capita than China and India, but a significantly smaller propensity to invest in its brands. Thus, for a given level of development, China and India are shown to attract more advertising from both foreign and local brand owners. The key question is whether over the past 30 years globalization has resulted in putting such fast-growing middle-income economies on a different trajectory than when high-income countries were at this stage of development a few decades ago. For a given level of GDP, more investment in branding might be required today than in the past. Foreign brands are also redoubling their efforts to cater for the rapid expansion of a large number of new middle-class consumers in these economies who have not yet been drawn into the "branded markets".

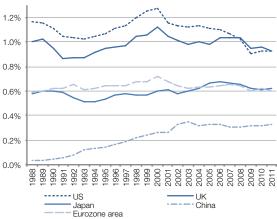
When compared with high-income economies, middle-income economies, as exemplified here by the extreme case of China, have experienced both an increase in R&D ratio and an increase – albeit a slower one – in their advertising intensity (Figure 1.5, bottom).

The above findings are confirmed when estimating branding investment in advertising and market research with upward adjusted depreciation rates (see Figure 1.6). Relative to GDP, branding investments are stable or falling for high-income economies, whereas they are increasing for middle- and low-income countries and, in particular, for China. Based on this approach, it is estimated that the world invested USD 466 billion, or about 0.7 percent of world GDP, in brands in 2011. Again, this only takes into account the bought-in component and it excludes strategic marketing and, potentially, other expenditures not captured by standard advertising budgets.

Figure 1.6: Branding investments are growing as a percentage of GDP in middle- and low-income economies

Branding investments in high- versus middle- and lowincome economies, in percentage of GDP, 1988- 2011





Note: The advertising data for the US is different, and is lower than the data in the earlier estimate in Figure 1.5 (top) because a different database is used for global estimates.

Source: Corrado and Hao (2013), based on media-structured advertising data from WARC, and market research revenue data from Esomar.

The above analysis provides the best data that researchers have produced estimating global cross-country investments in brands. This data notwithstanding, the current analysis continues to underestimate important components of branding investments, namely certain components of bought-in branding expenditures and, more importantly, all brand-related activities carried out within companies in internal marketing or advertising departments, i.e., the salaries and wages of relevant staff, and thus the so-called "own-account component" is not accounted for.

A more accurate estimate of branding investment is required. For the purposes of this Report, a more comprehensive appraisal of branding investment for one country - the US - has been computed (see Corrado and Hao (2013)). The authors made progress on three fronts: the use of more accurate depreciation rates, the inclusion of bought-in expenditures on strategic marketing, and the inclusion of an estimate for own-account, in-house advertising and branding activities.⁵⁹ For the latter, Corrado and Hao (2013) selected occupations that are thought to be actively involved in creating and maintaining a brand - including computer-related and media-related occupations - to account for the increased relevance of the Internet in brand building.60 Indeed, any measure of branding investment that only considers occupations such as advertising is likely to underestimate the contribution of branding to the economy.

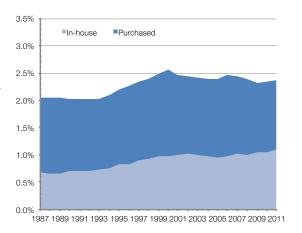
- 59 Market research and public opinion polling (NAICS 54191) is used to measure purchased market research services. Marketing consulting services (NAICS 541613) are used to measure purchased strategic marketing services. Strategic marketing services (whether in-house or purchased) are now counted as investments in branding, as opposed to investments in organizational capital used in previous intangible assets framework and measurement efforts as, for example, in Figure 1.2.
- 60 See Corrado and Hao (2013), Table 7. A list of 14 specific occupations was used to develop own-account investments. One group of occupations used to develop in-house estimates of investments in branding consists of certain managers and analysts advertising and public relations managers, marketing and public relations managers, and market researchers. Another group consists of certain computer, writer/editor and media occupations, in order to better capture in-house expenditures on online-related advertisements, which is one of the new trends identified in Section 1.1.

When considering labor inputs to building these intangible assets, occupations other than pure advertising also contribute to the creation of the reputation and image that comprise a brand.⁶¹

As a result, the authors find that branding investments in the US are much higher than originally estimated; both the levels and the trajectory of such investments are impacted positively (see Figure 1.7). Instead of trending downward, as would be suggested if advertising expenditures only were examined, a slight upward trend in total expenditures on brands can be identified for the period 2000-2011. Figure 1.7 shows that in-house business investments in marketing grew faster than nominal GDP during the 2009 economic downturn and its aftermath, increasing rapidly from 2007 to 2011, and faster than nominal GDP growth. During the same period, advertising media expenditure fell 3.3 percent per year, demonstrating the difficulty of using advertising spending as a good barometer for investments in brands.

Figure 1.7: More accurate branding investment data for the US show that investment is more dynamic than is suggested when advertising data alone is considered

Components of new metrics for US business branding investment in percentage of GDP, from 1987 to 2011



US business branding investment versus advertising media expenditure in percentage of GDP, from 1987 to 2011



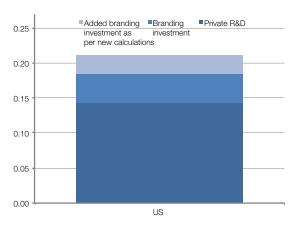
Note: Business advertising media expenditure is the Coen/ Galbi/WARC media-structured advertising spending series less estimated spending by non-profits and individuals.

Source: Corrado and Hao (2013).

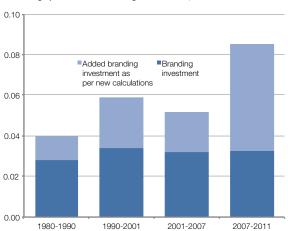
61 See Urwin et al (2008). The range of occupations contributing to branding indeed seems varied, and is an increasingly significant source of employment in modern economies. See UK IP Office (2011), and Officina Espanola de Patentes y Marcas (2012). As per the improved metric, branding investments in the US stood at USD 340 billion in 2010. Accordingly, the economic contribution of branding investment is about 65 percent higher than the contribution estimated previously (see Figure 1.8); in fact, in terms of contribution to economic growth, it is comparable to roughly 50 percent of the direct contribution of privately-funded R&D. The research also suggests that the contribution of branding investments to growth in output per hour has increased in relative importance since 2007. In short, it demonstrates that branding investments are significantly underappreciated with respect to their size and the scale of their contribution to economic growth. While smaller than the contribution of R&D, they are a major source of economic growth, and one that is currently not accounted for. The new metrics also go to show that high-income economies have probably not decreased their branding investments, or held them at a constant level, as implied in the analysis based on advertising alone. The example of the US clearly shows that using advertising expenditures alone as a barometer of branding efforts is erroneous. Rather, branding investments have grown vigorously since 1980; in the case of the US, branding investments have made a significant contribution to growth in output per hour. In the period 1987 to 2011, US investments in brands accounted for about 22 percent of all intangible assets investment. Notably, they exceeded investments in R&D and design.

Figure 1.8

Percentage point contribution to economic growth in output per hour (OPH), 1995-2007



Percentage point contribution to growth in OPH, 1980-2011



Notes: Top, R&D and existing contribution of branding, based on information reported in Corrado et al (2013). Privately-funded R&D refers to R&D carried out by for-profit industries only (i.e. academic R&D is excluded). Bottom, output is private industry excluding education, health, and real estate. The first three time periods shown are between years with business cycle peaks, as defined by the National Bureau of Economic Research.

Source: Corrado and Hao (2013).

These branding investment estimates constitute significant progress, when compared with previous estimates. Nonetheless, more work is required. First, currently, these new branding investment indicators have only been computed for the US, where the detailed data required are available. Second, as advertising and branding efforts and their organization within the company and outside evolve, the current approach will need fine-tuning e.g., the choice of occupations used to account for inhouse branding efforts will likely need to adapt as well. Third, new technologies, such as mobile broadband, social networks, digital video and others, will continue to shape how branding investments are undertaken and measured; additional challenges will arise with regard to the accurate measurement of related own-account or bought-in components.

To conclude, another question looms large. While it is important to measure branding investments, it is equally important to be able to capture their effectiveness and to rate the impact of branding investments accordingly. Anecdotal evidence suggests that the underlying return on investment on marketing and advertising expenditures has improved thanks to improved targeting made possible by new technologies - in particular by online advertising and access to more detailed customer data (see Section 1.1.). Through further research, it might be interesting to understand how the market for (big) data reflects the changing investments in branding. If the efficacy of advertising does indeed increase, then a declining ratio of branding investments to GDP – as seen in many high-income countries in recent years - could also reflect improved effectiveness of branding investments.

At the same time commentary about failures in performance can be communicated between consumers much faster through social media than through traditional channels. New competitors can gain access to market faster and cheaper than ever before if they can come up with something that captures consumers' imagination.

1.2.2

THE VALUE OF THE LEADING BRANDS IS CONSIDERABLE AND IS ON THE INCREASE

If companies invest considerable sums in building strong image and reputation, how valuable are their brands?

Putting an estimate on the value of a brand and the underlying trademark is no easy feat (see Box 1.6 on page 45 for various approaches used). In practice, little reliable data exist about the actual value of existing brands. Given the investments that many companies make in public relations and advertising, as well as maintaining global portfolios of trademarks, it appears that companies recognize the relevance of brands. Nevertheless, brand values are not actively reported by companies. Accounting standards do not offer a standardized method of calculating value, and, in fact, such standards generally restrict the inclusion of brand value, and associated goodwill, on the balance sheet. Instead, investments in intangibles are, at best, listed as operating expenses (see Section 1.2.1). The exception to this rule is when companies have acquired a formal valuation of a brand as a result of having bought or sold a business entity. In most countries, companies are allowed to recognize the value of acquired brands i.e., acquired goodwill, as identifiable intangible assets, and are permitted to put these on the balance sheet of the acquiring company. In one recent but unusual case, brand value was provided in a transaction between a holding company and its subsidiaries (see Box 1.5).

Box 1.5: IKEA – one of the first companies to disclose its brand value

At the beginning of 2012, IKEA became one of the first companies to disclose its brand value as part of a financial transaction between a holding company and one of its subsidiaries. Interogo Foundation sold the brand name to Inter IKEA Systems – a subsidiary which now owns the IKEA trademarks – for about USD 11 billion dollars, as a way of "consolidating and simplifying the group's structure". The estimate is said to have been produced as a result of using internal data combined with outside analysis. It is reasonably close to the estimates published by two of the indices discussed in this section.⁶²

Source: Press articles and investor relations material from August 9, 2012.

Even if companies wanted to explicitly reveal information on brand values, there is no market mechanism for evaluating brand values, except in a case where brands or trademarks are acquired or licensed, and where the parties agree to value the goodwill associated with the brand (see Section 1.4).⁶³

Nevertheless, global indices have emerged – indices which publish the values of the so-called "top 100" or the "top 500" brands worldwide (see Table 1.1 for data on the top 10 brands across the three most eminent brand value rankings). These rankings compiled by BrandZ, Brand Finance and Interbrand necessarily focus on a small selection of top brands and do not pretend to assess the value of brands to all companies, or to the economy as a whole. Moreover, methodologies for assessing brand values, as defined at the outset of this section, are complex to engineer, and therefore methodological choices – with respective strengths and weaknesses – have to be made.

⁶² In 2012, Interbrand valued IKEA at USD 11.9 billion and Brand Finance valued it at USD 9.2 billion

⁶³ Adams and Oleksak (2011) noted that the dollar value of brands can be difficult to identify, since no financial transaction is involved in creating the brands.

Table 1.1: Brand values are high and are important as a proportion of market capitalization

Values of the top ten brands in 2013 in absolute terms and as proportion of the company's market capitalization

	Interbrand		BrandZ			Brand Finance		
Company	Brand value 2013 (in billion USD)	Brand value as a percentage of market capitalization	Company	Brand value 2013 (in billion USD)	Brand value as a percentage of market capitalization	Company	Brand value 2013 (in billion USD)	Brand value as a percentage of market capitalization
Apple	98.3	58.0%	Apple	185.1	41%	Apple	87.3	19%
Google	93.3	20.7%	Google	113.7	39%	Samsung	58.8	32%
Coca-Cola	79.2	39.3%	IBM	112.5	56%	Google	52.1	18%
IBM	78.8	26.9%	McDonald's	90.3	94%	Microsoft	45.5	18%
Microsoft	59.6	22.9%	Coca-Cola	78.4	46%	Wal-Mart	42.3	18%
General Electric	47	19.9%	AT&T	75.5	43%	IBM	37.7	19%
McDonald's	42	43.9%	Microsoft	69.8	27%	General Electric	37.2	16%
Samsung	39.6	35.2%	Marlboro	69.4	NA	Amazon	36.8	27%
Intel	37.3	20.0%	Visa	56.1	49%	Coca-Cola	34.2	20%
Toyota	35.4	17.8%	China Mobile	55.4	25%	Verizon	30.7	23%
Average	61	30.5%		91	46.7%		46	21%

Note: The values for market capitalization are based on valuations on the New York Stock Exchange, obtained from Yahoo! Finance, access date September 6, 2013, 2 p.m.

Source: WIPO, based on BrandZ, Brand Finance, Interbrand.

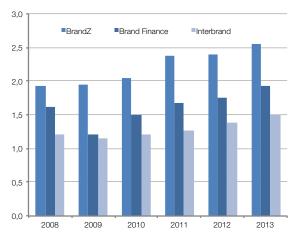
Accordingly, different methodologies and different criteria for inclusion yield different results. In 2013, only 33 brands are common to all three top 100 rankings, and the brand values assigned by existing indices can differ noticeably for the same brand. The total brand value of all common top brands in the BrandZ and Brand Finance rankings varies between a low of about USD 863 billion and a high of about USD 1.2 trillion, and hence by about 39 percent.⁶⁴ The brand value assigned by two distinct valuations for Apple, for example, differs by almost USD 100 billion (Table 1.1).

Notwithstanding these caveats, a number of insights emerge when studying brand value indicators over time and across indices. To begin with, according to these rankings, the value of brands is significant and, for the most part, is increasing, with average values of between USD 46 billion and USD 91 billion for the top 10 brands in the three respective rankings in 2013. Furthermore, in nominal terms, the total value of the top 100 global brands grew by 32 percent (BrandZ), 19 percent (Brand Finance) and 24 percent (Interbrand) between 2008 and 2013, despite the economic downturn which began in 2009. The top 100 brands and their performance might not be representative of the brand values of all companies. Still, the top 200 to 500 brands in the Brand Finance ranking also experienced similar growth in their value.

Indeed, Table 1.1 also shows that the assigned brand values make up for a significant share of the company's market capitalization. This further corroborates earlier analysis claiming the large contribution that brands make to shareholder value.⁶⁵ Of course, this is also due to the fact that brand value indicators are computed to a great extent by incorporating the current and future profits of the company (see Box 1.6). It is also an open question whether the proportion of brand value in market capitalization tends to be smaller for brands outside the top 100 range.⁶⁶

Figure 1.9: The total brand value of the top 100 global brands is increasing

Total value of top 100 brands, 2008-2013, in USD trillion



Source: WIPO, based on data from BrandZ, Brand Finance and Interbrand.

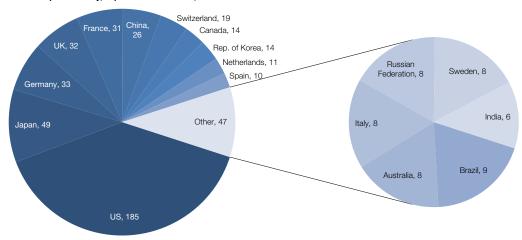
According to WIPO calculations, the technology sector and Internet sector, including brands such as Google, account for the most highly ranked combined brand value among the top 100 global brands. More established sectors, such as car companies BMW, Mercedes-Benz and Volkswagen; banks such as Wells Fargo, HSBC and J.P. Morgan; business service companies such as Cisco, Oracle and SAP, and conglomerates such as General Electric, Siemens or Tata are the next most highly ranked sectors in terms of their total value within the top 100 global brands.

For reasons explained earlier (see Section 1.2), multinational enterprises outside of high-income economies are pursuing strategies to build or acquire brands at home and abroad. Multiple, possibly complementary, strategies have been adopted by companies as local and global economies have changed and grown.⁶⁷ Some companies' strategies have evolved over time: companies in countries such as Japan and the Republic of Korea, which at one time pursued a low-cost and low-price strategy, have, over time, been able to raise prices and quality, thus turning low-cost products into premium brands. Other companies, including companies in the information technology (IT) industry in particular, have made a name as providers of certain components, or as assembly and contract manufacturers (e.g. Asus, Acer, etc.); alternatively, these companies (e.g. Huawei) may have focused on business customers before entering the end-consumer markets with a more established brand. Other companies have bought brands from companies in high-income economies (see Section 1.4). Many of these successful brand strategies have tracked changes in economic climates and the evolution of opportunities over time.

- 65 Study by Interbrand in association with JP Morgan. In this study, it is suggested that "brands account for more than one-third of shareholder value".
- 66 Data obtained from Corebrand by Carol A. Corrado and Janet X. Hao at the Conference Board suggest that the estimate of corporate brand value, overall, is of the order of 5-7 percent of market capitalization for the top 500 US companies.
- 67 See Chattopadhyay and Batra (2012), and Kumar and Steenkamp (2013) for an elaboration of branding strategies of multinational companies emanating from middle-income economies.

Figure 1.10: Brands emanating from high-income economies lead in global brand rankings, but other brands are catching up

Number of brands per economy, Top 500 Brand Finance, 2013



Note: Only economies with more than five brands within the top 500 ranking were included.

Source: WIPO, based on data from Brand Finance.

Partly as a result of methodological issues and different criteria for inclusion, the majority of top brands are associated with companies that are primarily located in high-income economies (see Figure 1.10). Among the top 500 ranking in the Brand Finance index, brands emanating from the US led the field in terms of numbers – ahead of brands emanating from Japan, Germany, the UK and France. But, outside the list of traditional leaders, companies from other economies are also making an impact on these indices, with Chinese brands ranked in sixth place and Brazil ranked in twelfth place in 2013.

Clearly, brands from fast-growing middle-income economies are gaining ground. In 2008, five (BrandZ) or two (Brand Finance) brands from middle-income economies featured in these top 100 league tables. Their number increased to 17 (BrandZ) and 12 (Brand Finance) in 2013. The proportion of middle-income economies in terms of total top 500 brand value accounted for about 9 percent in 2013, up from 6% in 2009.

The average brand value of companies based in middle-income economies has grown faster than brand value of companies in high-income economies. In fact, the average value of the top 500 brands in companies based in middle-income economies grew by more than 98 percent between 2009 and 2013, while the brand value of companies in high-income economies has grown by 61 percent (Figure 1.10).

This trend is not consistent throughout all rankings, however. In the case of the Interbrand ranking, brands emanating from middle-income economies still play a small role, accounting for less than one percent of the total brand value. Again, this is partly due to the methodological criteria discussed in Box 1.6.

This issue aside, Table 1.2 consolidates all brands emanating from middle-income economies, and treats them as being part of one of the three rankings. Most of these brands belong to the banking, telecommunications or technology sectors. A comparatively large number of Chinese brands (13 out of 23) are included in the rankings, with an emphasis on the banking sector and the technology sector.

Table 1.2: Brands emanating from companies based in middle-income economies are mostly in the telecommunications sector and the banking sector

Rank						Brand value by ra (in USD million)	nking	
BrandZ 2013	Brand Finance 2013	Interbrand 2013	Name	Country	Industry group	BrandZ	Brand Finance	Interbrand
10	20		China Mobile LTD	China, Hong Kong SAR	Telecoms	55,368	23,296	-
16	31		Industrial and Commercial Bank of China	China	Banks	41,115	19,820	-
	39		Tata	India	Conglomerate	-	18,169	-
21			Tencent	China	Technology	27,273	-	-
22			China Construction Bank	China	Banking	26,859	-	-
33			Baidu	China	Technology	20,443	-	-
37	56		Agricultural Bank Of China	China	Banking	19,975	15,967	-
57			China Life	China	Insurance	15,279	-	-
59			ICICI Bank	India	Banking	14,196	-	-
58	64		Bank of China	China	Banking	14,236	14,145	-
67	67		Sinopec	China	Oil and gas	13,127	13,518	-
65	71		PetroChina	China	Oil and gas	13,380	12,994	-
70	63		Sberbank	Russia	Banking	12,655	14,160	-
	66		Bradesco	Brazil	Banking	-	13,610	-
	77		Itaú	Brazil	Banking	-	12,442	-
73			Moutai	China	Consumer	12,193	-	-
79			MTN Group	South Africa	Telecoms	11,448	-	-
82			Mobile TeleSystems OJSC	Russian Federation	Telecoms	10,633	-	-
84			Ping An	China	Insurance	10,558	-	-
89			Airtel	India	Telecoms	10,054	-	-
	93		China Telecom	China	Telecoms	-	9,974	-
	94		Banco do Brasil	Brazil	Banking	-	9,883	-
		93	Corona	Mexico	Alcohol	-	-	4,276

Source: WIPO, based on data from BrandZ (2013), Brand Finance (2013) and Interbrand (2013).

Methodological and other issues aside, the existing assessment of brand value demonstrates the growing role and economic importance of brands, both at the company level and at the country level.

Name/ origin	Availability	Brands under consideration	Main components of brand value calculation	
			Financial dimension	Consumer dimension
BrandZ (UK)	2006-2013	Universe: World Industries: All Companies: Financial data must be publicly available.	Profit-based Financial value based on past and future profits	Quantitative consumer research - Consumer surveys - Consumer interviews
Brand Finance (UK)	2007-2013	Universe: World Industries: All Companies: Financial data must be publicly available. Private companies can submit data if they wish to be included	Revenue-based Financial value based on a royalty rate applied to future revenues	Qualitative & financial research - In-house expert panels - Third party sources
Interbrand (US/UK)	2001-2013	Universe: Companies must generate more than 30% of their revenues outside their home market. Companies must be present at least in three major continents. Industries: Certain industries such as telecommunications, pharmaceutical and aviation do not tend to meet Interbrand's criteria for inclusion Companies: Financial data must be publicly available.	Profit-based Financial value based on past and future profits	Qualitative analysis - In-house expert panels - Primary research - Desk research

Box 1.6: Methodology used to establish brand value

In theory, three main approaches to how to measure brand value stand out. 68 One approach is the "product market level" approach. It aims to identify the price premium generated by a brand i.e., an implicit valuation of the revenue stream that accrues to the company from its brand name(s). This is the additional price a customer is willing to pay for an equivalent branded product versus a non-branded product. While this approach sounds pertinent to economists, it is difficult to implement in practice. 69 Since this approach relies on

comparing identical products – one of which is branded, while the other is not – it is difficult to implement in practice. Another reason it is difficult is because some brands relate to a company with multiple products whereas others relate to entire product ranges.

The second approach is the "financial market" approach, which calculates brand value on the basis of the hypothetical price of a brand if it were sold or acquired in an arms-length transaction. It is often based on the brand holder's revenues, but it also uses the cash flow valuation of licensing fees and royalties. To While seemingly hard data are used, it is challenging to appropriately assign revenue flows to the power of the brand alone. Given the dearth of data in this field (see Section 1.4), it is equally challenging to identify pertinent royalty or licensing rates for the brands being studied. In addition, this approach only captures the value created by the brand

- 68 Based on Aliwadi et al (2002) and their interpretation of Keller and Lehman (2002). In addition, an international standard for monetary brand evaluation (ISO 10668) exists.
- 69 Even putting aside the practical implementation issues, it ignores the volume effect of having a stronger brand, and it is not as relevant where the volume effect is greater than the price effect, such as in 'fast fashion' retail. In addition, some brands deliberately choose to position themselves as low priced e.g. Ryanair. This airline succeeds by differentiating itself as low priced, thus generating no premium relative to competitors' short-haul airlines, and creating significant passenger volumes as a result. The authors would like to thank Michael Rocha (Interbrand) for this comment.
- 70 See Aliwadi *et al.* (2002).

for the (often hypothetical) licensor through the royalty stream. The full value of the brand is likely to be higher, with some of the value created by the brand accruing to the licensee, a factor which this approach does not account for. Finally, these financial data may only indirectly estimate the power of the brand with customers.

Third, the "customer mindset" focuses on customer attitudes towards a brand, and relies on qualitative and quantitative research based on customer surveys, interviews and polls. This method is the most costly to perform, and is often restricted to small sample sizes for these brand rankings, unless customized research is carried out with fully representative samples by particular brand owners. Furthermore, no agreed scale or unit of measurement exists to properly assess the value of a brand as captured by customer perceptions. 71 In addition, for a long list of the top 100 or 500 brands, it is challenging to produce global estimates which accurately aggregate brand values — as perceived by people of different nationalities — into a single quantitative and/or financial value indicator. 72

In practice, existing rankings use a mix of the above approaches to triangulate brand values. Table 1.3 summarizes the main approaches used in the compilation of the various indexes.

To begin with, different indices adopt different approaches as to which brands should be considered for inclusion in their indices. The Interbrand ranking, for example, requires that a company must generate more than 30 percent of its revenues outside the home market, and on three continents.

All three indices have a strong financial dimension, mirroring the "financial market" approach. By focusing on company data and forecasts, all rankings rely on standardized approaches to estimate the current and future performance of a company on which the brand

- 71 See Aaker (1995), and Grannell (2008).
- 72 To provide an example, certain brands are widely known and are popular in a large middle-income economy such as China, but the same brands are unknown elsewhere. In such cases, how does a final combined value take into account the fact that Chinese consumers have high brand awareness and value perception, whereas consumers in other countries assign no value to these brands?

value is based. In the first step in the process, the brand's relevance for company earnings is calculated. In the second step, a so-called "income approach" is used; this calculates the discounted future cash flow from the potential future earnings of a brand.⁷³ These calculations are based on annual reports data, as well as on future profit forecasts. While the fundamental evaluation steps between the rankings are relatively similar, some differences exist.⁷⁴

These approaches suffer from the fact that it is hard to associate earnings exclusively with the value of a brand. Revenues are driven by factors other than the brand alone. It is also challenging to correctly assess pertinent, hypothetical royalty rates for the licensing of brands. These data are hard to come by, and they do not exist for most brands that are not licensed.

As described above, the customer dimension relies on qualitative and quantitative approaches. BrandZ is the only ranking which surveys consumers directly by conducting interviews as well as carrying out market research surveys. Brand Finance and Interbrand substitute direct consumer contact with using their own in-house experts drawn from offices worldwide. 75 The behavioral aspect is the most important, but it is also the most difficult aspect to measure. As a result, there can be a tendency in some brand value methodologies to assign a proportionately higher weight to the financial dimension than to the customer dimension. Valuations carried out for particular companies by these brand valuation agencies may be much more granular than the top 100 rankings, and can more easily overcome the challenges described above.

All indices describe their approach in publicly available documents, and they compare their approach to their competitors' rankings. Nevertheless, a lot of details, for example, how the overall values are computed, or how the customer dimension is assessed in practice, are not publicly available. It is therefore challenging to independently verify the underlying data or the methodologies, and then replicate existing findings.

1.3

THE GLOBAL SURGE IN TRADEMARK FILINGS AND ITS MAIN DRIVERS

The increase in expenditures on branding, and the increased economic role of such expenditures, goes hand in hand with a pronounced but less noticeable surge in trademark filings both at the national and the international level.

Nevertheless, the increased demand for trademarks remains relatively unexplored, as noted in the 2011 World Intellectual Property Report. He patent-innovation nexus has garnered most of the attention from IP economists, the surge in trademark filings, and an analysis of its main drivers, has not.

- 73 See Keller and Lehmann (2006).
- 74 Brand Finance uses notional royalty rates that a company could earn if it were to license its brand to an independent third party. Interbrand uses a hybrid of the "customer mindset" and the "financial market" approach. BrandZ uses a hybrid of the "financial market" and "customer mindset" approach; it takes the financial value of the brand (not the company), similar to the method used by financial analysts to value companies, and it then assesses the proportion of that value that is attributable to brand and brand alone, based on an extensive quantitative global consumer research program.
- 75 Interbrand uses a combined approach by aggregating data from expert panels, desktop research and information gathered from primary research.

 Brand Finance uses an amalgam of in-house experts' opinions combined with external data.

1.3.1

THE DEMAND FOR TRADEMARKS HAS GROWN SUBSTANTIALLY IN ABSOLUTE TERMS, AND IN PROPORTION TO ECONOMIC ACTIVITY

The demand for trademarks has intensified, reaching unprecedented levels since the 1970s.⁷⁷

Trademarks have been in existence since the mid-19th century (see Section 1.1). Yet, in most high-income economies, the rapid growth in trademark applications only began to take off after 1975.⁷⁸ Following a slow start in the early 20st century, trademark activity accelerated significantly in the mid-1970s at the United States Patent and Trademark Office (USPTO). At the Japanese Patent Office (JPO) such activity accelerated at an even earlier date. Trademark activity in other IP offices followed much later – in the 1980s (see Figure 1.11, top). Thus, the surge in trademark filings in high-income economies began about ten years earlier than the historic increase in worldwide patenting, which began in the mid-1980s.⁷⁹ Middle-income economies, in turn, began experiencing a rapid rise of trademark filings in the late 1980s and 1990s.

A second significant acceleration took place from the late 1990s until today. In most high-income economies, and in a number of middle-income economies, applications reached their first peak in 1999 or 2000, suggesting amplified demand for new registrations during the dotcom boom, followed by a contraction in registrations that corresponded with the timeline of the dotcom collapse. Applications peaked again in 2007, before the onset of the global financial crisis, with demand falling again throughout the downturn, but with new filings recovering to near pre-crisis levels by 2011.80 Most middle-income economies saw substantial increases in trademark filings at the turn of the 21st century. By 2001, the Chinese trademark office had become the top recipient of trademark filings, a position China was not to regain in terms of patent filings until 2011, when it became the world's top patent application recipient.

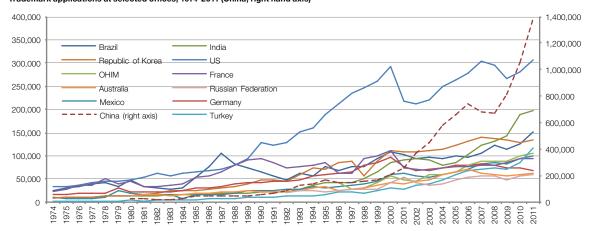
In absolute terms, trademark demand quadrupled from just under 1 million applications per year in 1985 to 4.2 million trademark applications by 2011 (Figure 1.11, bottom). During this period, trademark applications multiplied approximately fivefold in the case of the Republic of Korea and the US, approximately threefold in Australia, and approximately twofold in Canada, France and Germany. In the case of middle-income economies, the rise was more striking, with an increase by a factor of close to 30 in the case of China, 20 in the case of Turkey, 12 in the case of India, more than six in the case of Mexico, and three in the case of Brazil.

- 77 This section draws on the following background reports prepared for the 2013 World Intellectual Property Report: Fortune (2013), Helmers (2013), Mitra-Kahn (2013), Myers (2013), and Schautschick and Graevenitz (2013).
- 78 See Duguid *et al* (2010), and Greenhalgh and Schautschick (2013).
- 79 See Graevenitz et al (2012).

- 80 See Fortune (2013), Helmers (2013), Mitra-Kahn (2013), Myers (2013) and Schautschick and Graevenitz (2013).
- 81 The only major high-income economy with apparently falling filing rates is Japan. As explained earlier, the switch to a multi-class system introduces a downward bias, which is not meaningful for time series comparison. Moreover, the filing increase in individual European countries was accompanied by an increase in filings at the European Union's OHIM, reaching 105,000 applications in 2011, up from zero in 1995.

Figure 1.11 Trademark growth has taken off since the mid-1970s in high-income economies, and since the 1980s in middle-income economies

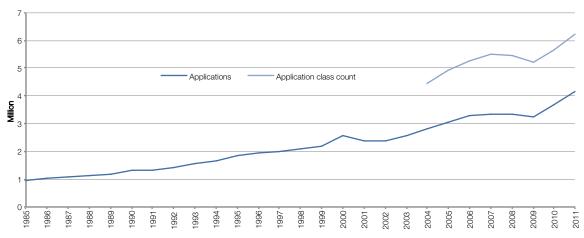
Trademark applications at selected offices, 1974-2011 (China, right hand axis)



Note: The chart includes economies with a single-class trademark filing system (China, Mexico indicated with dotted lines) and a multi-class trademark filing system (the remaining economies). The levels of trademark filings are not directly comparable across these economies with different systems (see Box 1.7). Australia and Japan are not included, given the structural break in the series due to the introduction of a multi-class system in 1996.

Source: WIPO Statistics Database, October 2013.

Trend in trademark applications worldwide (applications and application class count), in millions, 1985-2011



Source: WIPO Statistics Database, July 2013.

In turn, trademark application class counts increased from 4.4 million in 2004 to 6.2 million in 2011 (see Box 1.7 for an explanation, and Figure 1.11, bottom).

Box 1.7: Pitfalls when comparing trademark data over time and/or across countries

Care must be taken when comparing trademark data across countries and over time. Countries' institutional frameworks for registering trademarks differ in important ways and often undergo substantial reform, which can affect how many applications trademark offices receive and eventually register.

Most importantly, when comparing trademark data across countries, it is vital to account for different trademark filing systems. B2 Some offices have a single-class filing system, which requires applicants to file a separate application in respect of each of the goods and services classes in which they seek protection. Other offices follow a multi-class filing system, which enables applicants to file one application that lists all the classes in which they seek protection. For example, the offices of Argentina, Brazil, China, Colombia and Mexico follow a single-class filing system, whereas the offices of Japan, the Republic of Korea and the US, as well as many European offices, today operate multi-class filing systems.

All other factors being equal, a single-class filing system invariably results in higher application counts than does a multi-class filing system, as trademarks covering more than one class lead to more than one application under the former system. A direct comparison of trademark filing levels between countries that operate different systems would, therefore, be misleading. However, it is possible to compare trademark filing volumes on the basis of application class counts. For this reason, WIPO's Statistics Database reports comprehensive class count statistics. However, these reports contain information dating back to no earlier than 2004, which complicates longer-term historical comparisons. Furthermore, several countries have switched from a single-class to a multi-class system — notably Australia and Japan in 1996 — introducing a structural break in application and registration data, which complicates comparability over time.

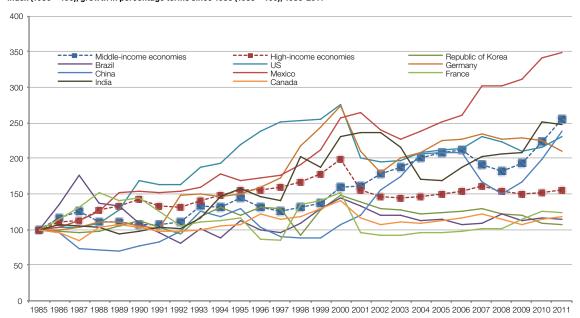
In addition to differences in filing systems, there are a number of other institutional differences that affect applicant behavior and the propensity of offices to register incoming applications. As will be further explained in Section 2.3, key institutional elements in this context include the following:

- Whether applicants must use the trademarks for which they seek protection and, if so, to what extent they must demonstrate such use prior to the registration of the trademark.
- To what extent trademark offices examine applications on relative grounds for refusal – i.e., whether new applications pose a conflict with earlier trademarks in different ownership.
- How opposition systems operate and at what point during the registration process third parties can initiate oppositions.
- Whether a country is a member of the Madrid system⁸³ (see Section 1.3.2) and other international treaties or organizations, such as the EU, for which the Office for Harmonization in the Internal Market (Trade Marks and Designs) (OHIM) facilitates the registration of a trademark in several jurisdictions.⁸⁴

- 83 The abbreviated form of the Madrid system for the International Registration of Marks administered by WIPO. The Madrid system makes it possible for an applicant to register a trademark in a large number of countries by filing a single application with WIPO via the applicant's national or regional IP office that is party to the system. The Madrid system simplifies the process of multinational trademark registration by reducing the requirement to file separate applications in each office. It also simplifies the subsequent management of the mark, since it is possible to record changes or to renew the registration using a single procedural step.
- 84 For example, many companies in European countries have switched from filing trademarks in their national office to filing in the OHIM. If one were to merely quantify the number of filings in the national IP office over time, and after the creation of the OHIM, the figures would therefore be misleading.

Figure 1.12: Since 1985, trademark use intensified in most high- and middle-income economies

Trademark applications by GDP, direct applications excluding applications via the Madrid system, index (1985 = 100), growth in percentage terms since 1985 (1985 = 100), 1985-2011



Note: GDP data are in constant 2005 purchasing power parity (PPP) dollars. For France, Germany, Spain, Switzerland and the UK, the trademark applications by the OHIM were added. The graph is based on data for middle-income economies: Algeria, Brazil, Chile, China, Colombia, Costa Rica, India, Mexico, Panama, Philippines, South Africa, Sri Lanka, Thailand, Turkey, and high-income economies: Canada, France, Germany, Israel, New Zealand, Republic of Korea, Spain, Switzerland, the UK and the US. As China and Mexico use single-class systems, their trademark filing intensity should not be directly compared to the other countries in the graph.

Source: WIPO Statistics Database, March 2013 and the World Bank, October 2013.

For both high-income and middle-income economies, the use of trademarks relative to GDP increased considerably between 1985 and 2011 (Fig. 1.12). While high-income economies for which data are available increased their trademark filing intensity by a factor of 1.6, middle-income economies increased their trademark filing intensity by a factor of 2.6 during this period. Over the same time span, the US, Germany and Switzerland saw their trademark intensities, relative to GDP, more than double. France and Canada saw an increase of about 20 percent.

85 When resident trademark applications are converted to equivalent class counts and are measured relative to GDP, one also finds increasing levels of filing intensities; the majority of the selected economies for which resident application class count data exist had higher ratios in 2011 than in 2006, with the Russian Federation exhibiting the largest increase by a factor of 20.

In the case of middle-income economies, over the same time span, Turkey experienced a sixfold increase in its trademark filing intensity, while in Mexico and Costa Rica it increased by a factor of about 3.5. The Russian Federation doubled its trademark filing intensity in a shorter time span, namely between 1992 and 2011. However, a few high-income economies such as Spain, Israel and New Zealand, and middle-income economies such as Sri Lanka, saw their trademark filing intensity fall between 1985 and 2011. The difference between nations with similar levels of economic development in terms of trademark filing intensity is little understood, however. Here, institutional and cultural factors could be at play.

Remarkably, many middle-income economies use trademarks more intensively, relative to GDP, than do most high-income economies. When resident trademark applications are converted to equivalent class counts, countries such as Turkey, Viet Nam, China, Madagascar, Uruguay and the Russian Federation emerge with trademark filing intensities that are higher than the world average. A parallel to the earlier analysis of advertising intensities also emerges (see Section 1.2.1); less developed economies experience more trademark filings from residents and non-residents at an earlier period of development.

The mix of different IP forms also varies between richer and poorer economies. Economies with lower GDP per capita often file more trademarks relative to patents than do richer countries. This can be seen in Figure 1.13 (top), which plots the intensity of trademarks relative to GDP (class counts) and patents relative to GDP for a number of economies. This pattern does not hold for all countries for which data are available. Some high-income economies, such as New Zealand for instance, use trademarks more intensively, relative to patents, than do their peers. The case of Australia is striking, when compared with other high-income economies which have a high intensity of trademark filings but a low intensity of patents relative to GDP.

But, the general point holds. Furthermore, separate computations show that the intensity of patent applications over trademark filings is indeed positively correlated to the level of economic development (see Figure 1.13, bottom). An increase of GDP per capita thus reduces the ratio of trademarks/patents, with some statistical significance.⁸⁷

87 When data for trademark class counts become available for a greater number of middle- and low-income economies, this result should, in fact, be reinforced. Indeed, the current computations exclude many of middle- and low-income economies that are using trademarks relatively more frequently than patents.

⁸⁶ See WIPO (2012), Figure B.7.1. Among high-income economies, this concerns Switzerland, the Republic of Korea, Australia, Germany and Finland, for example.

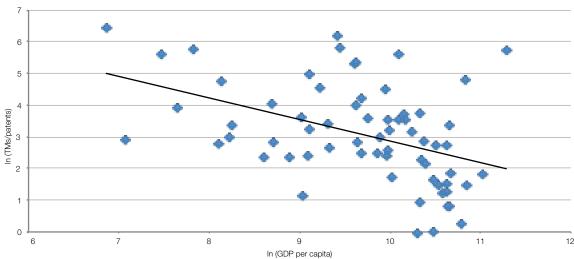
2011 resident trademark applications/GDP over 2011 resident patent application class count/GDP 180 Bulgaria 160 Turkey Resident trademark applications per GDP (class counts) Costa Rica New Zealand Viet Nam Czech Republic 120 Chile Switzerland Romania 100 Estonia Uruguay Germany Australia 80 Jordan China, Hong Kong SAR Finland Russian Federation Poland Spain 60 Mexico **•** UK 40 Malaysia US 20 Singapore Israel Algeria 0 0 5 15 25 30 10 20 Resident patent applications per GDP

Figure 1.13: Poorer countries use trademarks more intensively relative to patents

Note: The Republic of Korea and China are excluded from the graph, as their level of filing intensity of both IP types is many multiples that of the rate of filing intensity of one of the other countries listed here.

Source: WIPO Statistics Database, September 2013 and World Bank for GDP.

Log of trademarks over patents against per capita GDP, 2011



Note: To compute the trademark/patent ratio, patent filings by origin, residents only (i.e. including, for example, filings by German residents at the German office and at the European Patent Office (EPO)) are divided by trademark class counts, by origin, by residents only (including, for example, filings by German residents at the German office and at the OHIM).

Source: WIPO Statistics Database, September 2013 and World Bank for GDP.

1.3.2.

MAIN DRIVERS OF GROWTH IN TRADEMARK APPLICATIONS

The important surge in trademark applications, and its drivers, has been subjected to little systematic analysis thus far.⁸⁸ The economic literature has largely focused on understanding the surge in patent applications. According to available data and analysis, the following main drivers for the growth in trademark applications can be identified. The empirical importance of the factors listed here, and their interaction, are not yet well understood, however.

- 1) Increased growth and investment in branding in high- and middle-income economies: Economic growth and increased global branding expenditures are highly correlated with trademark activity. The higher investments by companies to maintain existing brands, or to develop new brands, coupled with the rise of new players in new countries using trademarks, all have a positive impact on filing activity.
- 2) Increased product innovation: According to the literature, rising trademark activity also reflects the increased rate of product innovation and quality improvements in the economy. New or qualitatively improved products often trigger a new trademark filing, which helps to differentiate new goods and services in the marketplace. ⁸⁹ In the legal literature it has also been argued that trademarks reinforce the protection of patented goods; trademarks are said to prolong the life of a patented product beyond the patent itself. ⁹⁰ Increased global technological and non-technological innovation expenditures and activity may, therefore, act as indirect drivers of trademark activity.

3) The shift to an innovating service economy: Today, businesses and other entities providing services are eligible for trademark registration in most countries.

The services sector now accounts for about 60-70 percent of economic activity in high-income economies. As the proportion of services is growing in poorer economies as well, the structural change from economies based on manufacturing to economies based on services production is also judged to be an important driver of trademark filings.⁹¹

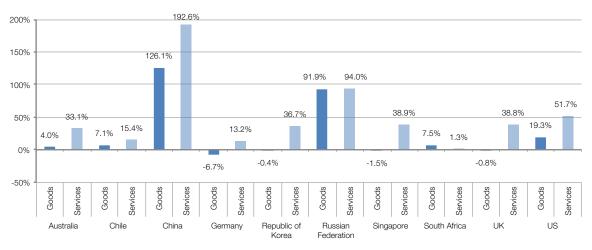
The privatization and deregulation of important services industries e.g., telecoms, financial services and energy services, has led new private companies to create their own innovative services, and to brand and advertise them. This rise in a competitive and innovative service industry is translating into higher levels and faster growth of services trademarks. ⁹² Moreover, the services sector is not alone in filing for services trademarks. As part of a shift to a service economy, manufacturing industries complement their product offerings with new services, such as after-sales, financial and consulting services, and they also file related services trademarks. ⁹³

- 88 See Jensen and Webster (2011), and WIPO (2011b).
- 89 See Mendonça et al (2004), Hipp and Grupp (2005), Millot (2009), Jensen and Webster (2011), and Greenhalgh and Schautschick (2013). For a similar analysis for a middle-income economy, see Brahem et al 2013.
- 90 See Rujas (1999).

- 91 See Blind and Green (2003), Mendonça *et al* (2004), Mangàni (2006), and Greenhalgh and Rogers (2012).
- 92 See Greenhalgh *et al* (2003). The Global Innovation Index uses the number of trademarks filed as proxy for non-technological innovation. See Cornell University *et al* (2013). Other experts have made a similar point. See Millot (2012).
- 93 See Schmoch (2003), Hipp and Grupp (2005), Schmoch and Gauch (2009), Myers (2013), and Blind and Green (2003). This is not always easy to show with the available data, as no straightforward comparison between Nice classes and particular sectorial industry classifications exists.

Figure 1.14: Services trademarks have been growing faster than goods trademarks

Growth rate of total trademark applications by goods and services, in percent, for selected economies, 2004-2011



Note: The time series are different for Chile (2007-2011) and South Africa (2008-2011).

Source: WIPO Statistics Database, September 2013

The number of services trademarks in total trademark applications is still lower than the share of goods trademarks. Together, the 11 service-related classes accounted for only one-third of all classes specified in applications filed worldwide in 2011. However, these percentages differed considerably across offices and across countries with different levels of economic development. Around 45 percent of trademark filing activity in Australia, Mexico, Turkey, the UK, the US, France and Germany was focused on service classes; in the case of Spain, services trademarks accounted for the majority of all trademark filing activity. Conversely, China, with around 77 percent of trademark filing activity, had the highest percentage of applications in the goods-related classes. India and Viet Nam, for example, also displayed higher percentages of activity in goods classes.

However, on the global level, and in most economies, between 2004 and 2011 the number of filings of trademarks in services classes grew considerably faster than in goods classes (see Figure 1.14).94 In high-income economies, only a few countries, such as France, have seen the growth of goods classes achieve roughly the same levels as services classes.95 Among middle-income economies, the Russian Federation and South Africa saw higher growth in goods classes. Yet, these are the exceptions, with most other economies experiencing higher growth of services trademarks relative to goods trademarks. The services which drive trademark filings are diverse, but the following categories stand out as the main drivers of growth: advertising, business management, business administration, office functions; treatment of materials; medical services; veterinary services; hygiene and beauty care; legal services; security services; personal and social services.

⁹⁴ In the US, for example, between 1985 and 2010, the demand for services trademarks grew on average three times as fast as that for product trade trademarks. See Myers (2013).

⁹⁵ See Fortune (2013).

4) Greater global demand for trademarks: Trademark filings on a local and international level are also positively influenced by increased globalization and economic development. Existing companies or other trademark holders export their brands to more countries, and they register local variations of existing brands, thus driving trademark filings. Brands created by companies that are "born global", and have an immediate Internet presence, are available to consumers worldwide. For these firms, the importance of expeditiously registering their trademarks, and using them in overseas markets to retain rights, is increased (see Section 1.4). New brands emerge from middle-income economies, which also start exporting their brands. Finally, the use of electronic commerce (e-commerce) by firms and customers has increased, thanks to digital networks.

Interestingly, two sets of findings emerge when analyzing the data:

First, the data show that a wider range of companies, individuals and countries are now active in trademark filing than at any previous time in history. Trademark filings in middle- and low-income economies (at home and abroad) have increased significantly since 2005 in terms of volume, but also in terms of their share in global trademark filing activity. Trademark filings in middle-income economies now account for most trademark applications, i.e. 54 percent (see Table 1.4). About 30 percent of the top 20 IP offices are now located in middle-income economies. In regional terms, Asia surpassed Europe as the largest recipient of trademark applications in 2009. In 2011, it received 44 percent of all applications filed worldwide. Latin America and the Caribbean region also increased their shares in global trademark filings.

Table 1.4: Middle-income economies' IP offices receive the majority of trademark filings

Patent, trademark (based on class counts) and proportion of GDP by economies' income group (in percent), 2005-2011

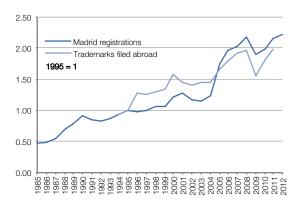
	Patents (%)		Trademarks (%) GDP (%)			6)
	2005	2011	2005	2011	2005	2011
High-income	79.8	65.3	54.9	45.1	64.8	57.6
Upper middle-income	16.9	30.4	35.1	43.9	24.2	29.7
Upper middle-income – excluding China	6.7	5.9	21.3	21.1	14.8	15.5
Lower middle-income	2.7	3.1	8.9	9.9	9.9	11.8
Low-income	0.4	0.0	1.0	1.0	1.2	1.3
BRICS	15.1	30.1	20.9	32.4	20.2	26.5
BRICS – excluding China	4.9	5.6	7.0	9.6	10.8	12.3
World	100.0	100.0	100.0	100.0	100.0	100.0

Source: WIPO Statistics Database, September 2013.

Trademarks, first filed at the national level, are also increasingly being filed abroad. In order to obtain trademark protection in multiple offices, an applicant can either file directly in each individual office or file an application for an international registration through the Madrid system. 96 When compared with patents, and thanks to the Madrid system, it is easier to obtain a trademark in a large number of jurisdictions. Moreover, the disclosure of trademarks does not destroy novelty - thus internationalization can happen over a longer period and at a different pace. Trademarks filed abroad more than doubled from 437,000 in 1995 to close to 872,000 in 2011 (see Figure 1.15). International registrations via the Madrid system also more than doubled from close to 19,000 in 1995 to close to 42,000 in 2012. Box 1.8 discusses the patterns of international trademark filing and the new tools needed in order to better understand international branding strategies.

Figure 1.15: More trademarks filed abroad

Growth of trademark applications abroad and Madrid registrations, percentage growth, 1995=1, 1985-2012



Source: WIPO Statistics Database, September 2013.

Box 1.8: New tools needed in order to analyze international trademark strategies at the sector level

The determinants of companies' trademark filing behavior abroad, and the potentially pronounced differences in these strategies across sectors, remain largely unexplored. Differences exist across economic income groups. Trademark owners in high-income economies register a majority of their foreign trademarks in other high-income countries. Trademark owners in middle-income economies in turn register their trademarks about as frequently in high-income economies as they do in middle-income economies. Trademark owners in low-income economies register the majority of their trademarks in middle-income economies.

The intensity of trademark use abroad relative to exports is highest for high-income economies, meaning that for every dollar exported, companies in high-income economies file more trademarks abroad than other income groups. However, since 1994, middle- and low-income economies have ramped up their reliance on trademark use abroad relative to their exports.

Despite this evidence, analyzing the determinants and effects of trademark filings abroad is difficult because, until now, trademark data could not be jointly analyzed with sector-level economic data such as trade, foreign direct investment and other data. This might soon change. Lybbert *et al* (2013) are developing an approach to link trademark and economic data via standard product and industry classification systems. If perfected, this mapping would enable analysts to model the determinants and impacts of international and domestic trademark activity at the sector level.

Source: Lybbert et al (2013).

Second, the data do not support the view that trademark filings at the national level are necessarily characterized by a larger share of non-resident filings. Brands and trademarks retain a local character that is persistent over time, partly due to language-related factors.

To begin with, trademark filings are usually more local – i.e. filed by residents – than patent filings, which are more international in nature. In most of the top 20 IP offices by number of trademark applications (class count), the majority of trademark filings are filed by residents. In China, the US, France, the Russian Federation, Germany, India, Japan, Turkey, the Republic of Korea, Mexico, Italy, the UK, the Benelux countries and Spain, the proportion of non-resident trademark applicants was always below 30 percent in 2011, and sometimes as low as around ten percent. 97 The exceptions are Canada, Australia, Switzerland and China, Hong Kong SAR.

In the case of less developed middle- and low-income economies, the proportion of resident filings is clearly less numerous than in the 20 largest IP offices in the world, in terms of trademark filings. In countries such as Viet Nam, Thailand, South Africa, Colombia, Venezuela and Bangladesh, the proportion of non-resident applicants is around 40 to 50 percent of total filings. Even so, this proportion of non-resident applications for trademark filings is usually lower than the proportion of non-resident applications for patents.

97 See WIPO (2012), Figure B.2.1.3. In the case of European countries, care must be taken when analyzing the figures, as applicants can obtain domestic trademark protection by filing a regional application with the OHIM. This increases the difficulty of capturing the resident/non-resident breakdown. In particular, with OHIM filings, it is hard to assess to what extent the applicant has a domestic or an EU-wide objective.

Furthermore, over time, the proportion of resident trademark filings versus non-resident trademark filings does not appear to be impacted as much as in the case of patents. In fact, at the global level, the proportion of non-resident trademark filings hovered around 30 percent in the period 2004 to 2011. While this global figure is largely influenced by the high level of resident trademark applications in China, the finding also holds true at the national level. For instance, the proportion of resident trademark filings is relatively stable in large IP offices (see Box 1.9 for the US).

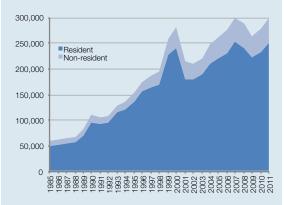
Overall, the finding that domestic actors dominate trademark filings at local IP offices is plausible. The answer lies in the nature of the companies that file for trademarks, and the reasons that they do so. When compared with patents, trademarks are more accessible to actors in any economy. They are cheaper and easier to obtain and they have a wider applicability to businesses, products and services (see Chapter 2).98 A lot of small- and mediumsized enterprises (SMEs) apply for trademarks to protect goods and services. The vast majority of these SMEs only operate domestically; consequently, SMEs represent a large proportion of resident applications for trademark filings. In fact, many trademark filings in middle- and low-income economies tend to be by individuals rather than by companies.99 Finally, patenting tends to be more concentrated in a smaller number of global companies. Additionally, patents are often filed abroad by company headquarters, rather than by their subsidiaries abroad.

Box 1.9: Non-resident versus resident trademark filings in the US

Of the five million trademark applications filed with the USPTO between 1985 and 2011, only 15.3 percent can be attributed to non-US residents. ¹⁰⁰ Foreign demand did appear to be more resilient following the dotcom boom. Throughout 2010, non-resident trademark filing applications recovered faster and exhibited stronger growth than resident filings. Overall, however, both resident and non-resident applications grew at roughly the same pace between 1985 and 2011 (see Figure 1.16).

Figure 1.16: Non-resident trademark filings are not becoming more important over time in the US as a proportion of total filings





There is some variation in the distribution of non-resident applications over this time period. As a proportion of total non-resident applications, Canadian filings peaked in the mid-1990s, potentially in response to increased access to the US economy following implementation of the North American Free Trade Agreement in 1994. While filings have since slowed, Canadian residents remain the largest source of non-resident applications for US trademark registration. Non-resident filings from Germany, the UK, Japan, France, and Italy also show signs of relative decline, although they are increasing in annual volumes overall. In contrast, China (including China, Hong Kong SAR), Mexico, and the Republic of Korea accounted for growing shares of non-resident applications. In 2011, Chinese residents were the fourth largest source of foreign applications for US trademark registrations.

Source: Myers (2013). For more detail, see Graham et al (2013).

¹⁰⁰ Applicant residency was established based on the first-named applicant's address. For applications with no owner address data recorded, the firstnamed applicant's nationality was used to proxy residency. Applications with neither address nor nationality data coverage were omitted. Basing residency on nationality yielded comparable results.

⁹⁸ See OECD (2013c), Section 5.8.

⁹⁹ See Abud et al (2013) for the case of Chile.

When it comes to IP offices in middle- and low-income economies with smaller volumes of trademark filings, non-residents file the majority of trademarks. In this case, experience shows that it is indeed the proportion of residents – and not non-residents – that is more likely to grow over time, as local companies develop experience with the trademark system, and also as the proportion of services in overall economic output grows. In general, a certain level of economic development is associated with a greater degree of dominance of resident trademarks in the home market. A stronger presence of these same brands in foreign markets is only attained at far higher levels of economic development, however.

5) The rise of the Internet: The Internet has affected the role of trademarks in at least three major and related ways.

First, the Internet has led to a considerable and most likely lasting boost to trademark applications. On the one hand, existing businesses launch new Internet-based or related products and services, triggering new trademark filings. On the other hand, the Internet is spurring the creation of new companies and the development of novel products, which, in turn, is also spurring the use of the trademark system. Both these trends have led to a robust increase in services-related trademarks in particular. It is worth noting that during the Internet boom years around 2000, the filing of trademarks in IT-related service trademark classes also increased sharply.

Second, the Internet has increased the international and, indeed, global reach of brands. More companies file not only in their home country but also abroad, leading to a larger spread of trademark filings. Arguably, the role of brands – and the trust they create – are particularly important in the online context, as consumers engage in transactions remotely, often without being able to physically inspect the product before concluding the transaction. Comparable in some ways to the evolution of trademarks during certain historical advancements in international trade (Section 1.1), trademarks are seemingly becoming more important in the context of today's national and cross-border online transactions.

Third, the Internet increases the need for legal protection where rights owners face online sales of counterfeit goods or other forms of misuse of their trademark.¹⁰¹ The consequences of this increased risk include not only loss of profit, but also impairment through trademark dilution (see Section 2.3.1 of Chapter 2 for a discussion on this concept).

In tandem with these three developments, a dynamic interaction is taking place between trademarks and domain names. Companies with existing brand names are filing for domain names both in country code top-level domains (ccTLDs) and in the international generic top-level domains (gTLDs) under these brand names (and in combination with other terms) in order to build their online presence, or, defensively, to prevent third parties from carrying out such registrations. In turn, new companies with novel products are more likely to acquire both trademarks and domain names.

Broadly in parallel with trademark filings, the number of domain name registrations has increased almost continuously, with ccTLD registrations growing from less than 2 million in 2000 to close to 35 million in 2012, and gTLDs, most importantly ".com", moving from 105 million in 2004 to 233 million in 2012. This trend was also accompanied by an increasing number of domain name disputes, where trademark-related domain names were occupied by entities that were different from the trademark owner. The number of cases administered under the WIPO-initiated Uniform Domain Name Dispute Resolution Policy (UDRP), for example, has also grown. In 2003, the number of WIPO domain name disputes stood at 1,100; in 2012 that number had more than doubled to 2,884 cases.

¹⁰¹ See WIPO (2010b).

¹⁰² See OECD (2013a), compiled from country and generic network information centers and from ZookNIC.

In a recent development, the Internet Corporation for Assigned Names and Numbers (ICANN) has begun introducing new, generic, top-level domains. Following a round of applications, 1,930 applications are currently being processed, with the first of these domains expected to come online in 2014. The introduction of such domains comes with additional opportunities and risks around the use of trademarks online, thus further increasing the level of interaction between the Internet and trademarks. For example, brand owners who can afford the fees might assess whether to apply for their own domain. Regardless of whether or not they apply, they must address any need for a presence in new domains operated by third parties, and devise strategies for the prevention and resolution of infringement of their trademarks in such new domains.

Finally, there is the issue of the interaction between trademarks and how products are searched for and found via Internet search engines. A known trademark may lead Internet users more quickly to a company's webpage and corresponding offerings online. Similarly, competitors or counterfeiters might be tempted to use someone else's trademark to direct traffic to their sites. The Internet has provided countless new ways for businesses to refer to trademarks in a manner that affects the trademark holder's business. 104 Practices such as the use of trademarks within listings for non-genuine goods on auction sites, the use of trademarks as keywords in search engines, the use of trademarks to name accounts in social networks, or the use of trademarks on virtual objects that are traded in virtual worlds, constitute clear challenges to the traditional application of trademark law. As a result of competitors or counterfeiters purchasing trademarks as keywords from Internet search engines, advertisers' websites may show up in searches for trademarks that these advertisers do not own. Many trademark owners fear that website traffic is redirected in such a manner. Whether this is true or not is largely an empirical question.¹⁰⁵ As the importance of brands is likely to increase rather than decrease in the context of Internet searches and purchases of apparently genuine branded goods from websites, trademark enforcement practices will have adapt to this new environment.

104 See WIPO (2010b).

105 For the first empirical work on the matter see
Bechtold and Tucker (2013). The authors find that,
while some groups of users may visit the websites of
trademark owners less often after seeing third-party
advertisements on search engine result pages, other
groups of users actually visit them more often.

6) Strategic use of trademarks: A more strategic use of trademark filings may have contributed to overall growth of trademark filings. In particular, in legal regimes where there is an absence of stringent use requirements, companies or other organizations may file a great number of trademarks – without any plans to use them immediately. They may do this so that they can "fence" around their existing trademarks by way of preparing for future similar product releases, or so as to ensure that other companies do not get too close to their namespace. The inflation of trademark filings could end up "cluttering" the trademark register (see Subsection 2.3.2).106 Currently, while there seems to be little indication that the existence of too many trademarks is inhibiting the registration of new marks, the proliferation of trademarks may be responsible for driving up the costs of searches and clearance for companies that are considering entering a new market.

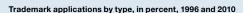
7) Institutional and regulatory changes: Finally, in the case of institutional drivers (for example the facilitation of filing trademarks abroad due to international agreements), the ease of trademark applications via new online application systems, coupled with other factors outlined in Box 1.7, play an important role in explaining trademark filing patterns. Interestingly, however, the extension of registrable trademarks to new forms of trademarks – and beyond service, word and shape trademarks – does not currently seem to be a major driver of trademark filings for countries for which data are available (see Box 1.10).

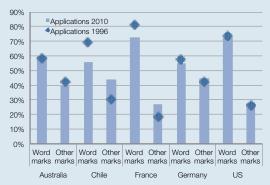
To conclude, one might also expect that the enforcement of trademark rights is related to the growth of trademark filings, with the assumption that improved legal certainty over time via improved enforcements leads to more trademark filings.

Box 1.10: The extension of registrable trademarks beyond words alone

Like the situation which applies to patent protection, the range of signs that can be registered, and thus protected as trademarks, has also grown. In 1994, Article 15.1 of the TRIPS Agreement confirmed a trend whereby a broader range of registrable trademarks had been well under way in countries since the 1980s. Initially, only words or combinations of words, typically represented in connection with graphical elements, such as drawings or logos, were considered registrable. Later, three-dimensional or shape marks (e.g. the Coca-Cola bottle), slogans, acoustical signs and sounds, identification threads of textiles, abstract colors (e.g. the colors green and yellow for agricultural machines from John Deere) were accepted as registrable trademarks. 107 Such developments notwithstanding, word trademarks, or a combination of word(s) and image, continue to be the most important trademark type by far. Data from four highincome economies shows that pure word trademarks accounted for anywhere between 55 percent (Germany) and 73 percent (France) of all trademarks in 2010 (see Figure 1.17).

Figure 1.17: Word trademarks account for the majority of registrations; some trend growth towards registration of other types of trademarks



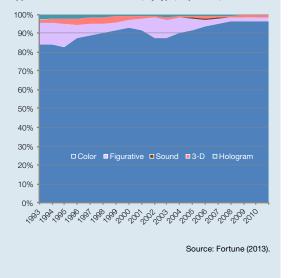


Source: WIPO based on data in Fortune (2013), Helmers (2013), Mitra-Kahn (2013), Myers (2013), and Schautschick and Graevenitz (2013).

106 On trademark cluttering, see Graevenitz et al (2012). This work, commissioned by the UK Intellectual Property Office (UK-IPO), provides a first empirical assessment of the matter. The filing of other types of trademarks (such as three-dimensional, sound or color) is still negligible in countries for which data are available. In Germany, for example, word, and word and image accounted for almost 97 percent of all trademarks filed in 2011. In Australia, the use of sound, scent, shape, color, or a combination of shape and color on trademarks, has decreased as share of overall trademark activity, accounting for a mere 0.3 percent of filings in 2012, down from one percent in 1996. Of these filings, the most popular is the shape trademark, which accounted for 137 filings in 2012, or 0.2 percent of the total. In the US, the proportion of image-only trademarks is slowly decreasing over time, while word and image trademark filings are on the increase. Filings to register sound, smell, and other non-visual trademarks are rare in the US. France is an exception, in that color trademarks play a non-negligible role; color trademarks accounted for 96 percent of non-word trademarks and hence about 26 percent of all trademarks in 2011 (Figure 1.18). It must be noted, however, that all color marks are not single-color marks; there are also trademarks that claim color as a distinctive feature, which might be captured by the French statistics as color marks.

Figure 1.18: In France, apart from word trademarks, color trademarks are the most commonly used trademark type

Proportion of French trademark applications, other than applications for word trademarks, by type, in percent, 1993-2011



1.4

THE RISE OF MARKETS FOR BRANDS

Markets for brands seem to play an important but underappreciated economic role in today's global economy. Similar to patents, trademarks and brands are increasingly licensed, bought and sold at the national and international level. In addition, franchise business models are both growing and internationalizing.

Against this background, the absence of definitions, data and analysis on markets for brands is an important gap in the current body of knowledge. Whereas markets for technology have received a great deal of attention, the licensing and acquisitions of brands is relatively uncharted territory.¹⁰⁸

This section seeks to synthesize the disparate data on markets for brands and to provide new evidence. The objective is (i) to define and provide a taxonomy for different brand markets, and (ii) to provide evidence on their magnitude.

¹⁰⁸ See Arora *et al* (2001), and Giuri *et al* (2007) on markets for technology.

¹⁰⁹ This section draws on a background report prepared for the 2013 World Intellectual Report, see Frey and Ansar (2013).

1.4.1

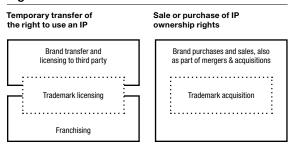
WHAT ARE MARKETS FOR BRANDS AND WHY DO COMPANIES USE THEM?

What are markets for brands? Despite their economic significance, no agreed definition of these markets exists.

In this Report the term "markets for brands" covers three different transactions, grouped under the the following: "Temporary transfer of the right to use an IP" with (i) the licensing of brands and (ii) the franchising of business models; and "Sale or purchase of IP ownership rights" essentially consisting of (iii) the acquisition of a brand and the transfer or associated rights, including as part of company merger and acquisition (M&A) (Figure 1.19).

Trademarks correspond to the legal rights associated with brand assets that may be transferred or purchased; hence they are often an integral part of these three transactions.

Figure 1.19: Markets for brands defined



Note: The sale or purchase of IP rights (see, right) covers a case where there is a change of economic ownership of the IP right; the seller no longer has any rights associated with the IP.

Source: WIPO. Definitions aligned with (UN et al 2011).

Companies often pursue a brand licensing strategy. Companies ("licensors") may license the use of their brands (along with associated trademarks) to third party producers or sellers ("licensees") in return for a stream of royalties or other value. Companies often pursue such a licensing strategy, allowing them to diversify their business and expand into additional product categories.

By doing so, they are able to enter new markets, access competences outside the boundary of the company, and generate new revenues without making substantial investments in building or acquiring additional knowhow and manufacturing capacities. 110 The practice is often used internationally as companies outsource their manufacturing, sales or services to foreign countries. An additional incentive might be the fact that companies need to commercially use the brand in order to retain rights to the trademark in a foreign country, and hence to maintain brand ownership.111 Again, licensing can often accomplish this at a lower cost than would apply in a case where a direct entry approach is adopted. In many cases of promotional trademark merchandising, the licensing of a trademark increases the brand value of the licensor as well.¹¹² One such example would be the licensing of a brand of luxury car to a toy manufacturer producing miniature cars.

¹¹⁰ See Calboli (2007), and Colucci *et al* (2008)

¹¹¹ See WIPO (2004), and Jayachandran et al (2013). See the discussion of the use requirement in Subsection 2.3.2 of Chapter 2.

¹¹² See Ladas (1973), and Calboli (2007).

Many companies also pursue a franchise strategy. A company ("the franchisor") may choose to license its whole business model to a third party ("the franchisee") in a particular geographical area in return for a stream of royalty payments or other value. 113 Examples of this type of business model include fast food, hotel and car repair chains. As part of a franchise-based business model, the franchisee secures the right to use the brand and the relevant know-how. Franchising is similar to licensing in that it facilitates market entry for the franchisor while simultaneously enabling them to avoid the costs associated with building a brand and building a new business model; as such, franchising ensures short lead time to market. Licensing and franchising are also commonly employed as early-stage international moves for companies seeking to "go global", since they offer an opportunity to operate in new countries, and in doing so, to incur relatively low costs and low risk. Because franchising allows entrepreneurs worldwide to expand with relatively little capital investments, it provides a suitable growth model for businesses in low-income countries.114

Third, the acquisition of brands and the transfer of associated rights constitute a more permanent transfer of IP rights from one business to another. This regularly takes place as part of company M&As. One relevant example is the Lenovo purchase of the personal computer division of IBM, including the "Think" trademark, which took place in 2004. While there may well be secondary markets for brands – i.e. where companies acquire a brand, but not the related business – such transactions are likely to be uncommon, since brands are typically difficult to separate from a business, and the value of the business is likely to decrease substantially without the brand. Moreover, trademark assignments are likely to be a submarket of the above.

In short, markets for brands provide a way of mitigating some of the costs and risks associated with building a brand, allowing the companies involved to alleviate costs when entering new markets by using established brands.¹¹⁵ On the flipside, companies with established brand names increasingly depend on their ability to leverage brand equity by launching new products using established brand names, sometimes externally through brand licensing. This creates market opportunities, with some companies seeking to acquire established brands for new product developments, whereas others examine opportunities to leverage their own brands.¹¹⁶

However, a number of factors may restrain the development of these markets. The granting of the temporary use of a brand – as in licensing and franchising – entails the risk of the licensee or the franchisee weakening the brand by reducing the product or service quality, for example. Customers will expect a certain quality level; if disappointed, this will have a negative impact on the brand value itself. A brand owner will have to closely monitor the use of his or her brands.

¹¹³ As stated in EFF (2011), franchising is: "[...] a system of marketing goods and/or services and/or technology based upon a written contract between two legally, financially and fiscally separate and independent undertakings, the Franchisor and each of its individual Franchisees, whereby the Franchisor grants each of its individual Franchisees the right, and imposes the obligation, to conduct a business in accordance with the Franchisor's concept."
114 See Frey and Ansar (2013).

¹¹⁵ See Tauber (1988).

¹¹⁶ See Clifton (2003).

1.4.2

PUTTING NUMBERS ON MARKETS FOR BRANDS: NOT SO EASY...

Temporary and partial transfer of the right to use an IP

Putting numbers on trademark licensing: Examples of trademark licensing in most sectors, as well as examples for individual product and service lines, abound. Trademark licensing also appears to be a significant source of revenue for many trademark owners.

Nonetheless, reporting systematic data on trademark licensing is notoriously difficult.

First, company-level data on brand licensing is hard to grasp. For the most part, trademark licensing transactions between companies are not made public. On the contrary, companies have an incentive to avoid admitting to existing or potential customers that their brand is being used by third parties. While annual reports may make numerous references to the importance of brands and related licensing, only in very rare cases do they provide detailed figures on trademark licensing payments and revenues. In addition, disparate information on trademark deals, and underlying royalty rates, can be gleaned from court records, some filings with the US Securities and Exchange Commission (SEC) or similar sources; nevertheless, no systematic source is available.¹¹⁸

Some private entities have made efforts to map the economic importance of brand licensing by gauging the sales of licensed products. One of these – The Top 150 Global Licensors ranking – has estimated that retail sales of branded, licensed products worldwide were almost USD 230 billion in 2012.119 Using this measurement, Disney Consumer Products is the largest licensor, with revenues of USD 39 billion in 2012 - more than double the revenues achieved in 1992 (see Table 1.5). Disney licenses its film, television and movie characters for use on third-party products and thereby earns royalties.¹²⁰ Unmistakably, the entertainment sector, together with the sports sector, is one of the most important sectors in trademark licensing. As a result, the more detailed trademark licensing studies and publicly available data concern the licensing of cartoon characters or sport clubs to toys, food, home décor, clothing and footwear, and consumer products. The other top licensors in the ranking of the top global brand licensors mostly operate around the apparel, automotive, textile and consumer electronics sectors.

119 The ranking does not pretend to offer details on licensing revenues of these companies. Rather, the

120 Some of the major properties licensed by the company include Mickey Mouse, Cars, Disney Princess, Winnie the Pooh, Toy Story, DisneyFairies, and the Marvel properties including Spider-Man and Avengers. See *Disney Annual Report 2012*.

top global licensors report the retail sales of branded products from their licensees. These sales revenues are the basis on which confidential royalty rates are applied, yielding licensing revenue to top licensors.

¹¹⁷ See Jayachandran et al (2013).

¹¹⁸ See Smith and Parr (2005).

Others industry surveys by associations or consultancies help by collecting data on licensing across different IP forms and via surveys of licensors. They publish aggregate numbers; data are not made available on the level of the company, in order to keep individual license deals and revenues confidential. For instance, when examining the US licensing market, the latest survey carried out by the International Licensing Industry and Merchandisers' Association (LIMA) shows that trademark owners generated USD 5.5 billion in royalties in 2012, a gain of 2.5 percent over 2011, for an estimated retail value of USD 112 billion.¹²¹ In terms of revenues, the majority of these revenues are generated in the following sectors (in decreasing order of importance): (i) "Celebrity and Character" (entertainment, TV, movie and celebrity) followed by (ii) "Corporate brands", (iii) "Fashion" which includes designer branded goods, (iv) "Sports", including leagues and individuals, (v) "Art", and (vi) royalties for "University College" trademarks. 122 Other surveys and reports carried out by consultancies offer insights into specific sectors in specific countries.¹²³

Table 1.5: Global sales of licensed merchandise as reported by the top 15 brand licensors, 2012

Rank	Company	Country	Type of business	Global sales of licensed merchandise (in USD billion)		
1	Disney Consumer Products	US	Entertainment	39.3		
2	Iconix Brand Group	US	Apparel	13		
3	PVH Corp.	US	Apparel	13		
4	Meredith	US	Media and Marketing	11.2		
5	Mattel	US	Toys and games	7		
6	Sanrio	Japan	Art	7		
7	Warner Bros. Consumer Products	US	Entertainment	6		
8	Nickelodeon Consumer Products	US	Entertainment	5.5		
9	Major League Baseball	US	Sports	5.2 (E)		
10	Hasbro	US	Toys, games and entertainment	4.8		
11	The Collegiate Licensing Company	US	Sports	4.6		
12	IBML (International Brand Management & Licensing)	UK	Apparel	4		
13	Westinghouse	Electrical Ighouse US Engineerin Household Appliances		3.99		
14	Rainbow	Italy	Entertainment	3.8 (PRIVATE)		
15	General Motors	US	Automotive	3.5 (E)		

Note: E = estimated, PRIVATE = privately owned.

Source: Top 150 Global Licensors as in Lisanti (2013).

Second, in most countries, there is no legal requirement for trademark licenses to be recorded with the national IP office. Even where countries require registration (as is the case in Brazil), see Box 1.12, an insignificant amount of these data are available in a usable format, and there is no one source in existence anywhere in the world that stores all the various national statistics in a single repository. The information collected usually relates to registration requirements, which vary, and which are specific to each country. Often, only a minority of deals are registered. The data cannot be clearly associated with any particular company. Moreover, usually only information on the licensing deal, but not its outcomes (i.e. paid royalty streams, etc.) is available.

¹²¹ See LIMA (2013).

¹²² *Idem*.

¹²³ See PwC (2012), for example, on licensing in the Italian fashion industry.

To overcome these limitations, a number of private entities have begun to collect data on trademark licensing deals. This information includes the name of licensor and licensee, the royalty rate (e.g. five percent of sales, and a possible upfront payment) and the description of the deal. These data reveal the number of deals across time. Deal coverage is often low, however. Moreover, the data also do not include comprehensive figures on the value of trademark licensing deals, as the deal information is concluded ex ante to revenue generation. In addition, these sources are biased towards deals in high-income countries and, in particular, towards deals in the US.

The analysis of available deals shows that average royalty rates on both net and gross sales vary from less than 5 percent to more than 25 percent across sectors. The highest average rates are found within the "Celebrity and Character" category, while the lowest average royalty rates relate to "Corporate/Product" and "Fashion" trademarks.124

In short, trademark royalty deals and outcomes are only public for a minority of the total trademark licensing deals.¹²⁵ Available information on licensing deals is highly incomplete.

Putting numbers on franchising: Thanks to incipient work by statistical offices, reports by national franchise industry associations and publications of consultancies, the data situation with respect to franchising is somewhat better.

Statistical offices are beginning to track the franchise industry. In 2007, the US Census Bureau launched an Economic Census Franchise Statistics initiative focused on assessing the contribution of franchising to the US economy and on examining the number of businesses engaged in franchising, their annual sales, as well as their employment data and payroll.¹²⁶ The 2012 Economic Census forms also have franchising questions in relation to franchise industries. The US franchising sector has experienced steady growth both in terms of franchising establishment formation and related economic output. The estimates referred to in the US Census report suggest that the number of franchising establishments in the US will reach 757,055 by the end of 2013. Franchising output is expected to reach USD 802 billion by the end of 2013.127

Apart from some mostly US-specific rankings of top franchises, most other reports are based on data gathered from diverse national franchising associations or compilations of data produced by these associations. 128 The lack of a reporting framework at the international level complicates matters; different national reports adopt different reporting structures, and the data are hard to compile and compare.

126 See US Economic Census 2007 Economic

124 See Smith and Parr (2005). 125 Idem.

Census Franchise Report, released on September 14, 2010. See also PwC (2011).

¹²⁷ See IFA (2013)

¹²⁸ The 2013 Franchise 500 Bankings for instance, offers a tool that can be used to compare franchise operations in the US.

To get around this problem, Antonowicz (2011) gathered data from franchising associations of individual countries. He showed that franchising agreements are widely used around the world. According to his data, the international franchising market comprises 71 countries, 40,200 franchise brands and more than 3 million franchising establishments. In terms of the regional distribution of the market, the highest number of franchising brands operates in Europe, while Asia leads the field in the number of franchising establishments. In terms of franchising intensity relative to GDP, firms in Australia are the most active. Firms in North America, Africa, Europe, Asia and South and Central America follow in decreasing order of franchise intensity relative to GDP.

The above findings are similar to the findings of the European Franchise Federation (EFF) (2011). Over the period 2007 to 2009, Europe as a region was the largest franchising market, with 11,731 franchise brands. While the US was the largest single market for franchise brands in 2007, the data suggest that it was overtaken by China and the Republic of Korea in 2009. Nevertheless, the US was still the leading market in 2009, when the number of franchise establishments – as opposed to the number of franchise brands – is considered.¹³⁰

Finally, reports from the EFF show that markets for franchise brands are largely domestic. In China, for example, 90 percent of the franchise brands were still domestic in 2009. In Brazil, this figure was 89 percent in 2009, and in India, it was 99 percent in 2007.

Trade in IP – cross-border trademark licensing and franchises: Paradoxically, while these data are not available at the national level, monetary data on any IP-related licensing are provided at the international level. As part of their balance of payments (BoP) statistics compilation systems, countries report these IP-related receipts and payments with other countries under the title "Royalties and license fees" (see Section 1.3.1 in the 2011 World Intellectual Property Report).

One advantage of these data is that they are published by all countries in a timely and yearly (or quarterly) manner.

Thus far, however, most data on cross-border receipts and payments of royalties and license fees do not distinguish between different forms of IP. For most countries, only aggregate data for all IP-based transactions were available. No breakdown of these data were available, which would have allowed economists to assess international payments and receipts for specific IP types, such as trademarks or franchising.¹³¹

On this front, some noteworthy developments have taken place (as described in Box 1.11). The Manual on Statistics of International Trade in Services (MSITS) 2002 asks countries to submit data while separately identifying franchise and trademark payments. In addition, the current 2010 edition of the manual clarifies this recommended identification. More detailed data on international IP transactions have slowly started to become available. While these statistics will not be reported by the IMF, in line with the 2010 MSITS recommendations, the data are accessible from the countries themselves or from international organizations such as the WTO.

- 129 See Antonowicz (2011). Although the author provides a list of the countries included in the study, no country-specific information is provided. According to Frey and Ansar (2013), this makes it difficult to verify and replicate Antonowicz's findings.
- 130 Frey and Ansar (2013) note, however, that the EFF figures diverge substantially from the US Census estimates as well as from Antonowicz (2011).
- 131 The OECD's Technology Balance of Payments provides more detailed disaggregated information, distinguishing between four categories of technology services. See Athreye and Yang (2011). Yet, extracting trademark and licensing receipts separately from this database does not currently appear to be possible.

Box 1.11: Important developments in relation to international IP payments

More disaggregated data on international trade in IP rights are starting to become available. Following publication of the fifth edition of the International Monetary Fund's (IMF) BoP Manual, which introduced separate reporting for IP payments, the United Nations interagency Task Force on Statistics of International Trade in Services recommended an extended breakdown of charges for the use of IP through the *Manual on Statistics of International Trade in Services*. In the sixth edition of the BoP Manual, an item on the "Charges for the use of IP not included elsewhere (n.i.e.)" was introduced with clearer definitions. The 2010 edition of the trade in services manual recommends the breakdown between various IP-based licensing transactions.

The item "Charges for the use of intellectual property n.i.e." is now defined as follows:

- Charges for the use of proprietary rights, such as patents, trademarks, copyrights, industrial processes and designs, trade secrets and franchises, where rights arise from research and development, as well as from marketing
- Charges for licenses to reproduce and/or distribute intellectual property embodied in produced originals or prototypes, such as copyrights on books and manuscripts, computer software, cinematographic works and sound recordings, and related rights, such as for the recording of live performances and for television, cable or satellite broadcast

Following these recommendations, royalties and license fees, or the new charges for the use of IP n.i.e should include license fees paid for the use of produced originals or outcomes of research and development and trademarks and franchises. MSITS 2010 suggests reporting franchise and trademark licensing fees separately.

The methodology makes a difference between temporary right to use, outright sales, and full transfers of IP rights (compare to Figure 1.19). Similarly, the provision of temporary right to use or reproduce IP products is shown as a service.

Another recently introduced change is where to classify the sales of specific IP assets. In previous recommendations, a sale of the IP asset was supposed to be under the capital account, i.e. as non-produced non-financial assets. In the new recommendations, the sale of other IP-based products should be included under the appropriate service that produces them, i.e. software originals should be shown separately under computer services; audiovisual (films, music) originals should be shown under audiovisual services. The only exception here is trademarks; their sale is not currently considered on a par with the sale of other IP rights, which are treated as produced assets. The sale of trademarks, therefore, is still treated under the capital account as a non-produced non-financial asset.

Source: IMF (2009), and UN et al (2011).

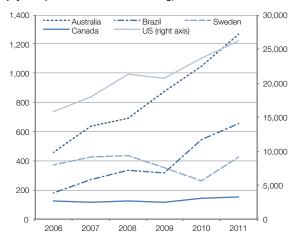
The following relies on IP-flow BoP-statistics for five countries which already offer disaggregated information on trademark licensing and on franchising, namely Australia, Brazil, Canada, Sweden, and the US. A number of findings emerge from this preliminary analysis:

First, international markets for trademark licensing and franchising have been growing, both in absolute terms and relative to trade in services in some of the selected countries.

The total number of international trademark licensing and franchising transactions (defined as receipts plus payments) has grown in absolute terms over the period 2006 to 2011 for the five countries under consideration, except for Sweden (see Figure 1.20, top). The US and, to a lesser extent Sweden, have a positive balance in trademark licensing and franchising, whereas Australia, Brazil and Canada have a negative balance. The receipts and payments for the US are multiple times larger than that of its partners, and one can see how countries such as Canada rely on trademark and franchise-related payments from the neighboring US.

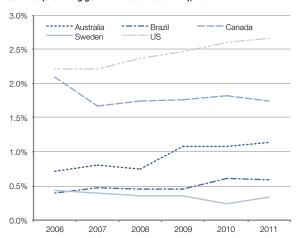
Figure 1.20: The total value of international trademark and licensing transactions has mostly increased over the period 2006 to 2011, sometimes rapidly

Total affiliated and unaffiliated transactions (receipts and payments) for trademarks and franchising, 2006-2011



Source: WIPO, based on data from the Australia Bureau of Statistics (ABS), National Industrial Property Institute Brazil (INPI), Statistics Canada (CANSIM), Statistics Sweden (SCB), Bureau of Economic Analysis (BEA).

Total affiliated and unaffiliated transactions for trademarks and franchising as a proportion of total trade in commercial services (excluding government services n.i.e.), 2006-2011

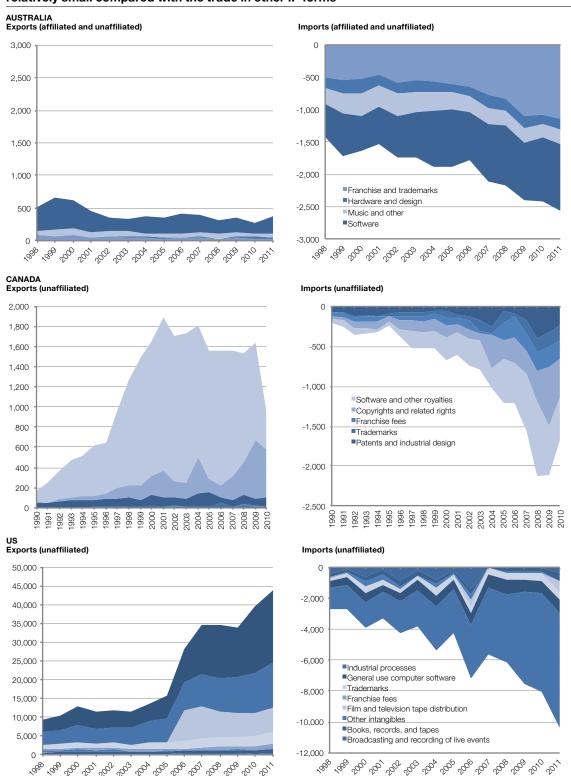


Source: WIPO, based on data from ABS, INPI Brazil, CANSIM, SCB. BEA and WTO data for trade in commercial services.

Trademark licensing and franchising also grew, relative to trade in services in the case of the US, rising from 2.2 percent to 2.7 percent of total services trade, and in Australia from 0.7 percent to 1.1 percent of total services trade. For the other countries, the development was flat, or, in the case of Canada, negative (Figure 1.20, bottom).

Second, when examining Australia, Canada and the US, one finds that the receipts for trademark licensing and franchising are relatively small when compared with other IP-based transactions (Figure 1.21). One also finds that payments can, however, account for a significant proportion of IP trade flows, as in the case of Australia and Canada. Transactions related to IP for software, copyright and industrial processes constitute the bulk of the IP-related unaffiliated international payments, both in Canada and in the US. In the US, trademarks and franchising account for 10 percent of the receipts for IP rights, while payments accounted for 6.6 percent of all imports for IP rights in 2010. In Canada, trademarks and franchising accounted for only 1.3 percent of the unaffiliated receipts for IP rights, but a considerable 25.6 percent of all IP-related payments. Also, in Canada and the US, the proportion of markets for unaffiliated trademark licensing and franchising are growing relatively slowly as a proportion of total IP trade between unaffiliated entities. In Australia, the situation is similar to Canada, but with amplified magnitudes and growth as regards IP-related payments. Specifically, the trademark and franchise proportion of total IP receipts was at 10 percent in 2011, but payments accounted for a much higher proportion, at 45 percent of all IP payments. In addition, they have been growing since 1998. Turning to Brazil, while the proportion of trademarks and franchises has been growing over time, royalty payments are also mainly due to payments related to know-how and technical assistance services (see Box 1.12).132

Figure 1.21: Markets for trademark licensing and franchising are relatively small compared with the trade in other IP forms



Source: WIPO, based on data from ABS and the Office of the Chief Economist, IP Australia, CANSIM, and BEA.

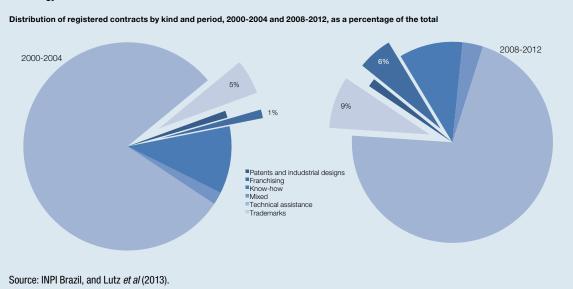
Box 1.12: Is the licensing of foreign brands and franchises increasing? Evidence from Brazil

Following national regulations, the Brazilian IP office (INPI) registers contracts related to the transfer of technologies. By law, companies are obliged to register technology or franchise contracts, in order to enable the Central Bank to process and facilitate outward payments of royalties and license fees. In Brazil, such registration also allows income tax deduction of these expenses. The contracts under consideration involve the licensing of industrial property rights, such as trademarks, patents, utility models, industrial designs and integrated circuits. They also include contracts on knowledge transfer not involving IP rights, such as know-how agreements and technical assistance services and franchise contracts.

Approximately 1,000 technology contracts between a foreign licensor and a national licensee are registered per year. The vast majority of these contracts relate to technical assistance services (76 percent), which are followed by know-how agreements (10 percent), trademark licenses (7 percent) and franchise contracts (3 percent). Given that only the number of deals is recorded, but not the value of the deals, these proportions do not necessarily reflect the actual amounts involved in the remittances.

However, the contracts involving trademarks licenses and franchising are the only ones that grew fairly consistently, both in absolute and proportional terms during the 2000-2012 period. Altogether, they now account for around 15 percent of contracts registered in 2012 (see Figure 1.22).

Figure 1.22: In Brazil, the relative importance of trademark licensing and franchising is small, but it is growing relative to other technology contracts



Third, in countries where these figures are available, the vast majority of registered international receipts for trademark licensing and franchising relate to transactions between affiliates. In the US, unaffiliated transactions accounted for 22 percent of total (affiliated and unaffiliated) trademark licensing and franchising receipts in 2011. In Canada, unaffiliated transactions accounted for only 9.5 percent of total trademark licensing. Although no separate information is available, the situation is likely to be similar in the vast majority of countries. In affiliated transactions, however, companies transfer trademarks within companies to manage the brand or franchise from

a central position, and they then charge the other parts of the business a license fee. Global companies are known to allocate profits between tax jurisdictions – sometimes in order to optimize business processes, sometimes in order to pay fewer taxes – and this may impact on how licensing revenues and flows are reported, thus affecting the interpretability of the data.¹³³

133 For more details, see Box 1.7 in WIPO (2011a) and Madeuf (1984).

Fourth, and unsurprisingly, examination of the data from the US shows that most international trademark and franchise transactions are between high-income countries. US franchising and trademark licensing receipts are mainly confined to OECD member states. Unsurprisingly, Canada and Mexico, given their close proximity to the US, provide important export markets. Additional noteworthy US markets for trademark licensing, are Japan, the UK, Australia, and central European countries. One largely finds the same patterns when examining franchising receipts. An exception is China, which constitutes a more important franchise export destination than Australia and France.

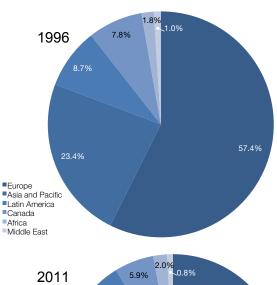
Middle-income economies are becoming more important markets. While small, growth rates in US receipts from these countries increased substantially during the investigated period. In particular, US franchising receipts from the Middle East increased by 15 percent annually over the investigated period. Double-digit growth figures were also recorded for South America.

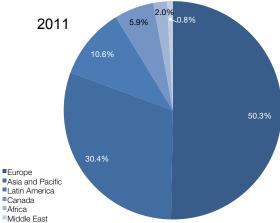
While middle- and low-income economies still provide relatively small markets, some regions, such as Asia, Latin America and Africa, have increased their proportion of trademark licensing from the US at the expense of Europe and Canada (see Figure 1.23).

While some middle- or low-income economies have increasingly become important export destinations for trademark licensing, and in particular for franchising, there is either limited or no evidence suggesting that these economies export licensed brands to richer countries. US payments to middle- and low income countries for both franchising and trademark licensing remained negligible over the investigated period.

Fig 1.23: Asia, Latin America and Africa are becoming more important markets for US trademarks

US trademark receipts, by region, affiliated and unaffiliated, 1996 and 2011





Note: Regions as defined by the US Bureau of Economic Analysis.

Source: Bureau of Economic Analysis (BEA), US Department of Commerce.

Sale or purchase of IP rights: brand-related M&As

Both the press and the business literature provide numerous examples of brand-related M&As. In particular, the acquisitions of Dunlop, Jaguar, Land Rover, Volvo, Tetley and others by companies in middle-income economies have received much attention in recent years

Putting a figure on the acquisition of brands is complicated for conceptual reasons. First, brands or trademarks are rarely acquired on their own; rather, they are usually part of an M&A deal (see Figure 1.19). Evidently, M&As are seldom motivated by the acquisition of a brand alone. They are usually related to many other strategic considerations of the parties involved – sometimes the brand comes along with other assets, with these other assets being the intended target of the takeover. Consequently, purely brand-related M&A transactions are difficult to single out from M&As that are motivated by other considerations.

Nonetheless, it is possible to use available M&A databases to extract some preliminary findings of interest (see Box 1.13).

Box 1.13: Triangulating cross-border purchases of brands

Frey and Ansar (2013) identified brand-driven acquisitions by searching a database of M&As.¹³⁴ This was done by using a number of brand-related keywords in the deal descriptions. The authors are the first to admit to, and to describe, the limitations of such an approach. In the first place, it is likely to lead to a systematic under measurement of deals in which the brand plays some role; the deal descriptors might not mention the significance of brands and trademarks in the given transaction explicitly.

134 The database used is Bureau van Dijk (BvD)'s Zephyr.

It covers deals in 40 languages – deals that Englishonly databases tend to miss. In addition, BvD states that it builds on data from a large number of analysts in various countries who monitor media, press releases by transaction parties, interim and annual financial reports, and filings in the local language.

This partly helps to overcome the common bias against deals in non-English-speaking countries.

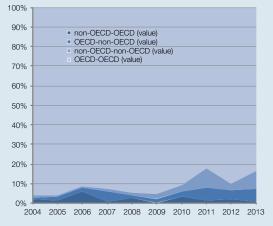
The chosen methodology yields about 1,000 to 1,700 brand-related deals per year, or only about 1.5 percent of the global deal volume. Interestingly, however, the value of the average brand-driven M&A transaction is approximately 10 to 12 times higher than the value of the average global M&A deal.

Most brand-driven M&A transactions tend to be domestic deals as opposed to international deals. Cross-border brand-related M&As — as defined here — typically constitute about 25 to 30 percent of annual transactions. However, the moderate proportion of cross-border transactions is not particular to the market for brand-driven M&A transactions, but is general to the M&A market as a whole.

When international deals take place, both the main acquirer and the targeted commercial entity tend to be in high-income economies, although there was a substantial decline in OECD country to OECD country transactions following the financial crisis of 2008 (Figure 1.24). Firms in non-OECD countries are becoming more important acquisition targets. Moreover, although it is possible to cite a number of prominent examples, Frey and Ansar (2013) conclude that there is little systematic evidence of non-OECD countries catching up in absolute terms, or of being important acquirers of branded companies in high-income countries. Interestingly, in this data sample, however, transactions in non-OECD-non-OECD countries have increased.

Figure 1.24: Markets for brand-driven M&A transactions are largely domestic

Brand-driven M&A transactions by origin and by transaction value, as a percentage of total, 2004-2013



Source: WIPO, based on data in Frey and Ansar (2013), based on the Zephyr database.

1.5

CONCLUSIONS AND DIRECTIONS FOR FUTURE RESEARCH

For centuries, companies have relied on succinct logos and promotional efforts, in order to help build their reputation and image. Trademarks as a registered IP right came into existence in the 19th century, when the first trademark laws were passed. As a result of globalization and the rise of the Internet, companies' reliance on brands, advertising and trademarks is intensifying. While at the global level the use of patents is more concentrated, a dramatic increase in trademark filings has occurred in many middle- and low-income economies. Brands and trademarks are not the purview of companies alone: nations, institutions and individuals also care about brands and trademarks – and, in particular, about the *value* of such brands and trademarks.

This chapter sets the scene for the 2013 World Intellectual Property Report by establishing how branding behavior and trademark use have evolved in recent history, how they differ across countries and how they relate to economic growth. In order to take into consideration the economy-wide significance of branding activities, a rethink on the issue of how companies' branding investments should be conceptualized and measured is being proposed. The more accurate estimates of branding investment – only available for the US at this point – show that both the magnitude and the growth of branding investments are considerable in absolute terms, and are much larger than previously believed.

The chapter also reviewed current approaches to brand valuations, the relative merits of such approaches, as well as the main trends in brand evaluations. The value of top brands is significant both in absolute terms and as share of firms' market capitalization. Both the value and the importance of brands emanating from middle-income economies generates a great deal of speculation. While these brands are slowly beginning to show up in global brand rankings, this is only the tip of iceberg. Judging by the number of trademark filings in low- and middle-income economies, the world of brands will dramatically change in the years to come, with new brands appearing at the local and international level.

Additionally, the demand for trademarks has intensified, reaching unprecedented levels since the 1970s. This first assessment of the global increase in trademark filings aims to contribute to creating a better understanding of the rapid growth in the number of trademark filings worldwide. It shows that the surge of trademark filings in high-income economies began about ten years earlier than the historic increase in worldwide patenting, which began in the mid-1980s. Middle-income economies, in turn, began experiencing a rapid rise in trademark filings in the late 1980s and 1990s. For both high-income and middle-income economies, the use of trademarks relative to GDP increased considerably between 1985 and 2011. Interestingly, the intensity of trademark filings varies greatly between countries, even at the same level of development. In addition, middle-income economies use trademarks more intensively than richer countries. Interestingly, the use of more novel trademark forms, such as sound or smell trademarks, is at best just beginning to emerge in rich and poor countries alike.

The following main drivers for the growth in trademark applications have been identified: (i) increased growth and investment in branding, (ii) increased use of trademarks to foster product innovation, (iii) the boost to trademarks via the service sector, (iv) the internationalization of the global demand for trademarks, (v), the Internet and trademark interactions with domain names and online search, (vi) more strategic use of trademarks, and (vii) institutional and regulatory changes, including new electronic application procedures and improved international filing possibilities through the Madrid system.

Finally, the chapter has shown that markets for brands play an important but underappreciated economic role in today's global economy. A taxonomy for studying different brand markets, and available evidence on their magnitude, is provided. Markets for brands provide a way of mitigating some of the costs and risks associated with building a brand. On the flipside, companies with established brand names increasingly depend on their ability to leverage brand equity by launching new products using established brand names. The scarce data on licensing presented in this chapter show that the markets for brands are large and growing, in particular in the area of entertainment, corporate brands that relate to consumer products, fashion, sports, arts and education. While franchising is likely to be an even bigger market – with a high level of activity in almost all countries - systematic international data is also hard to grasp. Interestingly, and contrary to what one might expect, the chapter shows that the market for franchising is still largely domestic. To conclude, while the press and the business literature provide numerous examples of brand-related purchases out of middle-income economies, the evidence seems to show that this is still a small, albeit growing phenomenon.

AREAS FOR FUTURE RESEARCH

Brands and trademarks merit closer attention from economists and statisticians. This chapter has identified a number of important gaps. It is hoped that it has laid the groundwork for reflection and debate and further economic work on the matter by introducing definitions, concepts, metrics and a series of findings. Drawing on the chapter's findings, the following areas will need to be prioritized:

- First, the economic role and contribution of branding at the country-level and at the company-level deserves a more in-depth treatment in scholarly work on intangible assets. Thus far, the branding component has not received sufficient attention, both in terms of how to measure it and on how to settle on a fitting depreciation rate that would better capture the durability of the reputational capital generated. To facilitate this discussion, a better understanding of (i) changing branding models, (ii) the impacts of new technologies on branding efficacy, and (iii) the interaction between brands and other intangible assets would be helpful. On the data side, improved global datasets of branding expenditures i.e., including the bought-in as well as the own-account components – as defined in this chapter - are required.
- Second, more empirical research into the surge in trademark filings and its drivers is imperative. The chapter highlights important cross-country variations in the absolute and relative use of trademarks which need more study. The chapter also identifies the main drivers of recent trademark filing growth but, as it also shows, there is little understanding of the empirical significance of each of these drivers and their interactions. Two related subthemes are of particular interest: the role of trademarks in the services sector and the Internet.

• Third, there is a need for research on the value of trademarks to their owners and to the economy as a whole. On the one hand, the question is how firms capitalize on trademarks when introducing new products to market, when trying to preserve market share and, for instance, if trademarks are used as collateral to secure debt - similar to way in which other IP assets are used for this purpose. Here, the interactions between trademarks and other IP rights, notably designs and patents, and other intangible assets for value creation at the company level remain ill understood. On the other hand, the question is how trademark owners derive value from markets for brands - as defined in this chapter - and hence via licensing or franchise agreements. Little is known about the magnitude of markets for brands, the associated business models and the resulting economic impacts. Finally, one main finding of the chapter is the relatively high and emerging importance of trademarks in low- and middle-income countries, both in absolute terms and relative to GDP or other economic variables. Better understanding the related economic and development impacts, also relative to other forms of IP, will be an area for further research.

REFERENCES

Aaker, D.A. (1995), Building Strong Brands, New York; Free Press.

Abud, M.J., Fink, C., Hall, B., & Helmers, C. (2013). "The Use of Intellectual Property in Chile". WIPO Economic Research Working Papers, No. 11. Geneva: WIPO.

Adams, M., & Oleksak, M. (2011). Intangible Capital: Putting Knowledge to Work in the 21st Century Organization. Praeger Publishing.

Aliwadi, K.L., Lehmann, D.R., Klein, S.A. (2002). A Product-Market-Based-Measure of Brand Equity. Marketing Science Institute.

Anholt, S. (2007). Competitive Identity: The New Brand Management for Nations, Cities and Regions. Basingstoke: Palgrave Macmillan.

Antonowicz, A. (2011). "The dissemination of franchising all over the world: an attempt to assess the scale of the phenomenon". *Problems of Management in the 21st Century.* Volume 2, 2011.

Arora, A., Fosfuri, A., & Gambardella, A. (2001). Markets for Technology: Economics of Innovation and Corporate Strategy. Cambridge, MA: MIT Press

Askenazy, P., Breda, T., & Irac, D. (2010). "Advertising and R&D: Theory and evidence from France". Working paper. Paris: Paris School of Economics, at http://halshs.archives-ouvertes.fr/docs/00/56/49/88/PDF/wp201045.pdf.

Athreye, S., & Yang, Y. (2011). Disembodied knowledge flows in the world economy. Background Report to the WIPO 2011 World Intellectual Property Report. Published as WIPO Economic Research Working Papers, No. 3, Geneva: World Intellectual Property Organization.

Batra, R., Ramaswamy, V., Alden, D. L., Steenkamp, J.B., & Ramachander, S. (2000). "Effects of Brand Local and Nonlocal Origin on Consumer Attitudes in Developing Countries". *Journal of Consumer Psychology*, 9(2), 83-95.

Battelle (2012). "2013 Global R&D Funding Forecasts". Battelle, *R&D Magazine*.

Bechtold, S., & Tucker, C. (2013). "Trademarks, Triggers, and Online Search". SSRN Working Paper.

Bharadwaj, S., Tuli, K.R., Bonfrer, A. (2011). "The Impact of Brand Quality on Shareholder Wealth". *Journal of Marketing,* 75(5), 88-104.

Bilkey, W.J., & Nes, E. (1982). "Country-of-Origin Effects on Product Evaluations". *Journal of International Business Studies*, 13(1), 89-99.

Bittlingmayer, G. (2008). "Advertising." In D.R. Henderson (Ed.), *Concise Encyclopedia of Economics* (2nd ed.). Indianapolis: Library of Economics and Liberty.

Blind, K., Edler, J., Schmoch, U., Andersen, B., Howells, J., Miles, I., Roberts, J., & Green, L., Evangelista, R., Hipp, C., Herstatt, C. (2003). *Patents in the service industries* (final report prepared for the European Commission). Karlsruhe: ISI.

Brahem, M., El Harbi, S., & Grolleau, G. (2013). "What drives trademarks registration among Tunisian clothing firms? An econometric investigation". *International Journal of Intellectual Property Management (IJIPM)*, 6(1/2 2013).

Brinker, S. (2012). "5 meta-trends underlying almost all of modern marketing". http://chiefmartec.com/2012/10/5-meta-trends-underlying-almost-all-of-modern-marketing.

Calboli, I. (2007). "The Sunset of 'Quality Control' in Modern Trademark Licensing". *American University Law Review, Vol.* 57(no.2 (December 2007)), 341-407.

Cattaneo, O., Gereffi, G., & Staritz, C. (2010). Global Value Chains in a Postcrisis World – A Development Perspective. Washington D.C.: The World Bank.

Chang, B.-H., & Chan-Olmsted, S.M. (2005). "Relative constancy of advertising spending. A crossnational examination of advertising expenditures and their determinants". *Gazette*, 67(4), 339–357.

Chattopadhyay, A., & Batra, R. (2012). The New Emerging Market Multinationals – Four Strategies for Disrupting Markets and Building Brands. New York: McGraw Hill.

Clayton, T., & Turner, G. (1998). Brands, Innovation and Growth: Evidence on the contribution from branded consumer businesses to economic growth. London: PIMS Profit Impact of Market Strategy. Clifton, R. (2003), Brands and Branding, London: The Economist Books.

Cobb-Walgren, C. J., Ruble, C. A., Donthu, N. . (1995). "Brand equity, brand preference, and purchase intent". *Journal of Advertising*, 24(Fall), 25-40.

Colucci, M., Montaguti, E., & Lago, U. (2008). "Managing brand extension via licensing: An investigation into the high-end fashion industry". *International journal of research in marketing*, 25(2), 129-137.

Cornell University, INSEAD, & WIPO. (2013). The Global Innovation Index 2013 – The Local Dynamics of Innovation. Geneva: World Intellectual Property Organization.

Corrado, C.A., & Hao, J. (2013). "Brands as Productive Assets: Concepts, Measurement, and Global Trends". Background research for the 2013 World Intellectual Property Report. New York: The Conference Board, forthcoming as WIPO Economic Research Working Paper.

Corrado, C.A., Haskel, J., Jona-Lasinio, C., & Iommi, M. (2013). "Innovation and Intangible Investment in Europe". Oxford Review of Economic Policy, 29(2 (Summer)), 2-26.

Corrado, C.A., Hulten, C.R., & Sichel, D.E. (2006). "Intangible Capital and Economic Growth". NBER Working Paper 11948.

Day, G.S. (2011). "Closing the Marketing Capabilities Gap". *Journal of Marketing*, 75(4), 183-195.

Draper, P., Dadush, U., Hufbauer, G., Bacchus, J., & Lawrence, R. (2012). The Shifting Geography of Global Value Chains: Implications for Developing Countries and Trade Policy: World Economic Forum.

Duguid, P., Da Silva Lopes, T., & Mercer, J. (2010). "Reading registrations: an overview of 100 years of trade mark registrations in France, the United Kingdom and the United States". In P. Duguid & T. Da Silva Lopes (Eds.), Trade marks, Brands and Competitiveness. New York: Routledge.

EFF. (2011). Franchising: A Vector for Growth in Europe: European Franchise Federation.

Fan, Y. (2010). "Branding the Nation: Towards a Better Understanding". Place Branding and Public Diplomacy, 2010(6), 97–103.

Faust, W.H., & Eilertson, A. (1994). "You've got a logo, you need a brand". ABA Banking Journal, 86(86-88).

Feenstra, R.C. (1998). "Integration of Trade and Disintegration of Production in the Global Economy". *Journal of Economic Perspectives*, 12(4), 31-50.

Fortune, E. (2013). "What is behind the surge in trademark fillings in France?". Unpublished background research for the 2013 World Intellectual Property Report. Direction des Études, Paris: Institut National de la Propriété Intellectuelle.

Frey, C.B., & Ansar, A. (2013). "Markets for Brands: Theory and Evidence". Unpublished background research for the 2013 World Intellectual Property Report. Oxford: Oxford University.

Giuri, P., Mariani, M., Brusoni, S., Crespi, G., Francoz, D., Gambardella, A., Garcia-Fontes, W., Geuna, A., Gonzales, R., Harhoff, D., Hoisl, K., Le Bas, C., Luzzi, A., Magazzini, L., Nesta, L., Nomaler, Ö., Palomeras, N., Patel, P., Romanelli, M., & Verspagen, B. (2007). "Inventors and invention processes in Europe: Results from the PatVal-EU survey". *Research Policy*, 36(8), 1107-1127.

Graevenitz, G.V., Greenhalgh, C., Helmers, C., & Schautschick, P. (2012). *Trademark Cluttering* (Report for the UK IP Office). London: UK Intellectual Property Office.

Graham, S., Hancock, G., Marco, A., & Myers, A.F. (2013). The USPTO Trademark Case Files Dataset: Descriptions, Lessons, and Insights. SSRN Working Paper.

Grannell, C. (2008). "Untangling Brand Equity, Value, Assets and Health". Brand Papers, from www.brandchannel.com/papers_review.asp?sp_id=1460.

Greenhalgh, C., Longland, M., & Bosworth, D. (2003). "Trends and distribution of intellectual property: UK and European patents and UK trade and service marks 1986-2000". Report to the UK Patent Office on a Research Project into The Extent and Value of Intellectual Property in United Kingdom Firms.

Greenhalgh, C., & Rogers, M. (2012). "Trade Marks and Performance in Services and Manufacturing Firms: Evidence of Schumpeterian Competition through Innovation". *Australian Economic Review*, 45(1), 50-76.

Greenhalgh, C., & Schautschick, P. (2013). "Empirical studies of trade marks – the existing economic literature". *Oxford University Department of Economics Discussion Paper Series (Ref: 659) June 2013.*

Gregory, J.R. (2003). The Best of Branding: Best Practices in Corporate Branding. New York: McGraw-Hill.

Guellec, D., & Wunsch-Vincent, S. (2009). Policy Responses to the Economic Crisis: Investing in Innovation for Long-Term Growth (OECD Digital Economy Papers). Paris: OECD Publishing.

Hall, R.E. (2012). "The Cyclical Response of Advertising Refutes Counter-Cyclical Profit Margins in Favor of Product-Market Frictions". National Bureau of Economic Research Working Paper Series, 18370.

Han, C.M., & Terpstra, V. (1988). "Country-of-Origin Effects for Uni-National and Bi-National Products". *Journal* of International Business Studies, 19(2), 235-255.

Helmers, C. (2013). "What is behind the surge in trademark filings in Chile?" Unpublished background research for the 2013 World Intellectual Property Report. Santa Clara: Santa Clara University.

Hipp, C., & Grupp, H. (2005). "Innovation in the service sector: The demand for service-specific innovation measurement concepts and typologies". *Research Policy*, 34(4), 517-535.

Hulten, C. R., & Isaksson, A. (2007). "Why Development Levels Differ: The Sources of Differential Economic Growth in a Panel of High and Low Income Countries". *NBER Working Paper* 13469.

Humphrey, J., & Schmitz, H. (2001). Governance in Global Value Chains (IDS Bulletin): Institute of Development Studies. www.ids.ac.uk/files/dmfile/humphreyschmitz32.3.pdf.

IFA. (2013). Franchise Business Economic Outlook: 2013. International Franchising Association Education Foundation.available at: www.franchise.org/Industry Secondary.aspx?id=42842.

IMF. (2009). Balance of Payments and International Investment Position Manual Sixth Edition (BPM6). Washington D.C.: International Monetary Fund.

IMF (2012). Changing Patterns of Global Trade (Strategy, Policy, and Review Department Paper). www.imf.org/external/pubs/ft/dp/2012/dp1201.pdf

Jayachandran, S., Kaufman, P., Kumar, V., & Hewett, K. (2013). "Brand Licensing: What Drives Royalty Rates?". *Journal of Marketing*, 77(5), 108-122.

Jensen, P. H., & Webster, E. M. (2011). "Patterns of Trademarking Activity in Australia". *Melbourne Institute Working Paper No. 2/04*.

Kallapur, S. (2004). "The value relevance and reliability of brand assets recognized by U.K. firms". *The Accounting Review*, 79(1), 151-172.

Kapferer, J.N. (2008). The New Strategic Brand Management: Creating and Sustaining Brand Equity Long Term (4th ed.): Kogan Page.

Kaplinsky, R. (2000). "Globalisation and Unequalisation: What Can Be Learned from Value Chain Analysis?". *The Journal of Development Studies*, *37*(2), 117-146.

Kashani, K., Miller, J., & Clayton, T. (2000). A Virtuous Cycle: Innovation, Consumer Value and Communication—Research Evidence from Today's Brand-Builders. Lausanne: IMD International.

Keller, K. L. (Ed.). (2011). Brand Equity, in: The Palgrave Encyclopedia of Strategic Management: Palgrave Macmilla.

Keller, K.L., & Lehmann, D. (2006). "Brands and Branding: Research Findings and Future Priorities". *Marketing Science*, 25 (November-December), 740-759.

Kenava, N. (2011). "Nation Branding: Toward an Agenda for Critical Research". International Journal of Communication 5(2011), 117–141.

Koopman, R., Wang, Z., & Wei, S.-J. (2008). "How Much of Chinese Exports is Really Made In China? Assessing Domestic Value-Added When Processing Trade is Pervasive". NBER Working Paper 14109.

Kumar, N., & Steenkamp, J.B. (2013), Brand Breakout; Palgrave Macmillan.

Ladas, S.P. (1973). "Trademark Licensing and the Antitrust Law". TRADEMARK REPORTER – Official Journal of the International Trademark Association, 63 (245), 257–259.

Landes, W.M. & Posner, R.A. (1987). "Trademark Law: An Economic Perspective." *Journal of Law and Economics*, 30(2), 265-309.

Lanz, R., Miroudot, S., & Nordås, H. (2011). *Trade in Tasks* (OECD Trade Policy Working Papers). Paris: OECD Publishing.

Lemper, T.A. (2012). "Five trademark law strategies for managing brands". *Business Horizons*, 55 (2), 113-117.

LIMA. (2013). 2013 Licensing Industry Survey. New York City: International Licensing Industry and Merchandisers' Association. www.licensing.org.

Lisanti, T. (2013), Top 150 Licensors, Global Licensel, 16 (2 (May),

Loo, T., & Davies, G. (2006). "Branding China: The Ultimate Challenge in Reputation Management?" *Corporate Reputation Review*, 9(3), 198-210.

Lutz, M. C. V., Orind, V., Carvalho, S. M. P., Filgueiras Jorge, M., & Pinheiro, V. (2013). "Is the licensing in of foreign brands and franchises increasing? Evidence from Brazil", Unpublished background research for the 2013 World Intellectual Property Report. Coordenação Geral de Contratos de Tecnologia (CGTEC) da Diretoria de Contratos, Indicações Geográficas e Registros (DICIG) e Assessoria para Assuntos Econômicos (AECON), Instituto Nacional da Propriedade Industrial (INPI). Rio de Janeiro.

Lybbert, T.J., Zolas, N., & Bhattacharyya, P. (2013). "An 'Algorithmic Links with Probabilities' Concordance for Trademarks Creates New Possibilities For Analyzing Trademark & Economic Data", forthcoming as WIPO Economic Research Working Paper.

Madeuf, B. (1984). "International technology transfers and international technology payments: Definitions, measurement and firms' behaviour". *Research Policy*, 13(3), 125-140.

Mangàni, A. (2006). "An Economic Analysis of Rise of Service Marks". Journal of Intellectual Property Rights (JIPR), 11(4), 249-259.

McKinsey & Company. (2012). Advertising as an economic-growth engine. www.mckinsey.com/locations/Belux/~/media/Belux/FinalAdvertising.ashx.

Mendonça, S., Pereira, T.S., & Godinho, M.M. (2004). "Trademarks as an indicator of innovation and industrial change". Research Policy, 33(9), 1385-1404.

Millot, V. (2009). Trademarks as an Indicator of Product and Marketing Innovations. Paris: Organisation for Economic Co-Operation and Development.

Millot, V. (2012). Patent and trademark-based indicators of service innovation. Paper presented at the KNOWINNO – Making the most of knowledge Innovation in services: the role of R&D and R&D policy (INNOSERV) – Second expert meeting. Paris.

Mitra-Kahn, B. (2013). "What is behind the surge in trade mark filings?" Unpublished background research for the 2013 World Intellectual Property Report. Office of the Chief Economist, IP Australia. Canberra.

Miyagawa, T., & Hisa, S. (2013). "Estimates of intangible investment by industry and productivity growth in Japan". *Japanese Economic Review,* 64(1), 42-72.

Moore, L. (2012). "The Law and the Ultimate Intellectual Asset". Intellectual Asset Management, November/December 2012, 78-84.

Morgan, N.A., & Rego L.L. (2009). "Brand Portfolio Strategy and Firm Performance". *Journal of Marketing*, 73(1), 59-74.

Myers, A.F. (2013). "What is behind the surge in trademark fillings? An analysis of United States data". Background research for the 2013 World Intellectual Property Report. United States Patent and Trademark Office Economic Working Paper No. 2013-1. www.uspto.gov/ip/officechiefecon/publications.jsp.

Nayaradou, M. (2006). *Advertising and Economic Growth.* PhD, University of Paris 9 - Dauphine, Paris.

OECD. (2013a). Communications Outlook. Paris: OECD Publishing.

OECD. (2013b). New Sources of Growth: Knowledge-Based Capital - Key Analyses and Policy Conclusions Synthesis Report. Paris: OECD Publishing.

OECD. (2013c). Science, Technology and Industry Scoreboard. Paris: OECD Publishing.

OECD & Inno-Tec. (2009). Summary - Workshop on Trademarks and Trademark Data. Summary presented at the Workshop on Trademarks and Trademark Data, Paris: OECD Publishing.

Officina Espanola de Patentes y Marcas. (2012). Impacto de las Marcas en la Economia y Sociedad Espanolas: Officina Espanola de Patentes y Marcas and Departemento de Marketing, Universidad de Alicante.

Ono, S. (1999). "The History and Development of Trademark Law". *Overview of Japanese Trademark Law* (2nd ed.). Tokyo: Yuhikaku.

Phillips, J. (2003). Trade Mark Law: A Practical Anatomy. Oxford: Oxford University Press.

Picard, R.G. (2001). "Effects of Recessions on Advertising Expenditures: An Exploratory Study of Economic Downturns in Nine Developed Nations". *Journal of Media Economics*, *14*(1), 1-14.

Prahalad, D. (December 8, 2011). "Why Trust Matters More Than Ever for Brands". http://blogs.hbr.org/cs/2011/12/why_trust_matters_more_than_ev.html.

PwC. (2011). Franchise Business Economic Outlook: 2011 (Prepared for The International Franchise Association Educational Foundation). PriceWaterHouse Coopers.

PwC. (2012). Italian Licensing Industry Survey 2012 – Report for the International Licensing Industry and Merchandisers' Association. PriceWaterHouseCoopers.

Richardson, G. (2008). Brand Names Before the Industrial Revolution, NBER Working Paper 13930.

Rujas, J. (1999). Trade marks: complementary to patents. World Patent Information, 21(1), 35-39.

Schautschick, P., & Graevenitz, G. (2013). "What is behind the surge in trademark filings in Germany?". Unpublished background research for the 2013 World Intellectual Property Report. East Anglia: Centre for Competition Policy, University of East Anglia.

Schmalensee, R. (1972). *The Economics of Advertising* Amsterdam: North-Holland Publishing Company.

Schmoch, U. (2003). "Service marks as novel innovation indicator". *Research Evaluation, 12*(2), 149-156.

Schmoch, U., & Gauch, S. (2009). "Service marks as indicators for innovation in knowledge-based services". *Research Evaluation*, 18 (4), 323-335.

Simon, C. J. & Sullivan, M.W. (1993). "The measurement and determinants of brand equity: A financial approach". *Marketing Science*, *12*(Winter), 28-52.

Smith, G.V., & Parr, R. (2005). Intellectual Property: Valuation, Exploitation, and Infringement Damages (Fourth ed.). Hoboken, NJ: Wiley & Sons.

Smith, P., Amos, J., & Clayton, T. (2004). Brands, Innovation and Growth – A report for the European Brands Association. London: PIMS Profit Impact of Market Strategy.

Sullivan, M. (2001). "How Many Trademarks Does It Take to Protect a Brand? The Optimal Number of Trademarks, Branding Strategy and Brand Performance". Washington D.C.: U.S. Department of Justice.

Tauber, E.M. (1988). "Brand Leverage: Strategy for Growth in a Cost-Control World". *Journal of Advertising Research*, 28 (August-September), 26-30.

UN, IMF, OECD, Eurostat, UNCTAD, UNWTO, & WTO. (2011). Manual on Statistics of International Trade in Services 2010 (MSITS 2010). Geneva, Luxembourg, Madrid, New York, Paris and Washington D.C.: United Nations, IMF, OECD, Statistical Office of the European Union, United Nations Conference on Trade and Development, World Tourism Organization and WTO. UNESCAP. (2007). "Primer on global value chains and international production networks". (UNESCAP) (Ed.), Linking Greater Mekong Subregion Enterprises to International Markets: The Role of Global Value Chains, International Production Networks and Enterprise Clusters (Vol. ST/ESCAP/2439, pp. 3-15). Bangkok: United Nations Economic and Social Commission for Asia and the Pacific.

UK Intellectual Property Office. (2011). *Branding in a Modern Economy – Conference Report.* Paper presented at the Branding in a Modern Economy – Conference Report, London: UK IP Office.

Urwin, P., Karuk, V., Hedges, P., & Auton, F. (2008). *Valuing Brands in the UK Economy – report for the British Brands Group.* London: Westminster Business School, University of Westminster.

van der Wurff, R., Bakker, P., & Picard, R.G. (2008). "Economic Growth and Advertising Expenditures in Different Media in Different Countries". *Journal of Media Economics*, 21(1), 28-52.

WIPO. (1993). *Introduction to Trademark Law & Practice – The Basic Concepts* (2nd ed.). Geneva: World Intellectual Property Organization.

WIPO. (2004). "Fields of Intellectual Property Protection". In WIPO (Ed.), WIPO Intellectual Property Handbook: Policy, Law and Use (pp. 17-156). Geneva: WIPO.

WIPO. (2006). Making a Mark – An Introduction to Trademarks for Small and Medium-sized Enterprises Intellectual Property for Business Series (Intellectual Property for Business Series). Geneva: WIPO.

WIPO. (2010a). "Special Theme: The Impact of the Crisis and Recovery on Innovation". In WIPO (Ed.), World Intellectual Property Indicators 2010 (pp. 14-30). Geneva: WIPO.

WIPO. (2010b). *Trademarks and the Internet* (Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications 24th Session, Geneva, November 1 to 4, 2010). Geneva: WIPO.

WIPO. (2011a). "The Changing Face of Innovation and Intellectual Property". *The Changing Face of Innovation* (Vol. 2011, chapter 1, pp. 23-75). Geneva: WIPO.

WIPO. (2011b). "The Surge in Worldwide Patent Applications", Study prepared by the International Bureau for the Patent Cooperation Treaty (PCT) Working Group (Vol. PCT/WG/4/4). Geneva: WIPO.

WIPO. (2012). "Trademarks". In WIPO (Ed.), World Intellectual Property Indicators 2012 (Vol. Section B, pp. 97-130). Geneva: WIPO.

WIPO. (2013a). Geographical Indications - An Introduction. Geneva: WIPO.

WIPO. (2013b). Study on the Protection of Country Names (Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications, 29th Session, May 27 to 31, 2013). Geneva: WIPO.

Wortmann, M. (2004). Retail and Globalization the Governance of Global Value Chains by German Retailers (Project). Berlin: WZB Berlin Social Research Center.

WTO, & IDE-JETRO. (2011). Trade patterns and global value chains in East Asia: From trade in goods to trade in tasks. Geneva and Tokyo: WTO and Institute of Developing Economies.

Yarbrough, L., Morgan, N., & Vorhies, D. (2011). "The impact of product market strategy-organizational culture fit on business performance". Journal of the Academy of Marketing Science, 39(4), 555-573.

CHAPTER 2 THE ECONOMICS OF TRADEMARKS

Branding is a central element of modern market economies and an important feature of everyday life. Firms invest large sums of money in advertising their goods and services and building a reputation in the marketplace. In turn, these activities influence consumer choice and determine commercial success. Ultimately, branding shapes how firms compete, with important implications for economic welfare. Understanding firms' branding strategies and how they affect market outcomes is therefore important.

Early theories of how market economies function paid little attention to branding activities. Starting with the writings of Adam Smith in the 1700s, economic scholars implicitly took it for granted that consumers have full knowledge of all products offered on the market and that their purchase decisions form part of the invisible hand that guides firms' production decisions. However, in the early 1970s, economists began to appreciate that information does not flow freely among market participants. This development paved the way for rigorous analysis of how branding activities and the behavior of imperfectly informed consumers affect market outcomes.

Drawing on the insights of the economic literature, this chapter explores the role of the trademark system in supporting the branding activities of firms and promoting orderly competition in the marketplace. It begins by outlining the main rationale for protecting trademarks (Section 2.1) and then asks how society fares when counterfeit goods violating trademark rights enter the market (Section 2.2). Against this background, the chapter explores important choices in designing trademark laws and institutions (Section 2.3). The concluding remarks summarize the main messages emerging from the chapter's discussion, and point to areas where more research could usefully guide policymakers' decision-making (Section 2.4).

2.1

THE RATIONALE FOR PROTECTING TRADEMARKS

In order to appreciate the role of trademarks, it is helpful to start by asking why consumers value brands in the marketplace.¹ One can broadly distinguish between two different sources of value. First, brands have *reputational value*. Consumers may prefer one product over another for a variety of reasons – how functional or effective the product is; how reliable it is; how long it lasts; how easy it is to use; how it tastes, sounds or smells; what side effects it may have. Often, these characteristics cannot be easily observed at the time of purchase. Consumers may only be able to evaluate them as they experience the product.

In order for consumers to select the products that best suit their needs and preferences, they must rely either on their past consumption experience or on information about the product provided by the producer or a third party. In short, they need to rely on a product's reputation. But this only works when consumers can reliably identify the goods of different producers in the marketplace – the precise function performed by brands. Indeed, if many producers could independently market their products using the same brand, consumer intelligence would have little value, and producers could not build a reputation.

1 As in Chapter 1, this chapter employs the term "trademark" when referring to the specific instument of intellectual property protection; the term "brand" is used when more generally referring to the use of product and company identifiers in the marketplace (see Box 1.1).

However, brands do not only offer reputational value. A consumer facing the choice between two goods of the same known quality, but bearing different brand names, may still choose one brand over another – and may even be willing to pay a higher price for the preferred brand. This is because brands have *image value*. For example, a consumer may derive pleasure from wearing the same sunglasses as a Hollywood actor. More often, image value stems from displaying the ownership of a particular brand to other members of society. This is especially relevant for many luxury products, where brands enable consumers to communicate their affluence. However, it also applies to other images; for example, consumers choose brands to convey how traditional, modern, alternative, sporty, or trendy they are.

In rationalizing the trademark system, economic analysis has mainly focused on the reputational value of brands. Accordingly, this section takes a closer look at what lies behind such reputational value, which the economic literature analyzes in terms of consumers' search costs. However, the image value of brands has important economic implications to which this chapter – and Chapter 3 – will return.

2.1.1

HOW TRADEMARKS REDUCE CONSUMERS' SEARCH COSTS

Neoclassical economics largely assumes that buyers have full knowledge of the quality of all product offerings and that there are many sellers of the same product. Unrestricted competition among self-interested sellers then leads to an allocation of resources that maximizes societal welfare. In today's world, some markets come close to fitting these assumptions. For example, primary commodities such as gold or copper are homogenous goods traded around the world at pre-determined quality levels. Similarly, many financial markets are close to perfectly competitive – a United States (US) dollar costs the same in terms of Japanese yen, regardless of whether the dollar is purchased in New York or in Tokyo.

However, many modern markets – particularly consumer markets - do not fit these simplified assumptions. As described above, product offerings differ along a wide range of quality characteristics. Consumers, in turn, cannot always observe these characteristics at the moment of purchase. In economic jargon, they are asymmetrically informed about products – asymmetrically, in the sense that they know less about the products than the sellers. Nobel prize-winning economist George Akerlof was the first to explore the consequences of asymmetric information on market behavior and the allocation of resources.² His main conclusion – illustrated in Box 2.1 with the example of the market for used cars - is that buyer uncertainty about product quality may not lead to markets for high-quality products, even if there is demand for such products; as a result, consumers and society as a whole are worse off.

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Box 2.1: A market for lemons?

In what turned out to be one of the most-cited journal articles in economics, George Akerlof famously considered the market for used cars. He argued that, typically, buyers will have less information about the quality of used cars than sellers – the latter of whom could be either the cars' owners or specialized dealers. This is because buyers cannot ascertain key quality characteristics of a used car – how long the engine will last, how often the windscreen wiper needs repair, or whether the engine will ignite on a cold winter's day – by simple inspection. In other words, buyers are uncertain about whether they are about to buy a good quality car or a lemon (which is American slang for a car that is found to be unsatisfactory or defective).

Faced with this uncertainty, buyers will not be willing to pay the full price of a high-quality car. If they are risk-neutral and quality is uniformly distributed, they will at most be willing to pay the price of an average quality car. Sellers, in turn, who have perfect knowledge about quality, would not be willing to sell a high-quality car for the price of an average quality car. As a result, there is no market for high-quality cars. Instead, a race to the bottom ensues, whereby only sales of the lowest quality cars occur.

Of course — as many readers would attest — markets for high-quality used cars do, in fact, exist. Akerlof's original article recognized that certain mechanisms — such as warranties and social norms — exist in order to lessen the effects of quality uncertainty. In a nod to the role of trademarks, he specifically mentioned the role of brand names: "[b]rand names not only indicate quality but also give the consumer a means of retaliation if the quality does not meet expectations. For the consumer will then curtail future purchases. Often too, new products are associated with old brand names. This ensures the prospective consumer of the quality of the product."

Source: Akerlof (1970)

A different way to think about information asymmetry is to recognize that consumers spend time and money researching different offerings before deciding which good or service to buy. Brand reputation helps consumers to reduce these so-called search costs. As already pointed out, it enables them to draw on their past experience and other information about specific goods and services – such as advertisements and third party consumer reviews. However, the reputation mechanism only works if consumers are confident that they will purchase what they intend to purchase. The trademark system provides the legal framework underpinning this confidence. It does so by granting exclusive rights to names, signs and other identifiers in commerce subject to certain procedural rules and limitations.

Besides guaranteeing exclusivity, the trademark system reduces consumers' search costs in another way. It pushes producers and sellers towards creating concise identifiers for specific goods or services. For example, instead of asking for the location of a "coffee store belonging to a firm headquartered in the US city of Seattle", consumers can simply search for "Starbucks" and will be perfectly understood. Trademarks thus improve communication about goods and services.³ They help consumers to distinguish between different product offerings and, in this way, they promote orderly competition between sellers.

While the discussion has thus far focused on brands for goods and services, the same principles also apply to firm brands. Knowing who produced a particular good, or who is providing a particular service, offers consumers relevant information and can thus reduce their search costs. Company brands can be especially important for new and previously untested products: consumers cannot base their purchase decisions on how satisfied they were with a product in the past, but rather by how satisfied they were with the producer of that product following previous purchases.

From the perspective of producers, lower search costs create incentives to invest in higher quality goods and services. Producers will be confident that consumers are able to identify higher quality offerings in the marketplace and not confuse them with lower quality ones. More generally, trademarks are at the heart of product differentiation strategies, whether vertical or horizontal in nature – concepts that Chapter 3 will explore in greater detail.⁴

2.1.2

HOW TRADEMARKS COMPARE TO OTHER INTELLECTUAL PROPERTY RIGHTS

Trademarks are a form of intellectual property (IP). Like patents, copyright, industrial designs and other forms of IP, they afford exclusive rights to an intangible asset. However, trademarks differ in important ways from other forms of IP; in order to fully appreciate the role of trademarks, it is useful to explore these differences.

From an economic perspective, the most significant difference pertains to the type of market failure the various IP rights seek to resolve. As already explained, in the case of trademarks, the relevant market failure is the presence of asymmetric information between buyers and sellers. In the case of patents and copyright, it is the public good nature of inventive and creative output. Economists refer to public goods as goods that many people can use simultaneously, and which one cannot effectively exclude people from using. Clearly, a solution to a technical problem or a literary work falls within this definition. Without patents and copyright, firms' incentive to invest in inventive and creative activities would be reduced, as competitors could free-ride on the fruits of those activities.⁵

- 4 Historically, the introduction of trademarks supported the geographical separation of production and sale. Before the Industrial Revolution, manufacturers had to sell goods to consumers in distant markets anonymously, leading to Akerlof-type information failures. To overcome these information failures, manufacturers added conspicuous characteristics to products which served as substitutes for today's brands (Richardson, 2008). Trademarks enabled firms to reach consumers through intermediaries (Griffiths, 2011). They thus encouraged specialization in the organization of economic activities, allowing firms to reap economies of scale and focus on what they do best.
- 5 See WIPO (2011) for a more detailed discussion of the market failure that gives rise to patent and copyright protection.

Are trademarks private goods or public goods? Interestingly, they have elements of both. A brand only has reputational value if it is used in relation to a single good, service, or firm.6 Use of a brand is thus "rival" in nature – in contrast to an invention which many firms can reuse without undermining its value. Viewed from this perspective, trademarks are private goods. At the same time, the fact that trademarks uniquely identify particular goods and services makes them useful communication tools. This attribute of trademarks has a public good character, as many people can simultaneously refer to a trademark when describing or comparing products. It has given rise to certain exceptions to the exclusive rights conferred by trademarks, notably the right of the public to use a trademark when referring to particular goods and services.7

There is one form of IP that is closely related to trademarks, namely geographical indications (Gls). Like trademarks, Gls seek to reduce consumers' search costs and provide incentives for product differentiation. One key difference is that the right to use a Gl belongs to a group of producers located within a certain geographical boundary, rather than a single entity. There are additional legal and institutional differences between trademarks and Gls (see Box 2.2). However, many of the arguments and findings in relation to trademarks that are presented in this chapter also apply in the same way, or in a similar way, to Gls.

Box 2.2: What are GIs and how do they differ from trademarks?

A GI is a sign used on products that have a specific geographical origin and possess qualities or a reputation associated with that origin. Most commonly, a GI consists of the name of the product's place of origin, for example, "Jamaica Blue Mountain" or "Idaho potatoes". However, non-geographical names – such as "Vinho Verde", "Cava" or "Argan Oil" – or symbols commonly associated with a place can also constitute a GI.

Whether a sign functions as a GI is a matter of national law and consumer perception. As a general prerequisite, it must identify a product as originating in a given place. In addition, the qualities or reputation of the product should be *essentially attributable* to the place of origin.⁸

Gls and trademarks are distinctive signs used to distinguish goods or services in the marketplace. Both convey information about the origin of a good or service, and enable consumers to associate a particular quality with a good or service. In the case of trademarks, this information relates to the identity of the producer; in the case of Gls, it relates to a particular place.

Gls do not belong to individual producers. Irrespective of the legal form of Gl protection, the embodied collective goodwill benefits all producers who are entitled to use it. Those producers are often members of a collective body administering and controlling a Gl's use. Indeed, *sui generis* Gl protection instruments – such as appellations of origin or registered Gls – often require that the beneficiaries organize themselves into a collective such as a producers association, which administers the use, control, certification and marketing of the Gl.

A trademark can be assigned or licensed to anyone, anywhere in the world. In contrast, the sign to denote a GI is directly linked to a particular place. All producers who are based in the area of origin – and produce the good according to specified standards – may use the GI. However, because of its link with the place of origin, a GI cannot be assigned or licensed to someone producing outside that place, or to someone who does not belong to the group of authorized producers.

Some countries protect Gls under trademark law – more specifically through collective marks or certification marks. This is the case, for example, in Australia, Canada, China and the US. What precisely defines a collective mark or certification mark differs from country to country. However, a common feature of these types of trademarks is that more than one entity may use them, as long as all users comply with the regulations of use or the standards established by the holder. Those regulations or standards may precisely require that the trademark be used only in connection with goods that have a particular geographical origin.

- 6 See Landes and Posner (1987).
- 7 See Barnes (2006).

8 See Article 22.1 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

Like brands protected by trademarks, brands displaying Gls can have considerable image value — especially brands with a long history of reputation for quality. This explains why selected Gl products can command substantial price premia akin to luxury goods. For example, accounting for product quality and the reputation of individual producers, Landon and Smith (1998) found that the display of certain regional designations for Bordeaux wines plays a significant role in determining prices, with the "Pomerol" designation commanding a price premium of United States dollar (USD) 15 per bottle.

Policymakers around the world have taken an interest in GIs as a way to enhance the value of local production — especially in the agricultural sector. Indeed, there are several examples of GI products that have developed an international reputation, including GI products from developing countries, such as "Café de Colombia" and "Darjeeling tea". At the same time, the number of GI products that can command a substantial price premium remains relatively small, and even those highly successful GI products do not feature in lists of top global brands (see Subsection 1.2.2). Newly established GIs not only face the challenge of gaining an international reputation — which may take decades — but also face the challenge of competing with incumbent GIs benefitting from considerable consumer goodwill.

Another important difference between trademarks and other forms of IP concerns their protection term. Most other IP rights are time bound – for example, limited to 20 years in the case of patents – after which the subject matter they protect moves into the public domain. This reflects the trade-off between providing sufficient incentives for inventive and creative activities, and limiting the costs imposed on society from inhibiting competitive market forces. Trademarks, by contrast, can last for a potentially unlimited time as long as their owners renew them and use them. This supports the permanent contribution that trademarks make towards reducing consumers' search costs. Indeed, a statutory term limit would create confusion in the marketplace and, invariably, raise search costs.

9 Trade secrets are an exception; their protection term is not statutorily limited.

Like other forms of IP, trademarks can confer market power on their owners; however, the sources of market power differ. Patents and industrial designs prevent competitors from copying physical product features or technologies that consumers value.10 Trademarks at first appear less exclusionary, as they do not restrict this form of copying, as long as competitors sell their products under a different brand. Yet, the brand may be all that matters: when trademarks protect brands with significant image value, the brand in and of itself becomes a product characteristic that consumers care about but competitors cannot copy. In addition, regardless of any image value, certain brands can command considerable consumer goodwill due to buyers being unwilling to incur the search cost of switching to a competing product. For example, studies have shown that brands of previously patent protected medicines can command a premium price over newly available generic versions of the same medicines.¹¹ In a world of imperfect information, it may be entirely rational for consumers to pay a higher price for the brand they are used to, as they save the time of researching whether other products would equally satisfy them.12

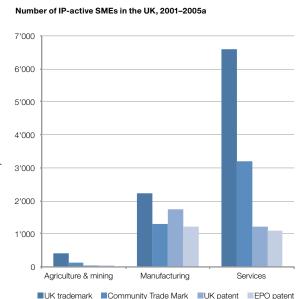
- 10 Of course, patented products still compete with substitute products, limiting the market power that patent holders can exercise.
- 11 See, for example, Hurwitz and Caves (1988). Admittedly, the price premium for the established brands may also reflect strong relationships of pharmaceutical firms with market intermediaries, notably doctors. See also Subsection 3.2.1.
- 12 Another way in which trademarks can command market power is specific to design marks. Sometimes, product designs acquire distinctiveness with consumers, in which case they become eligible for trademark protection. The shape of the Coca-Cola bottle is a famous case in point. A design can be an important product characteristic, leading consumers to choose one product over another; a trademarked design cannot, in turn, be copied by competitors. However, market power is limited by competitors "designing around" a trademarked design and by exceptions in trademark laws that deny protection to designs that are functional in nature. See Economides (1988) for a fuller discussion of the entry barriers created by trademarks.

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The fact that brands can be a source of market power means that they can support firms' innovation strategies. In particular, evidence has shown that branding is one of the most important mechanisms for firms to secure returns to investments in research and development (R&D) – a link that will be the focus of the discussion in Chapter 3.

As a final point, and as a practical matter, trademarks are more widely used than other forms of IP.13 In contrast to patents, trademark use is not limited to firms that operate at the technology frontier, or to sectors that witness rapid technological progress. Firms in almost every sector of the economy employ trademarks to protect the exclusivity of their brands. This includes the service sector, which accounts for the majority share of gross domestic product (GDP) in most economies and which sees only modest use of other forms of IP. Small and medium-sized enterprises (SMEs), in particular, rely to a far greater extent on trademarks than they do on patents - as illustrated in Figure 2.1 for the United Kingdom (UK). In addition, many low- and middle-income economies show intensive trademark use, even when they only see limited use of other forms of IP.14 A study on IP use in Chile, for example, found that 92 percent of all IP applicants only filed for trademark protection.¹⁵

Figure 2.1: SMEs mostly use trademarks, especially in services



Notes: Figures are based on the Oxford Firm Level Intellectual Property database that links IP activity to all UK firms. The definition of SMEs excludes micro entities; see the source for further details. The figure excludes 191 SMEs that could not be allocated to a particular industry. EPO stands for European Patent Office.

Source: Rogers et al (2007).

¹³ Trade secrets may be an exception here. However, they are an unregistered form of IP that does not leave a statistical trace.

¹⁴ See Subsection 1.3.1.

¹⁵ See Abud *et al* (2013a).

2.2

TRADEMARK COUNTERFEITING

Just as the protection of trademarks promotes orderly competition in the marketplace, so are there incentives to infringe trademarks and profit from disorderly competition. Trademark counterfeiting is not a new phenomenon. The oldest counterfeit products on display at the Museum of Counterfeiting – stoppers used to seal amphorae filled with wine – date from around 200 BC.¹⁶ A study on manufacturing activity in the Middle Ages reports widespread product counterfeiting; in one example, chemical analysis of sword blades believed to be made of Damascus steel showed that one in four were convincing counterfeits.¹⁷ In the mid-1980s, a business magazine described counterfeiting as "perhaps the world's fastest growing and most profitable business".¹⁸

Even though it remains elusive to precisely measure global counterfeiting activity, anecdotal evidence suggests that its scale and scope has expanded. For example, newspaper articles and surveys indicate that counterfeiting has moved beyond luxury goods to target various types of consumer goods – affecting products as diverse as automotive replacement parts, electrical appliances and toys. Falling shipping costs have spurred international trade in counterfeit goods, and the Internet has created new distribution channels for such goods that are more difficult to monitor than bricks-and-mortar stores.

What happens when trademark rights are ignored and fake goods enter the market? How consumers, producers and society at large will be affected depends greatly on whether consumers unknowingly purchase fake goods, or whether they knowingly do so. The economic literature refers to these two alternatives as deceptive and non-deceptive counterfeiting, respectively.²⁰ This section first explores the socioeconomic effects of these two distinct forms of counterfeiting and then discusses more generally the economy-wide consequences of trademark violations.

¹⁶ See "The Museum of Counterfeiting, Paris – A Walk on the Wild Side," *WIPO Magazine*, February 2009, page 20.

¹⁷ See Richardson (2008).

¹⁸ See "The Counterfeit Trade: Illegal Copies Threaten Most Industries," *Business Week*, December 1985, pages 64-72.

¹⁹ See OECD (2008).

2.2.1

DECEPTIVE COUNTERFEITING

If consumers are unable to tell apart fake from genuine goods, the supply of fake goods undermines the ability of trademarks to identify goods in the marketplace. Unknowing buyers of fake goods will derive a value from the product that is lower than what they expected and, possibly, below what they were willing to pay for. To the extent that consumers know about the presence of fake goods on the market but cannot easily identify them, sufficiently high search costs will lead them to shun higher quality products for fear of buying a low-quality fake. Producers, in turn, will have a reduced incentive to invest in product differentiation, undermining product quality and diversity. Society is bound to be worse off.²¹

The harm inflicted by fake goods may go beyond consumers being disappointed. Counterfeit products may pose health and safety risks – for example, when drugs do not contain the relevant active ingredient, or when defective vehicle replacement parts result in traffic accidents. ²² The risk of physical harm may not be limited to the persons consuming the fake good, but may extend to others – for example, due to the spread of infectious diseases. In the parlance of economists, the consumption of fake goods may entail negative externalities.

In most circumstances, the selling of counterfeit products that endanger the public will not only violate trademark laws, but also health and consumer protection laws. In addition, certain falsely-labeled or substandard products violating health and consumer protection laws do not involve trademark counterfeiting. The incidence of fraudulent products – broadly defined – is typically higher in less developed economies with weaker regulatory and enforcement systems.²³

- 21 Producers of fake goods benefit from the purchase of fake goods, but those benefits will likely be lower than the losses to consumers and genuine producers. Grossman and Shapiro (1988a) confirm that this in a formal model, although they also identify special cases in which social welfare effects are more ambiguous.
- 22 For a specific example of mislabeled malaria medicines not containing the relevant active ingredient, see Dondrop et al (2004).

23 See WHO et al (2013) for evidence on substandard, spurious, falsely-labeled, falsified and counterfeit medicines.

2.2.2

Non-deceptive counterfeiting

Cases of non-deceptive counterfeiting involve different – and arguably more complex – considerations. At the outset, such cases raise the question of why a consumer prefers a product bearing a falsified label to a generic product of the same quality. Since no information asymmetry prevails, the only plausible explanation is that consumers derive image value from buying the falsified brand. This may, at first, seem irrational. However, there may be rational explanations. In particular, while consumers know that they are buying a fake product, they may be able to pretend that they own the genuine brand when displaying the product to others. This explanation seems relevant to luxury products, where brands are especially important as a means of communicating affluence and status.

A considerable body of survey evidence has confirmed that image value is indeed what underlies the decision of consumers to knowingly buy counterfeit products. At the same time, they trade off image value with other considerations – notably the price of fake goods, and their moral attitude towards counterfeiting.²⁴ In addition, the precise image benefit that counterfeit products provide differs markedly across products and social context (see Box 2.3).

Box 2.3: Why do consumers buy counterfeit luxury brands?

Drawing on the psychology of human attitudes, Wilcox *et al* (2009) distinguish between two social functions that luxury brands fulfill – a "social-adjustive" function and a "value-expressive" function. Under the former, brands help consumers to gain approval in social situations. Under the latter, brands help consumers to communicate their central beliefs and values to their peers.

Research in psychology has suggested that consumers valuing the "social-adjustive" function of brands primarily respond to messages promoting a product's image, whereas consumers employing brands for "value-expressive" purposes primarily respond to messages promoting a product's quality. ²⁵ Accordingly, to the extent that counterfeit products allow consumers to borrow a product's image but not its quality, one would expect consumers who seek brands for "social-adjustive" purposes to be more likely to turn to counterfeit products.

Using a survey of consumer attitudes towards luxury brands, Wilcox et al confirm that this is indeed the case. In particular, they identify how strongly survey participants value the two social functions of brands and then explore whether those preferences explain their intent to purchase counterfeit products. The empirical results show that preference for a brand's "social-adjustive" function has a statistically significant effect on counterfeit purchase intent, whereas preference for a brand's "value-expressive" function does not.

Interestingly, however, Wilcox et al also find that moral attitudes towards counterfeit products only affect counterfeit purchase intent when preferences are of the "value-expressive" rather than the "social-adjustive" type. They explain this result by such moral attitudes forming part of the central beliefs and values that guide the purchase decisions of "value-expressive" but not "social-adjustive" type consumers.

It is this latter complexity that makes it difficult to evaluate the socioeconomic impact of non-deceptive counterfeiting. In particular, the buying of a fake not only affects the buyer, but also how other consumers perceive the genuine brand underlying the fake. One prominent theoretical study on this topic assumes that image value results from a product's perceived exclusivity; in particular, it models image value as declining in terms of the number of consumers buying the product - whether genuine or fake.²⁶ In this particular setting, the social welfare consequences of counterfeiting prove to be ambiguous. In particular, while the presence of fake goods undermines the brand's image value, and thus harms brand owners and consumers of the genuine product, consumers of fake goods benefit by deriving image value without paying the full price of the genuine product.²⁷

The notion of perceived product exclusivity generating image value arguably holds for many luxury products – as evidenced by numerous advertisements for luxury brands expressly alluding to their exclusivity. However, there are other ways in which the presence of counterfeit products can affect the demand for the genuine product. For example, trend conformity – consumers seeking to imitate their peers – may lead to a positive relationship between image value and the number of both genuine and fake purchases.²⁸

The effects of non-deceptive counterfeiting on innovation are similarly complex. To the extent that counterfeits undermine the image value of brands, one would expect the immediate effect to be negative: fewer sales and reduced market power make it more difficult for brand owners to finance investments in innovation. At the same time, as further explained in Section 3.1, greater competition may under certain circumstances lead firms to innovate more in order to retain their competitive edge. This holds true even when competition is illicit in nature. Indeed, one prominent investigation on counterfeiting in the Chinese footwear industry found that some genuine producers reacted to increased competition from fake products by improving the quality of their product line - especially visible quality elements such as surface materials.²⁹ However, this finding is specific to the industry and the nature of counterfeit activity studied; there have been too few empirical studies on this link to draw any general conclusions.

- 26 See Grossman and Shapiro (1988b).
- 27 The overall effect on social welfare depends on the values of the relevant market parameters. See Grossman and Shapiro (1988b).
- 28 For empirical evidence of such peer effects, see, for example, Burnkrant and Cousineau (1975), and Bearden et al (1989). Conner (1995) and Nia and Zaichkowsky (2000) show that, under certain assumptions, the presence of counterfeit products can benefit the producers of genuine goods. See also the "social-adjustive" role of brands, as described in Box 3.
- 29 See Qian (2008). This study exploits a natural experiment created by the reallocation of enforcement resources away from the footwear industry and towards sectors where illicit products posed greater risks for public health. In addition to innovating more, genuine producers reacted to the entry of fake products by vertically integrating downstream retailers and stepping up enforcement efforts. These strategies proved effective in reducing counterfeit sales.

2.2.3

ECONOMY-WIDE EFFECTS

In policy discussions on trademark counterfeiting, possible adverse tax revenue and employment effects have assumed some importance. In this regard, it is important to distinguish between short-term effects of changes in levels of counterfeiting and the longer term effects of a given level of these activities.

Understanding the former is conceptually straightforward. Short-term employment effects depend on the output movements of licit and illicit producers, and the intensities with which they use labor in the production and distribution of goods. Short-term tax revenue effects are bound to be negative, as sales of fake goods typically occur in informal markets and thus do not generate sales, corporate income, or import tax revenue. In addition, to the extent that counterfeiting reduces the sales of genuine producers, tax collections from those firms also fall.

The longer term consequences of counterfeiting activity are more difficult to grasp. Workers losing employment likely find other jobs and governments facing a revenue shortfall likely adjust their tax structure to finance public spending. The key question is how workers and the efficiency of the tax system would fare in a hypothetical scenario that is not characterized by counterfeiting.

Some studies have sought to estimate the effects of counterfeiting activity on sales, employment, and tax revenue. 31 These studies have focused entirely on the short-term effects of counterfeiting. 32 Possibly because they lack information on a hypothetical scenario that is not characterized by counterfeiting, they do not consider the longer term economic effects of persistent counterfeiting activity. In addition, they suffer from data limitations and, where no data exist, they need to make crude assumptions – especially on important behavioral parameters. 33

Indeed, the lack of consistent macroeconomic data on counterfeiting activities across countries and over time poses one of the biggest barriers towards providing more reliable empirical insights into this topic. Being illegal, the production and sale of fake goods escapes official statistical recording. While some efforts are under way to find indirect ways of capturing the scale and effect of counterfeiting, it will invariably take time for better data to become available.³⁴ In the meantime, policymakers will need to continue setting priorities for fighting trademark counterfeiting with little empirical guidance on offer.

- 31 See Fink *et al* (2010) and the US Government Accountability Office (2010) for reviews of these studies.
- 32 In some cases, the resulting estimates include the effects of copyright piracy as well. In addition, some studies look at short-term effects of given levels rather than changes in levels of counterfeiting, without considering the longer term 'general-equilibrium' consequences outlined in the text. See Fink et al (2010).
- 33 One such parameter is the degree to which fake and genuine products are substitutes for one another. Some studies simply assume that consumers of fake goods would switch one-for-one to genuine goods, if the former were not available. See Fink et al (2010).
- 34 The European Observatory on Counterfeiting and Piracy has initiated work towards methodologies that would quantify the scope, scale and impact of IPR infringements on the European economy. However, this work is still at a relatively initial stage. See Hoorens *et al* (2012) for a first proposal for a new approach towards quantification.

30 Much will depend on whether employment changes take place in the formal or informal sector; the setting of wages, the reach of social safety nets, and the length of possible unemployment spells are bound to differ in these two sectors.

2.3

CHOICES IN DESIGNING TRADEMARK LAWS AND INSTITUTIONS

As an economic principle, protecting trademarks stirs little controversy. As outlined in Section 2.1, they help lower consumers' search costs and promote orderly competition in the marketplace; society as a whole stands to benefit. However, designing trademark laws and institutions entails choices that determine how effectively the system fulfills this role. Among others, these choices concern what subject matter qualifies for trademark protection, how trademark rights are acquired and lost, and what acts constitute violation of those rights.

Over time, different approaches to trademark protection have emerged in different countries. New business models and the evolving nature of the marketplace constantly challenge existing practices and prompt new or refined approaches. In particular, the arrival of the Internet some 20 years ago posed new questions about how firms employ trademarks, when consumers may be confused, and what constitutes orderly competition.

This section reviews some of the key design choices, exploring what approaches different jurisdictions have followed and what trade-offs these approaches entail. It is divided into two parts. The first part looks at the law, and the second part looks at the institutions charged with implementing the law – mainly trademark offices. The discussion does not comprehensively cover all legal and institutional design choices; rather, it focuses on selected choices for which approaches differ markedly across countries.

2.3.1

DESIGNING TRADEMARK LAWS

To fulfill their economic rationale (see Section 2.1), trademark laws establish exclusive rights over signs, with the ultimate objective of preventing consumer confusion. At the same time, they seek to avoid unduly restricting "orderly" competition in the marketplace – which is generally defined as competition whereby one firm does not inappropriately take advantage of another firm's brand.

In many cases, there are no conflicts between the exclusive rights associated with a trademark and the activities of competitors. Indeed, firms often seek to establish their own identities and deliberately differentiate their brands from those of their competitors. However, situations of conflict sometimes arise – especially when firms seek trademarks that closely resemble those protecting successful brands.

One important question is what subject matter should qualify for trademark protection. The increased sophistication of modern marketing strategies has vastly expanded the types of signs for which applicants seek protection. In particular, firms no longer limit claims for trademark protection to names and two-dimensional logos, but try to extend protection to three-dimensional shapes, colors, holograms, slogans, sounds, smells, tastes, and feels (see Subsection 1.3.1). National laws define whether specific signs are eligible for protection.³⁵

35 Note that Article 15 of the TRIPS Agreement requires that "[a]ny sign, or any combination of signs, capable of distinguishing the goods or services of one undertaking from those of other undertakings, shall be capable of constituting a trademark. Such signs, in particular words including personal names, letters, numerals, figurative elements and combinations of colours as well as any combination of such signs, shall be eligible for registration as trademarks. Where signs are not inherently capable of distinguishing the relevant goods or services, Members may make registrability depend on distinctiveness acquired through use. Members may require, as a condition of registration, that signs be visually perceptible."

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Even if a particular sign qualifies, in principle, for protection, it must meet additional requirements: it must not deceive; it must not be contrary to morality and public order; in the case of shapes, it must not perform a technical function that competitors may want to use; and it must be distinctive.36 The latter requirement is a key eligibility criterion. For trademarks to best support efficient communication as outlined in Subsection 2.1.1, consumers need to clearly associate them with specific goods and services. If descriptive terms such as "orange juice" or "mobile telephone" could receive trademark protection in relation to the goods they denote, the ordinary meaning of those terms would be distorted; in addition, firms possessing those trademarks would have an undue advantage vis-à-vis their competitors. In practice, it is not always easy to evaluate how distinctive different subject matter is in different contexts, and this evaluation may change over time.

A similar tension arises when a brand name is so successful that its primary meaning evolves to describe a general class of a good or service rather than the specific good or service offered by the trademark holder. Wellknown examples of such cases are the terms "gramophone", "escalator", and "zipper". From an economic perspective, maintaining exclusive trademark rights in such cases would cement a dominant market position and lock in economic rents. Trademark law thus allows for the possibility that "genericized" trademarks lose their protection and become part of the public domain. However, this does not happen frequently. Indeed, trademark holders typically try to preempt losing their exclusive rights by discouraging the generic use of their trademarks. For example, the US firm Google publishes on its website suggested generic terms for the trademarks it owns, partly to help stem the use of "google" as a verb.37

A second important question is whether there can be situations of trademark infringement, even when it is not clear that consumers are confused. One classic example is the use of the name Cadillac in a brand of dog food. On the one hand, it seems unlikely that this dual use of the Cadillac name for two unrelated products confuses consumer as to its source or origin. One may even argue that the "premium product" notion associated with the Cadillac name conveys information to consumers. On the other hand, the introduction of the Cadillac dog food brand may negatively affect the image value of the original automobile brand; in legal terms, the former brand may "dilute" the latter.

Questions of trademark dilution have gained new prominence with the rise of e-commerce and the emergence of new market intermediaries. For example, search engine operators sometimes auction off trademarked keywords for the display of advertisements to the highest bidder, even if this bidder is not the trademark owner.³⁸ Does the display of advertisements unrelated to the trademarked keyword dilute the trademark in question? And if so, does such dilution constitute trademark infringement, even if there is no consumer confusion?

³⁶ See WIPO document SCT/16/2 for further discussion on this subject

³⁷ See: www.google.com/permissions/ trademark/our-trademarks.html

Courts have reached different conclusions on these questions, in part reflecting differences in how trademark laws protect right holders against dilution. 39 Assessing the consequences of dilution from an economic perspective is similarly complex. As pointed out in Subsection 2.1.2, trademarks can have a useful communication function, justifying their third-party use. In addition, diluting the image value of a brand may reduce the economic rents that strong brands can generate. This tends to benefit society. However, depending on competitive conditions, reduced profits may undermine investments in innovation, possibly rendering society worse off in the longer term (see Section 3.1). Few generalizations are possible and much depends on case-specific circumstances.

2.3.2

DESIGNING TRADEMARK INSTITUTIONS

Trademark institutions encompass those entities tasked with implementing trademark law. In principle, this includes the administrative office managing the trademark registration process, as well as the various entities responsible for enforcing the law – including judicial authorities, the police, and customs authorities. This subsection focuses on the registration process, although it also touches on questions of law enforcement.

The registration of a trademark is usually the most important vehicle for securing exclusive rights to a brand.⁴⁰ The typical job of a trademark office consists of examining the applications they receive for registration, publishing those applications, considering possible third-party oppositions against them, registering successful applications, and maintaining the register as the official record of trademark ownership. In performing these tasks, trademark offices typically seek to further the following objectives:

- Promote accessibility to the trademark system. Fees
 for registering and defending a trademark as well
 as associated procedural requirements should not
 unduly burden applicants especially smaller, more
 resource-constrained entities.
- Ensure transparency and legal certainty. All market participants should have a clear picture of the trademarks that are legally registered, the goods and services they cover, the trademarks for which the office has received applications, and the trademarks that have expired.
- 39 In the US, arguments of trademark dilution have historically gained little traction in both trademark case law and jurisprudence (Beebe 2004). Recent legislative reforms, however, have widened the possibilities for right holders to claim dilution of their trademarks (Slowik, 2009). In the EU, the Community Trademark Regulation (No 207/2009) expressly protects trademarks with a reputation against blurring, tarnishment, and free-riding (Fhima, 2011). Gilliéron (2008) offers a perspective on how the development of new online business models may influence the scope of trademark protection.
- 40 However, in most countries, even unregistered trademarks can benefit from legal protection. For example, under the US common law system, an entity can create and enforce a trademark without registering it. Registration provides additional benefits, however. See Graham et al (2013).

- Balance the interests of right holders and those of third parties. Administrative procedures should lead to the refusal of applications that pertain to non-eligible subject matter, that are not sufficiently distinctive, or for which prior rights exist. They should also allow third parties to challenge applications for new trademarks, while preventing them from unduly delaying the administrative process.
- Avoid "cluttering" of the trademark register. There should be incentives to minimize the registration and renewal of trademarks that applicants do not use. Cluttered registers impose a cost on society in that they reduce the space of names and other eligible subject matter available for new trademarks. While the precise extent of cluttered registers and their costs are uncertain, there is some evidence that they negatively affect at least some market participants (see Box 2.4).41

Box 2.4: Trademark cluttering in the pharmaceutical industry

Evaluating to what extent trademark registers may be cluttered is difficult, as one does not have information on whether owners of trademarks actually use them. To overcome this difficulty, von Graevenitz (2012) makes use of a natural experiment provided by the enlargement of the European Union (EU) in 2004.

In particular, von Graevenitz's study focuses on the pharmaceutical industry where firms do not only seek trademark protection for new drug names, but they must also obtain the approval of medical regulators for using those names in commerce. Indeed, in order to avoid confusion of drug names and the possible adverse health outcomes that could ensue, the scrutiny applied by medical regulators is typically tougher than that applied by trademark offices. As a result, pharmaceutical firms often submit multiple names for their new products to medical regulators, so that they do not have to start from scratch if one or more regulator around the world rejects a name. In order to establish exclusive rights over the submitted names, they apply for trademarks for each of them.

Against this background, von Graevenitz's study questions whether the enlargement of the EU prompted pharmaceutical companies to apply for more trademarks, as they faced a tougher name review at the European Medicines Agency (EMA). In particular, EU enlargement meant that 10 additional countries could object to a name in the EMA's Invented Name Review Group.

The study focuses on trademark applications at the Office for Harmonization in the Internal Market (OHIM), the EU office responsible for the Community Trade Mark (CTM). It employs a so-called difference-in-difference estimator that not only compares filing behavior before and after EU enlargement, but also evaluates how filing behavior in the pharmaceutical industry compares to other industries. ⁴² It concludes that name review at the EMA prompted pharmaceutical companies to register between 10 and 37 percent more trademarks. The costs of these additional trademark registrations are not trivial. Estimates suggest that the cost of developing a single new drug name can amount to USD 25,000 or more.

Admittedly, the study's findings only pertain to the pharmaceutical industry. Given the additional layer of name review that takes place in this industry, cluttering may well be less important elsewhere. However, this question deserves further study — especially in light of the rapid increase in the number of trademarks filed over the past decades (see Subsection 1.3.1).

Source: von Graevenitz (2012)

- 41 An explorative study on the extent of trademark cluttering at the UKIPO and OHIM reported on "survey-based evidence that applicants perceive cluttering to be a problem in specific fields and countries". However, it also concluded that there is no "strong evidence that cluttering has already become a systemic problem for the trade mark system that is comparable to the effect of patent thickets for patent systems." See von Graevenitz et al (2012).
- 42 The study also employs a so-called nearest neighbor matching estimator that confirms the main findings.

Trademark offices face a number of choices in designing the registration process that ultimately determine how effectively the system promotes the above objectives. ⁴³ The remainder of this subsection discusses several of these choices, pointing to different approaches and associated trade-offs.

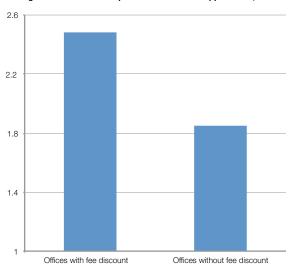
The first choice concerns the *level and structure of administrative fees*. Trademark offices charge applicants fees for the services they offer, typically starting with an initial application fee and extending to fees for additional services – such as publishing and registering the trademark, recording a change of ownership, and renewing the registration at regular intervals. The details vary from country to country.

Fees influence applicants' decisions, not only on whether to apply for a trademark, but also on the number of classes in which they seek protection. For instance, in some offices, the initial application fee already covers goods or services belonging to more than one class, whereas in other offices the initial fee only covers goods or services belonging to a single class, and the fee for each additional class costs extra. As a result, offices in the former category see, on average, 0.63 more classes specified in each application than offices in the latter category (Figure 2.2).⁴⁴

- 43 It should be noted that, strictly speaking, at least some of the institutional choices discussed here are governed by law rather than by trademark offices decisions. However, for expositional simplicity, the discussion treats them as trademark offices choices, in view of the fact that offices are responsible for implementing them.
- 44 Of course, statistical correlation does not imply causation. In particular, many offices in the former category do not examine trademark applications on relative grounds and do not require that an application be based on 'intent to use' which possibly explains why applicants specify additional classes. However, in a multivariate regression analysis based on the 51 offices included in Figure 2.2 that controlled for these office characteristics, the availability of a fee discount emerged as the only statistically significant variable that explains the average number of classes per application; the point estimate suggests that fee discounts are associated with 0.54 more classes per application.

Figure 2.2: Fees matter

Average number of classes specified in trademark applications, 2010



Note: This comparison is based on a sample of 51 offices for which underlying data were available and which operate multi-class filing systems. "Offices with fee discount" include 34 offices where the total fee for an application covering two classes exceeds the total fee for an application covering a single class by less than 50 percent; in most of these offices, the initial application fee already covers two or three classes. "Offices without fee discount" include 17 offices where the total fee for an application covering two classes exceeds the total fee for an application covering a single class by 50 percent or more.

Source: World Intellectual Property Organization (WIPO) Statistics Database and websites of national and regional IP offices.

These findings suggest that fees shape applicant behavior. How applicant behavior in turn shapes competitive outcomes in the marketplace is not always clear, however. For example, low fees can promote the trademark system's accessibility, benefitting small entities that might otherwise be exposed to 'disorderly' competition. At the same time, low fees might invite more speculative applications across a wider set of classes – thus possibly contributing to the cluttering of trademark registers, as described above.

Similar trade-offs exist for other design choices. Consider the implementation of the so-called use requirement. Most countries' legal frameworks make trademark protection conditional on the right holder using the trademark in commerce. 45 This condition precisely seeks to prevent the cluttering of trademark registers and bad-faith applicant behavior. In implementing this requirement, a key question is whether the trademark applicant or owner should furnish proof of use and, if so, when. On this question, countries have followed different approaches. Many European countries and OHIM, for example, do not require demonstration of use when trademarks are applied for, registered, or renewed. Questions of use only arise when third parties challenge trademarks through pre- or post-grant opposition procedures. At the United States Patent and Trademark Office (USPTO), by contrast, applicants generally need to demonstrate use before the office registers or renews a trademark.

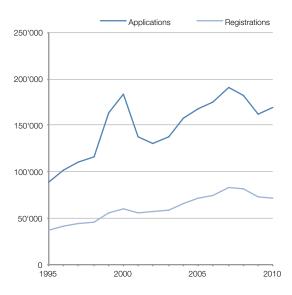
From an economic viewpoint, not – or not immediately – requiring use is justified in cases where the market introduction of new goods or services takes considerable time, and where firms need some assurance that their future brands will receive protection. For this reason, a considerable number of offices have opted for an intent-to-use system, whereby they accept applications for which the applicant signals future use, but registration can only occur once the applicant is actually using the trademark. At the USPTO, for example, applicants who file on an intent-to-use basis have to establish use within three years of the office approving the application. Only after they have done so will the office actually register the application.

- 45 A WIPO questionnaire on trademark law and practice reveals that in 2010 only 11 out of a total of 79 countries (or regional trademark offices) did not provide for a use requirement. See WIPO/STrade/INF/1 Rev.1.
- 46 Responses to the WIPO questionnaire referred to in footnote 45 reveal that 23 out of a total of 79 countries (or regional trademark offices) require that an application be based on intent-to-use.
- 47 See Graham et al (2013). There are certain exceptions to this use requirement, notably for applications filed under the Paris Convention as well as via the Madrid system (see Box 2.5).

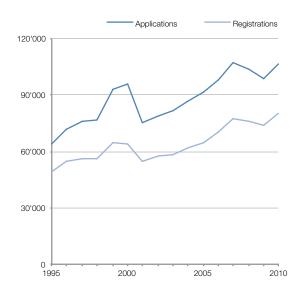
Figure 2.3: Intentions to use often do not result in actual use

Applications and registrations for trademarks at the USPTO, by filing year, 1995–2010

Intent-to-use applications



Use applications



Note: Intent-to-use applications include applications filed on the basis of intent-to-use, a foreign application or a registration under the Paris Convention, or an extension of protection under the Madrid Protocol.

Source: Myers (2013).

Interestingly, more than half of the intent-to-use trademarks filed at the USPTO do not result in a registration – a substantially higher share than for "regular" trademark applications (Figure 2.3). This suggests that many applicants realize within three years that they will not use the trademarks they intended to use. One explanation is that firms withdraw their plans for the introduction of new products; alternatively, they may initially apply for more than one trademark for the same product in order to collect more information on which branding strategy works best. The latter practice is especially relevant for the pharmaceutical industry, where firms face the risk that their proposed trade names will not meet regulatory approval (see Box 2.4).

The relatively low registration share of intent-to-use applications at the USPTO raises the question of whether offices that do not require proof of use as a condition for registration see a larger number of unused trademarks in their register. Preliminary evidence derived from comparing applications for the same trademarks at the USPTO and at OHIM suggests that this indeed is the case (see Box 2.5). Again, while indicating that the implementation of the use requirement matters, it remains unclear how the registration of unused trademarks affects competitive behavior and market outcomes.

Box 2.5: What happens to applications for the same trademarks at the USPTO and at OHIM?

One way to assess the effect of institutional design choices on trademark filing behavior and outcomes is to compare what happens to applications for the same trademarks that are filed in different offices. Von Graevenitz (2013) performed such an exercise focusing on trademarks filed in August 2007 at the USPTO and at OHIM. In those two months, the USPTO received 25,516 applications and OHIM received 8,140. Comparing the trademark names as well as the identity of the applicants, von Graevenitz identified 2,159 applications received by both offices.⁴⁸

Some of the 2,159 common applications arrived at the two offices via the Madrid system, whereas others arrived via the regular national procedures. This matters for the USPTO insofar as the registration of Madrid system-based applications is not conditional on applicants establishing use; by contrast, the great majority of non-Madrid system-based applications at the USPTO are intent-to-use applications, for which applicants need to establish use prior to registration.

How do registration outcomes for these 2,159 common applications differ across these two offices? Table 2.1 compares registration outcomes, first focusing on only those common applications for which applicants at the USPTO opted for intent-to-use filings. Marked differences emerge. First, OHIM registered 87 percent of all applications in this subsample, whereas the USPTO only registered 59 percent. Second, there were 445 applications — representing 33 percent of the subsample — for which registration occurred at OHIM but not at the USPTO. Looking more closely at why those 445 applications failed to register at the USPTO, it turns out that the applicant did not establish use in 292 of the 445 cases. In other words, the USPTO's use requirement is an important factor explaining why the two offices saw different registration outcomes.

Table 2.1: Registration decisions, intent-to-use subsample

		Register	ed at the USPTO?	
		No	Yes	Total
Registered at OHIM?	No	108	70	178
	Yes	445	741	1,186
	Total	553	811	1,364

48 In identifying common applications, von Graevenitz (2013) also considered applications filed in the three months before and after August 2007. Correctly identifying common applications requires extensive manual checks. This explains why this investigation focused only on applications filed in a particular month, rather than the whole population of applications at the USPTO and at OHIM.

Table 2.2 makes the same comparisons, focusing only on those common applications that entered the USPTO via the Madrid system.⁴⁹ Interestingly, the registration rate at the USPTO – at 81 percent – was considerably higher for this subsample. This again underlines the relevance of the use requirement. OHIM's registration rate – at 95 percent – was also higher for this subsample, and it remains the case that far more registrations fail to register at the USPTO than at OHIM. This suggests that other factors besides the use requirement "filter out" applications at the USPTO. One such factor may be stricter examination of applications: the USPTO – in contrast to OHIM – examines applications on relative grounds against earlier trademarks. Unfortunately, available data do not offer useful insights into the precise reasons why applications at the USPTO fail to register.⁵⁰

Table 2.2: Registration decisions, Madrid system subsample

		Register	ed at the USPTO?	
		No	Yes	Total
Registered at OHIM?	No	17	20	37
	Yes	119	566	685
	Total	136	586	722

While offering an empirical window into the effects of institutional design choices on registration outcomes, two caveats apply. First, there may be genuine differences in how applicants use the trademarks they applied for in the two jurisdictions, which could affect registration outcomes. Second, the sample at hand is relatively small; future investigations using larger samples may refine von Graeventiz's results and provide additional insights into how registration outcomes differ by sector and by applicant type.

Source: von Graevenitz (2013)

How extensively should offices examine applications for new trademarks? Virtually all offices examine applications on so-called absolute grounds – evaluating whether the applied for sign is eligible subject matter, sufficiently distinctive and in line with other provisions of the law (see Subsection 2.3.1). The majority of offices also perform so-called *relative grounds examination* – identifying any conflict with earlier trademarks in different ownership. However, a number of large offices – notably, OHIM and selected national offices in European countries – do not examine applications on relative grounds.

Relative grounds examination of all incoming trademark applications can consume considerable resources. One may argue that such a resource investment may not be necessary if only a minority of new applications is likely to raise a conflict with a prior trademark. In addition, the views of office examiners on whether new applications indeed raise a conflict may differ from the views of trademark owners.51 Some offices have therefore opted to only deploy examination resources when third parties oppose new trademarks. While this approach can save resources, one counter-argument is that not all trademark owners - especially small businesses - have the capacity to monitor and, if necessary, oppose conflicting new applications; ex officio relative grounds examination thus offers some assurance to those entities, and contributes more generally to legal certainty.

- 49 In addition to intent-to-use and Madrid system applications, the USPTO accepts so-called Section 44 applications filed on the basis of a foreign application or registration. However, there are only 73 common applications for which the USPTO equivalent is based on Section 44 a subsample that is too small for meaningful comparison of registration outcomes. This also explains why the two subsamples in Tables 2.1 and 2.2 only total 2,086 applications, slightly below the full sample of 2,159 common applications.
- 50 In the majority of cases, the data records simply indicate that the applicant failed to respond to an office inquiry.
- 51 Some offices that examine applications on relative grounds allow applicants to submit consent or co-existence agreements, allowing them to overcome a refusal based on a prior conflicting trademark. Generally, both parties sign these agreements, stating that they do not believe the trademarks will cause consumer confusion and that they should be allowed to co-exist.

Unfortunately, only limited empirical guidance is available on how relative grounds examination affects filing behavior and registration outcomes. ⁵² The comparison of common trademark applications at OHIM and at the USPTO outlined in Box 5 suggests that relative grounds examination may be a factor in explaining why more applications fail to register at the USPTO, but the evidence is not fully conclusive. A study on the effect of the United Kingdom Intellectual Property Office (UKIPO) weakening relative grounds examination in 2007 concluded that this policy change increased opposition rates; unfortunately the study could not evaluate how the policy change affected registration outcomes. ⁵³

Whether or not to examine on relative grounds raises a closely related institutional choice: the design of *opposition systems*. The vast majority of trademark offices have such systems in place, thereby enabling third parties to formally object to the registration of a new trademark through an adversarial, administrative proceeding.⁵⁴ Opposition systems serve to balance the interests of applicants, owners of existing trademarks, and the public at large; in addition, as stated above, they can guide the allocation of administrative resources. The exact design of opposition procedures differs in important ways across offices. Key design elements include the following:

- Timing of oppositions. Should oppositions take place before or after the registration of a trademark and, if before, should they occur prior to or post the examination stage? Allowing oppositions before registration avoids the uncertainty of untested registrations on the register. In addition, if oppositions precede examinations, they can provide relevant information that examiners might otherwise miss. The main advantage of delaying oppositions until after registration is that they shorten the registration process, benefitting the majority of applications that do not lead to any conflict.
- Grounds for opposition. Should third parties be able to oppose trademarks on all grounds or only on selected grounds? The most common scenario is for owners of earlier trademarks to oppose a new trademark on the basis that it would give rise to confusion. However, in addition to such relative grounds, some offices also allow oppositions based on formal and absolute grounds. Narrowing the opposition grounds reduces the burden that oppositions pose to applicants, but it also narrows opportunities for third parties to provide information that may assist in preventing the erroneous registration of trademarks.
- 52 Responses to the WIPO questionnaire referred to in footnote 45 reveal that 38 of the 51 offices in the sample underlying Figure 2.2 engage in relative grounds examination. Those 38 offices see, on average, 0.48 fewer classes specified in each trademark application than the remaining 13 offices. In a multivariate regression analysis that controlled for whether an office requires that an application be based on intent to use and the availability of a fee discount (as per Figure 2.2), relative grounds examination had a negative effect on the number of classes per application; however, this effect was not statistically significant.
- 53 See von Graevenitz et al (2012). In 2007, the UKIPO adopted a system whereby the office no longer automatically refuses to register a new trademark application if it conflicts with an earlier trademark. However, the office still examines applications on relative grounds. In cases where it finds a conflict, it notifies the applicant; if the applicant chooses to continue with the application, it also notifies the owners of earlier conflicting trademarks.

54 Responses to the WIPO questionnaire referred to in footnote 45 reveal that 60 out of 73 offices allow for *ex parte* opposition.

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• Opposition periods. Time windows for lodging oppositions range from as little as 30 days to up to 6 months after publication of a trademark. On the one hand, third parties need sufficient time to consider and prepare an opposition; on the other hand, long opposition periods delay the registration of trademarks, causing uncertainty for applicants. Some offices have put in place "cooling-off" periods – additional time windows for parties to consult on a case; these mechanisms appear to be useful in encouraging the settlement of cases that would otherwise lead to administrative or judicial decision-making.⁵⁵

There are no clear best practices in relation to these elements. Much depends on other institutional characteristics – notably, whether an office conducts relative grounds examination and what resources an office has at its disposal to carry out such an examination.⁵⁶ In any case, balancing the interests of applicants as well as the interests of third parties and the public should be a principal goal of any opposition system.

A seemingly legalistic, yet important institutional choice is how to specify the goods and services for which an applicant seeks trademark protection. It determines the scope of trademark protection and the transparency of the trademark register. Most offices have adopted the so-called Nice Classification consisting of 34 goods classes and 14 services classes, as well as alphabetical lists of goods and services indications falling within each class.⁵⁷ However, there are important differences in how they use this classification. In particular, at one extreme, selected European offices have adopted a "class-heading-covers-all" approach, whereby they deem

- 55 See WIPO document SCT/19/3 for further discussion on this topic.
- 56 WIPO documents SCT/19/3 and WIPO/STrade/ INF/4 offer additional background.
- 57 The official name of the Nice Classification is the International Classification of Goods and Services under the Nice Agreement. In order to keep the Nice Classification up to date, it is regularly revised by a Committee of Experts, and a new edition of the classification is published every five years.

 See: www.wipo.int/classifications/nice/en

indications of individual Nice classes as covering all the goods or services falling within those classes.⁵⁸ At the other extreme, some offices have adopted the "meanswhat-it-says" approach, whereby applicants need to list in detail the particular goods and services for which they will use the trademark; protection then only applies to those goods and services and not to the full classes into which they fall. The former approach offers wider protection, especially benefitting firms that frequently launch new products and services under the same trademark. The latter approach leads to a more clearly delineated and transparent trademark register, promoting legal certainty among all market participants.⁵⁹ It also leaves room for new trademarks within the same class that would otherwise conflict with the broad specification of existing trademarks.

- 58 In the EU, a 2012 ruling by Court of Justice of the EU in the so-called "IP translator" case has prompted changes to the "class-heading-covers-all" approach. One the one hand, the Court ruled that goods and services indications in trademark applications must be sufficiently clear and precise to delimit their scope on that basis alone. But it also allowed the possibility of listing Nice class headings, provided applicants specify whether they intended to cover all of the goods or services included in the alphabetical list of the particular class concerned or only some of those goods or services. Accordingly, OHIM and many national offices have clarified how they interpret goods and services specifications in light of the Court's decision. See "Common Communication on the Implementation of `IP Translator'", *European* Trademark and Design Network May 2 2013
- 59 There are no studies that systematically explore how alternative specification rules affect filing behavior. Abud *et al* (2013) report a sharp drop in the average number of classes specified in trademark applications from 2.2 to 1.2 after Chile adopted a "means-what-it-says" type rule in 2006.

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A final important area of institutional design concerns *international cooperation*. Generally, a trademark only receives protection within the borders of the country that grants the right.⁶⁰ In principle, firms that sell their goods or services in more than one country need to apply for trademarks in multiple national offices. This can be a costly exercise. In addition to paying office fees, firms face substantial administrative and legal costs when drafting and submitting application documents in different languages and conforming to different national rules. One key area for international cooperation therefore is to make registration systems compatible, so as to facilitate the processing of the same trademark application in multiple jurisdictions.

A number of international instruments have emerged to further this goal. First and foremost, the Madrid system – one of the oldest international cooperation frameworks dating back to a treaty first signed in the late 19th century – offers trademark owners the possibility to have their trademarks protected in several countries through a single application for international registration. It reduces the administrative burden on applicants and offices, while preserving the ability of offices to refuse applications that do not qualify for protection on absolute or relative grounds.

In addition to the Madrid system, two international agreements - the Trademark Law Treaty and the Singapore Treaty on the Law of Trademarks – simplify and harmonize administrative procedures for the registration of trademarks. Among other elements, these treaties govern what type of information applicants need to supply when applying for a trademark; how goods and service classes should be specified, and what means of communication with the trademark office are acceptable. They also mandate multi-class filing systems, so that applicants do not have to apply for more than one trademark if they seek protection in two or more classes. Like the Madrid system, these treaties reduce the administrative cost of applying for the same trademark in several jurisdictions, but leave the decision on whether a trademark qualifies for protection under prevailing laws to participating offices.

A somewhat different need for international cooperation arises for well-known trademarks. National laws provide special treatment for such trademarks, affording them protection even when they are not registered in a particular jurisdiction.⁶¹ The existence of a well-known trademark can therefore be a reason for offices to refuse a trademark application. Determining whether there is a conflict with a well-known trademark in a particular goods or services class can be challenging, however. What precisely qualifies as "well known" is context specific. Above all, among which group of consumers should a trademark be well known? Different jurisdictions have adopted different criteria in order to answer this question; they have also adopted varying terminology – such as "famous trademarks" or "trademarks with a reputation" - with varying legal implications. 62 Uncertainty about whether a trademark is well known in a country can give rise to so-called squatting behavior (see Box 2.6).

- 61 Article 6*bis* of the Paris Convention and Article 16 of the TRIPS Agreement mandate special protection for well-known marks.
- 62 US law has adopted the concept of famous trademarks (Beebe, 2004). The EU's First Trademark Directive and the Community Trademark Regulation have introduced the concept of a trademark "with a reputation"; it remains unclear, however, to what extent there is a difference between the concepts of "well known" and "with a reputation" (Marsland, 2008).

⁶⁰ The exceptions are supranational trademark systems – notably the CTM administered by OHIM – where protection applies to all jurisdictions that are party to the system.

Box 2.6: Trademark squatting - evidence from Chile

Trademark squatting describes a phenomenon whereby a firm or an individual deliberately registers a trademark that protects a good, service, or name belonging to another firm. The trademarks in question are often well-known and embody substantial goodwill built by the brand owner. However, the original owner has not registered them in a particular jurisdiction – for example, because the market in question is too small or initially seemed unattractive. Squatters, in turn, do not necessarily intend to use these trademarks; rather, they extract rents from the original brand owners or other companies that rely on the brand – such as importers of foreign brands. For example, the squatter may threaten to sue the original owner for trademark infringement once the latter seeks to enter the local market. Instead of engaging in costly litigation, the brand owner may be willing to make a modest payment to the squatter for abandoning or re-assigning the trademark.

There is anecdotal evidence of squatting behavior throughout the world. For example, when planning to enter the Russian market in 2005, Starbucks saw its trademark registered by an individual, Sergei Zuykov, who offered to re-assign the mark for USD 600,000. Instead, Starbucks succeeded in invalidating Mr. Zuykov's trademark in court – at the cost of delayed market entry. By contrast, other companies appear to have given in to Mr. Zuykov's demands. §3

Going beyond anecdotal evidence, how systemic is squatting behavior? One recent study sought to quantify the share of squatters among all trademark applicants in Chile. Several characteristics make Chile an interesting case for studying the incidence of squatting: the legal framework does not require owners to use their trademarks; at an initial application fee of around USD 85, applying for a trademark is relatively cheap; and Chile is not a member of the Madrid system, requiring foreign applicants to directly file for protection in Chile.

The study employed ten variables to identify potential squatters in the trademark register, including the share of an applicant's trademarks that were rejected, opposed, or revoked, simultaneous filings of unrelated trademarks, class diversity, and others. Using these variables, the researchers calculated a "squatter score" that ranks trademark applicants according to how likely they are squatters. After performing extensive manual checks, the authors conservatively identified a total of 431 potential squatters – 87 companies and 344 individuals – in the Chilean trademark registry. These potential squatters filed together almost 5,800 trademark applications between 1991 and 2010. The sector seeing the greatest number of squatting attempts is clothing and accessories; examples of trademark filings for which the Chilean IP office has frequently denied registration concern brands such as Abercrombie & Fitch, Adidas, Barbour, Calvin Klein, Chanel, and Ray-Ban.

The study also explores the effect of squatting on affected trademark owners. Using data on oppositions, the study finds that trademark owners that have been exposed to squatting file a disproportionately large number of trademarks shortly after having been targeted by squatters. This suggests that the squatting phenomenon induces more trademark filings by brand owners, which means squatting can have wider effects beyond the relatively small number of squatted trademarks themselves.

Source: Forthcoming study by the National Institute of Intellectual Property of Chile and WIPO on "Trademark Squatters: Evidence from Chile".

63 See "He Doesn't Make Coffee, but He Controls 'Starbucks' in Russia", *The New York Times*, October 12, 2005.

64 The estimates are conservative because the study ignores applicants with less than three filings and there may well be applicants that use the trademark system both "legitimately" and as squatters.

Offices and courts look at a range of factors to determine whether a particular trademark is well-known in the domestic context.65 One of those factors may be the extent to which a particular trademark is well-known abroad. A trademark's recognition can easily transcend national borders, through travelling consumers, television, the Internet and other media. International cooperation can thus be helpful in providing information that can assist relevant authorities to evaluate a trademark's international reach. One example of such cooperation is WIPO's Global Brands Database, which allows users to search for trademarks across multiple jurisdictions (Box 2.7). In particular, this public database allows users to establish in how many countries a trademark is registered and for what length of time - variables that may be relevant for evaluating whether a trademark should qualify as well-known.

Box 2.7: WIPO's Global Brand Database

Reflecting the territoriality of IP laws, trademark registration systems operate to a large extent at the national level and, in selected cases, at the regional level. As a consequence, researching in which jurisdiction a particular sign is already registered requires, in principle, consulting all relevant national and regional trademark registers. Until recently, no single international source was publicly available that would allow for simultaneous trademark searches.

WIPO's Global Brand Database – a free service established in 2011 – seeks to fill this gap. 66 It includes the national trademark collections of 10 countries as well as the data collections generated by the Madrid system for the international registration of trademarks and the Lisbon system for the international registration of appellations of origin. The service offers state-of-the-art search features – including searches of images and figurative elements as well as automatic suggestions of potential matching terms. As of mid-2013, the Global Brand Database contained close to 12 million records, with the number of national collections included set to grow.

A stronger form of cooperation would be to establish a framework for exchanging information on well-known trademarks, possibly resulting in a directory of such trademarks. While discussions on the establishment of such a framework have taken place, they have not yet led to any concrete proposals.⁶⁷ Several difficult questions arise. For instance, what should be the relevant criteria for a trademark in order to qualify for inclusion in any directory, when national rules for what should qualify as well-known differ? What should be its legal effects, if any? How can one avoid a presumption that a trademark is not well-known, if it is not included in the directory? How could one maintain a directory to reflect changes in market condition across all relevant jurisdictions? Answering these questions is as challenging today as it was 10 or 20 years ago. One possible new element in this discussion, however, is the increased availability of electronic data enabling assessments of the popularity and geographical reach of trademarks. Such new quantitative approaches may well spur renewed interest in international cooperation.

- 65 See WIPO (2000)
- 66 The Global Brand Database is available online at www.wipo.int/branddb.

67 In the 1990s, WIPO's Committee of Experts on Well-Known Marks considered the establishment of a voluntary network for the exchange of information among countries on well-known marks. However, the Committee concluded at the time that the setting up of such a network was "not realistic" and "no longer pursued" this idea. See WIPO document WKM/CE/II/2.

2.4

CONCLUSIONS AND DIRECTIONS FOR FUTURE RESEARCH

Brands are an indispensable guide for consumers and a means for companies to build a reputation and image in the marketplace. By protecting their exclusivity, trademarks enable market economies to function more efficiently. Their importance goes far beyond sophisticated markets for differentiated goods in high-income countries. They are, by far, the most frequently used form of registered IP in low- and middle-income countries. Firms of every size and from virtually every sector of the economy rely on trademarks when seeking to gain an edge on their competitors.

Notwithstanding the clear economic rationale for protecting trademarks, policymakers face a set of choices that have a bearing on how effectively the trademark system supports market economies. In addition, changing business models and the rise of e-commerce have challenged established practices, requiring new thinking and new approaches. The fight against trademark counterfeiting, for example, requires continuous adjustment, as producers and sellers of fake goods find new ways of distributing them and evading existing channels of law enforcement.

Another central area of policymaking concerns the design of the trademark registration process. Different countries have opted for different approaches, thus affecting filing behavior in important ways. In particular, evidence suggests that offices register fewer applications when they require applicants to establish use prior to registration. Similarly, whether or not an office conducts relative grounds examination affects how frequently applications face oppositions. Other important design choices include the level and structure of administrative fees, the rules governing oppositions, and how applicants specify the goods and services for which they seek protection.

Unfortunately, there is much less evidence on how differences in filing behavior and registration outcomes affect competition and firms' performance in the marketplace. One specific concern is the possible "cluttering" of trademark registers, making it more difficult and costly for firms to find new trademarks that are available for protection. Policymakers would be well advised to carefully assess whether there are signs of "cluttered" registers in different goods and services classes - especially in countries that have seen rapid growth in trademark registrations over the past decades. More generally, differences in filing behavior and registration outcomes raise the question of how different types of firms fare under alternative approaches. For example, do smaller firms face a disadvantage in offices that place some of the burden of identifying conflicts with earlier trademarks on existing owners?

Finally, the protection of well-known trademarks raises special questions for international cooperation. With the globalization of information, a trademark's recognition easily transcends national borders. However, whether a trademark is well-known in a particular place remains context specific. International cooperation can help national authorities assess the international reach of a trademark. At a minimum, this can be done by providing information on where a trademark is registered and for how long. A more ambitious form of cooperation would be to establish a framework for exchanging information on well-known trademarks, possibly resulting in a directory of such trademarks.

AREAS FOR FUTURE RESEARCH

While not as voluminous as the literature on patents, economic research on trademarks has already provided important insights – both on how they resolve market failures and how policy choices affect economic outcomes. Nonetheless, there are many areas where future research could offer better guidance to policymakers. Such areas include the following:

- Generating reliable evidence on the scale and effects of trademark counterfeiting represents one of the biggest research challenges. The availability of data on what are inherently illicit activities will continue to constrain investigations in this field. However, there appears to be scope to generate better data on the basis of information that is collected in the course of law enforcement activities. In addition, as shown by several pioneering studies, original survey work can generate useful evidence on the behavior of consumers and firms that may in turn inform policymaking.⁶⁸
- More insights into how trademark institutions affect filing behavior and registration outcomes are required

 partly in order to validate and refine the conclusions of existing studies and partly in order to look at institutional choices that have not been considered thus far.⁶⁹

• As already mentioned, research has provided too few insights into how differences in trademark filing behavior and registration outcomes affect firm performance and competition in the marketplace. The increased availability of unit-record trademark datasets should enable new investigations aimed at providing such insights. To In fact, similar datasets for patents became available more than 10 years ago and have prompted a large number of new empirical research studies that have produced new insights into the workings of the patent system. Comparable efforts in the field of trademarks would be welcome.

⁶⁸ See Fink *et al* (2010) for observations on possible ways forward.

⁶⁹ The WIPO questionnaire referred to in footnote 45 provides a list of relevant institutional choices and, indeed, enables cross-country studies on their effects.

⁷⁰ For example, the USPTO recently released a Trademark Case Files Dataset covering 6.7 million trademark applications filed with, or registrations issued by, the USPTO between March 1823 and January 2012.

REFERENCES

Abud, M.J., Fink, C., Hall, B. & Helmers, C. (2013a). "The Use of Intellectual Property in Chile." WIPO Economic Research Working Paper No. 11.

Akerlof, G. (1970). "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism." Quarterly Journal of Economics, 84(3), 488-500.

Ashmead, R. (2012). "IP TRANSLATOR and Trade Mark Registration Goods/Services Scope." Journal of Intellectual Property Law & Practice, 7(12), 844-846.

Bloch, P.H., Bush, R.F. & Campbell, L. (1993). "Consumer 'Accomplices' in Product Counterfeiting." *The Journal of Consumer Marketing*, 10(4), 27-36.

Burnkrant, R.E. & Cousineau, A. (1975). "Informationa and Normative Social Influence in Buyer Behavior." *Journal of Consumer Research*, 2(3), 206-214.

Dondorp, A.M., Newton, P. N., Mayxay, M., Van Damme, W., Smithuis, F.M., Yeung, S., Petit, A., Lynam, A.J., Johnson, A., Hien, T.T., McGready, R., Farrar, J.J., Looareesuwan, S., Day, N.P.J., Green, M.D. & White, N.J. (2004). "Fake Antimalarials in Southeast Asia are a Major Impediment to Malaria Control. Multinational Cross-Sectional Survey on the Prevalence of Fake Antimalarials." *Tropical Medicine and International Health*, 9, 1241–1246.

Barnes, D.W. (2006). "A New Economics of Trademarks." Northwestern Journal of Technology and Intellectual Property, 5(1), 22-67.

Bearden, W.O., Netemeyer, R.G. & Teel, J.E. Jr. (1989). "Measurement of Consumer Susceptibility to Interpersonal Influence." *Journal of Consumer Research*, 15, 473-481.

Beebe, B. (2004). "The Semiotic Analysis of Trademark Law." UCLA Law Review. 51, 621-704.

Bian, X. & Moutinho, L. (2009). "An Investigation of Determinants of Counterfeit Purchase Consideration." Journal of Business Research, 62(3), 368-379.

Conner, K.R. (1995). "Strategic Advantage from Being Imitated: When Can Encouraging 'Clones' Pay?" *Management Science*, 41(2), 209-225.

Economides, N.S. (1988). "The Economics of Trademarks." Trademark Reporter, 78, 523-539.

Fhima, I.S. (2011). Trade Mark Dilution in Europe and the United States. (Oxford University Press).

Fink, C. (2009). "Enforcing Intellectual Property Rights: an Economic Perspective." Issue Paper No.22, (International Centre for Trade and Sustainable Development, Geneva, Switzerland).

Fink, C., Maskus, K. & Qian, Y. (2010). "The Economic Effects of Counterfeiting and Piracy: A Literature Review.' Advisory Committee on Enforcement, (WIPO/ACE/6/7).

Gilliéron, P. (2008). "Online Advertising Business Models and Distinctive Signs – Should One Rethink the Concept of Confusion?" International Review of Intellectual Property and Competition Law, 39(6), 688-706.

Graham, S.J.H., Hancock, G., Marco, A.C. & Myers, A.F. (2013). "The USPTO Trademark Case Files Dataset: Descriptions, Lessons, and Insights." SSRN working paper, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2188621.

Griffiths, A. (2011). "An Economic Perspective on Trademark Law." (Cheltenham: Edward Elgar).

Grossman, G.M. & Shapiro, C. (1988a). "Counterfeit-Product Trade." *American Economic Review*, 78(10), 59-75.

Grossman, G.M. & Shapiro, C. (1988b). "Foreign Counterfeiting of Status Goods." *The Quarterly Journal of Economics*, 103(1), 79-100.

Hoorens, S., Hunt, P., Malchiodi, A., Liccardo, R., Pacula, S.K., Rabinovich, L. & Irving, B. (2012). "Measuring IPR infringements in the internal market: Development of a new approach to estimating the impact of infringements on sales." Report prepared for the European Commission, Internal Market and Services Directorate-General, available at http://ec.europa.eu/internal_market/iprenforcement/docs/ipr_infringment-report_en.pdf.

Hurwitz, M. A., & Caves, R. E. (1988). "Persuasion or Information? Promotion and the Shares of Brand Name and Generic Pharmaceuticals." *Journal of Law and Economics*, 31(2), 299-320.

Landon, S. & Smith, C. (1998). "Quality Expectations, Reputation, and Price." Southern Economic Journal, 64(3), 628-647.

Landes, W.M. & Posner, R.A. (1987). "Trademark Law: An Economic Perspective." *Journal of Law and Economics*, 30(2), 265-309.

Marsland, V. (2008). "Famous and well-known trademarks in EU law". World Trademark Review, January/February, 66-67.

Nia, A. & Zaichkowsky, J.L. (2000). "Do Counterfeits Devalue the Ownership of Luxury Brands?" *Journal of Product & Brand Management*, 9(7), 485-97.

Myers, A. F. (2013). "What is behind the surge in trademark filings? An analysis of United States data." Background research for the World IP Report 2013. United States Patent and Trademark Office Economic Working Paper No. 2013-1, available at www.uspto.gov/ip/officechiefecon/publications.jsp.

OECD (2008). "The Economic Impact of Counterfeiting and Piracy." (Paris, OECD).

Penz, E. & Stöttinger, B. (2005). "Forget the 'Real' Thing – Take the Copy! An Explanatory Model for the Volitional Purchase of Counterfeit Products." *Advances in Consumer Research*, 32, 568-575.

Qian, Y. (2008). "Impacts of Entry by Counterfeiters." Quarterly Journal of Economics, 123(4), 1577-1609.

Richardson, G. (2008). "Brand Names Before the Industrial Revolution." NBER Working Paper No. 13930.

Rogers, M., Helmers, C. & Greenhalgh, C. (2007). "An Analysis of the Characteristics of Small and Medium Enterprises that Use Intellectual Property." Working paper commissioned by UKIPO. www.ipo.gov.uk/ipresearch-characteristics-200710.pdf

Rosso, M. & Jansen, B. (2010). "Brand Names as Keywords in Sponsored Search Advertising." Communications of the Association for Information Systems, 27(1), 81-98.

Slowik, M.J. (2009). "Ahead of the Curve? The Effect of the Trademark Dilution Revision Act of 2006 on the Federal Circuit." *The Federal Circuit Bar Journal*, 18(2), 349-364.

Snyder, M. & DeBono, K.G. (1985). "Appeals to Image and Claims About Quality: Understanding the Psychology of Advertising." *Journal of Personality and Social Psychology*, 49(3), 586-597.

US Government Accountability Office (2010). "Observations on Efforts to Quantify the Economic Effects of Counterfeit and Pirated Goods." GAO-10-423, available at www.gao.gov/new.items/d10423.pdf.

Vida, I. (2007). "Determinants of Consumer Willingness to Purchase Non-Deceptive Counterfeit Products." *Managing Global Transitions*, 5(3), 253-270.

von Graevenitz, G., Greenhalgh, C., Helmers, C. & Schautschick, P. (2012). "Trade Mark Cluttering: An Exploratory Report." Working paper commissioned by UKIPO. Available at www.ipo.gov.uk/ipresearch-tmcluttering.pdf.

von Graevenitz, G. (2012). "Trade Mark Cluttering – Evidence from EU Enlargement." Manuscript, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2145588&download=yes.

von Graevenitz, G. (2013). "Concurrent filing of trade marks at the USPTO and at OHIM." Unpublished background research commissioned for the World IP Report 2013. Geneva: World Intellectual Property Organization.

WHO, WIPO, and WTO (2013). "Promoting Access to Medical Technologies and Innovation". (Geneva, WHO, WIPO, and WTO).

Wilcox, K., Kim, H.M. & Sankar S. (2009). "Why Do Consumers Buy Counterfeit Luxury Brands?" *Journal of Marketing Research*, 46(2), 247-259.

WIPO (2000). Joint Recommendation Concerning Provisions on the Protection of Well-Known Marks. (Geneva, WIPO).

WIPO (2011). World Intellectual Property Report: The Changing Face of Innovation. (Geneva, WIPO).

CHAPTER 3 BRANDING, INNOVATION AND COMPETITION

INTRODUCTION

Branding has come a long way from its humble beginnings as an identification mark to its current position as a tool for communicating with consumers. Firms use branding as a way to control and manage consumers' perceptions about their products and image. In many cases, branding creates sustainable competitive advantage for firms.

How much a firm should invest in branding is critically dependent on the business model that the firm pursues. For example, many recent buyers of a smartphone would attest, as firms that invest heavily in branding often also invest heavily in innovation. This raises the question of how firms' branding strategies interact with their innovation strategies. Does one support the other? Do firms face a choice between either branding or innovating? This chapter offers a perspective on such questions by exploring how branding affects innovation and competition in the marketplace. In particular, it draws on the economic literature to highlight the linkages between branding and innovation, and to show how such linkages have repercussions on market competition. It also examines forms of branding behavior that may be considered anticompetitive.

The chapter first describes the relationship between innovation and competition, and explores how branding affects this relationship (Section 3.1). It then examines in greater detail how branding and innovation relate to one another, and considers scenarios where competition concerns may arise (Section 3.2). Based on the insights gained, the chapter reviews ways in which competition authorities could safeguard competition against anticompetitive behavior (Section 3.3). The concluding remarks summarize the main messages emerging from the chapter discussion, and point to areas where more research could usefully guide policymakers (Section 3.4).

3.1

CONCEPTUAL CONSIDERATIONS

Innovation and market competition are two important elements in determining the growth rate of an economy. The combination of vibrant innovative activities and competitive market pressures can lay the foundation for strong economic growth in any country. However, the effects of these two elements are so interrelated, and so intertwined, that each of them has significant impact on the other.

3.1.1

HOW COMPETITION AFFECTS INNOVATION

Market competition can affect innovation in several ways. On the one hand, too much competition discourages innovation. When competitive pressures are too strong, firms are not in a position to innovate. Given that innovation is costly and risky, any additional expenditure would have to be justified by the potential profit margin. Where intensely competitive market conditions prevail, the profit margin may not be sufficiently large, or significant enough, for firms to recover their investments in innovative activities.²

- See Paul Romer (1986, 1990). Romer argues that a country can have sustainable economic growth if it invests in innovative activities.
- 2 In economic theory, perfect competition implies that firms in the market make little or no profit. In other words, the firms' total revenue from the sales of their goods or services pays for the costs of producing them. This would leave little to no leftover profit to invest in innovative activities.

Using a different line of reasoning, too little competition also hampers innovation. Firms that operate in markets where few rivals challenge them, or where they do not face any competitor, are less likely to innovate because there is no motivation for them to do so.

In short, for competition to best incentivize innovation, it has to be neither too strong nor too weak. Plotting the relationship between competition and innovation on a graph reveals an inverted U-shaped figure, whereby innovation increases as competition intensifies; however, after a certain threshold of competition intensity, innovation decreases as more rivals enter the market.³

What matters from an economic viewpoint is the presence and size of economic rents.⁴ When firms operate in markets where they enjoy some economic rents – and their rents are threatened by the potential entry of new rivals – these firms are more likely to innovate. They innovate so as to ensure that they continue to enjoy their rents, as well as ensure that they continue to stay competitive in the market. New entrants, on the other hand, are encouraged to innovate and enter the market so as to capture these rents for themselves. In this case, competition encourages firms to innovate, thus leading to generally higher innovation levels.

- 3 It is only recently that economists have been able to theoretically justify the inverted U-shaped relationship between market competition and innovation. Prior to the seminal contribution by Aghion et al (2005), most scholars observed this relationship without being able to provide a credible explanation for it. See also Subsection 2.2.3 of WIPO (2011) for further discussion on the relationship between innovation and competition, but from a patent rights perspective. Other economists have also added to the contribution of Aghion et al (2005) by looking at the innovation-competition relationship as influenced by advertising (Askenazy et al, 2010) and by considering when the market structure is endogenously determined (Goettler and Gordon, 2013), to name but a few.
- 4 Economic rent is a term that many economists use to refer to the return on a factor input. Profit – a type of economic rent – is the financial return from investing in the production of a particular good or service after subtracting the cost of producing that good or service.

However, when firms operate in markets where the economic rents are small – as happens when market competition is intense – the reward from innovating may be too small to justify the investment, and therefore the level of innovation in the market will also fall. At the other extreme, when rents are large and there are no competitive pressures, firms can continue to enjoy their economic rents without any need to innovate.

Competitive pressures also affect the types of innovation that firms bring to the market. The effect varies according to whether the innovation is a product or process innovation, leaving aside industry-specific factors.⁵

Process innovation is generally viewed as reducing firms' production costs. In a competitive setting, each firm would be motivated to invest in innovative activities that would reduce its production costs, so as to earn higher profit margins than its rivals; this impetus to innovate becomes stronger the higher the profit margin is expected to be. Moreover, if a firm's process innovation significantly reduces costs, it would be able to replace the existing leader in the market and gain market share. Therefore, in this case, market competition generally encourages innovation, which in turn may provide a basis for intervention from competition authorities if there is high risk of the market becoming too concentrated.

- 5 Industry-specific factors include how seamlessly one product could be substituted for a similar one; barriers to entry; presence of innovation spillovers, and ability to exclude others from imitating the innovation. See Richard Gilbert (2006), who conducted an extensive review of theoretical and empirical evidence on how market competition, market structure and innovation (proxied by R&D) affect one another.
- 6 This is a model proposed by Arrow (1962), and it assumes that the innovative firm is able to appropriate all returns on its innovation.
- 7 Concentration refers to when there are too few producers in the market – less than what is dictated in the effective competition framework. In traditional competition cases, market concentration is usually measured by the Herfindahl–Hirschman Index.

Product innovation – characterized by the introduction of new and improved products - can thrive in both competitive and less competitive settings.8 The reason for this is that product innovation will almost always increase firms' profits from the sale of both the new and the old products, especially when the products are differentiated. In the case of process innovation, however, the new process method often makes the older method obsolete, and so the profit that the innovator gains is only from the use of the new or the old process method, and not both. Therefore for product innovation, regardless of whether the market is competitive or not, firms tend to have the incentive to innovate. This result, in turn, makes it relatively difficult for competition authorities to assess if there could be competition issues at play in cases where they are assessing markets in terms of differentiated product innovation. Subsection 3.3 delves into this issue further.

HOW INNOVATION AFFECTS COMPETITION

Innovation, in particular product innovation, can affect market competition.⁹ There are two general types of product innovation, and these have differing effects on competition. The two types are: horizontal product differentiation and vertical product differentiation (see Box 3.1).¹⁰

- 8 This assuming that the firm innovating can appropriate all returns to its innovation. See Gilbert (2006) for a good review of Arrow's (1962) economic model which explains why it is not clear whether a competitive environment provides a good incentive for product innovation, even though this is generally the case for process innovation. See also Greenstein and Ramey (1998) for the case of vertical product differentiation and Chen and Schwarz (2013) for the case of horizontal product differentiation.
- 9 See Goettler and Gordon (2013). Similar to the findings of Aghion et al (2005), Goettler and Gordon found an inverted U-shaped relationship between innovation and product market competition, as measured by product substitutability.
- 10 Product innovation refers to a new or improved good or service.

Box 3.1: Distinguishing between *horizontal* and *vertical* product differentiation

Firms can improve products by differentiating them either horizontally or vertically. When firms cater to consumers' differing tastes and aesthetic preferences, it is regarded as horizontal product differentiation. This particular type of product differentiation is called horizontal because the product has not changed drastically; rather, it has been only slightly modified so as to meet the preferences/tastes of particular consumer segments. For example, a potato chip manufacturer may produce different product flavors such as barbeque, paprika or sour cream. Vertical product differentiation, on the other hand, improves the product's quality. One example of vertical product differentiation is Microsoft's quality upgrade from Windows Vista to Windows 7. The following examples also illustrate the difference between these two types of product differentiation.

Consider a market with two market segments, A and B. The consumers in these segments have different tastes, so the firm has to decide which of these segments it should design a product for. Suppose it decides to design for A – perhaps because A is the larger market segment, and let's assume that consumers in A are willing to pay USD 25 for this product whereas consumers in segment B are willing to pay only USD 15. Now the firm has to make a pricing choice: price at USD 25 and cater to A only, or price at USD 15 and cater to both A and B. The choice depends on the trade-off between higher margins or more sales. Choosing margins over sales means that the firm will cater for A's market segment whereas consumers in segment B will be shut out of the market. On the other hand, favoring sales over margins means that while all consumers would be catered for, the firm would have to forego its potential revenue from segment A: consumers in segment A would have paid USD 15 for a product that is worth USD 25 to them.

Now, suppose the firm innovates with a new product that explicitly caters to segment B's tastes — an example of horizontal product differentiation. Segment B would be willing to pay more for this product than for the previous one, say USD 20. By contrast, segment A's willingness to pay for this product would be lower than that for the previous product priced at USD 15. Here, the logical approach is for the firm to set the price for the old product at USD 25 and the new product at USD 20.

Suppose in a different scenario, the firm innovates to change the quality of the product – an example of a vertical product differentiation. Specifically, the firm invests in order to provide a lower quality of the same product, so as to cater for segment B's preference (because B does not care much for the high quality of the original product.) Suppose B is willing to pay USD 10 for the new product (as opposed to USD 15 for the high-quality product), and suppose A is willing to pay USD 25 for the high-quality product, and USD 18 for the low-quality product. Note that A's willingness to pay for the new product still exceeds B's willingness to pay for it – even if the new product is meant for the latter.

In both cases of product differentiation, investing to introduce products that cater to the demands of consumer B is good for the firm and can also benefit consumers. The firm now caters for both consumers A and B, earning more sales revenue; simultaneously, both A's and B's demands are met.

Source: Moorthy (2013)

Horizontal product differentiation, generally referred to as the Hotelling (1929) model, is one where products are spread along a straight line and consumers generally align themselves with their closest preference. A new firm could enter the product market and place itself along the line, either close to or far from the existing products, and then capture both new and existing consumers from rival producers.11 In such a scenario, the product innovation would result in more competition in the market in terms of the variety of products available and the number of producers in the market. Existing producers could also introduce new, differentiated products in order to increase their customer base.¹² While this would result in the availability of more products, the number of competitors would remain the same as before. However, such a situation might discourage new producers from entering the market (see subsection 3.2.3).

The other type of product innovation is vertical product differentiation. This type of innovation can either increase or maintain the number of products and competitors in the market. Modeled by Sutton (1991), and later Shaked and Sutton (1982, 1983), vertical product differentiation introduces into the marketplace a new product with superior quality to the existing one. When similar products of different qualities are sold at the same price, the newer and better quality one is always preferred to the older and lower quality one, and then displaces it in the marketplace. This cannibalization of the older product by the newer one enables the innovative firm to capture all consumers in the market, and both the number of products and competitors in the market remains the same as prior to the product's introduction.¹³

However, in certain circumstances, both the new and the existing firms can co-exist in the market. When there is a difference in consumers' willingness to pay for quality – such that some consumers would pay a premium price for the superior quality product while others would prefer the lower priced product regardless of quality – the existing firm with the lower quality product could set a lower price for its product in response to the introduction of the new, higher quality one. This would therefore lead to an increase in the number of products and competitors in the market.¹⁴

¹¹ How similar or different these products are from one another can vary from almost exact likeness to very different. See Hotelling (1929), D'Asprement et al (1979), and Böckem (1994).

¹² See Chen and Schwarz (2013).

¹³ Scherer (1979).

¹⁴ Innovation dynamics alone will not define the market, since, ultimately, the prevailing number of products and competitors in the market would depend on market forces and industry-specific factors such as barriers to entry.

How market competition and innovation affect one another has been the reason why some prominent economists, such as Kenneth Arrow, have argued for government intervention to encourage innovation.¹⁵ This intervention could be in the form of an exclusive right, such as patent protection, which would provide some reward to firms so as to encourage them to innovate. It is also why competition authorities around the world have been concerned about certain innovative activities that may give rise to anticompetitive behavior.¹⁶

3.1.2

WHY DOES BRANDING MATTER?

Branding can be broadly defined as all activities that raise awareness of a firm's offerings and shape how consumers perceive those offerings. This includes, first and foremost, advertising and other activities that directly promote the firm and its goods or services. More generally, it includes all observable activities for which consumers may have a preference – for example, what kind of innovation the firm pursues, how it treats its customers, and to which environmental or labor standards it adheres.

Firms invest in branding so as to increase demand for their products and enhance the willingness of consumers to pay for these products. In general terms, branding investments are worthwhile as long as an additional dollar spent on branding generates a net profit of at least one dollar.¹⁷ However, branding can affect consumer behavior, and consequently the performance of firms through different channels, and so therefore it is useful to briefly review these channels.

How does branding do this? First, as outlined in Chapter 2, branding reduces consumers' search costs. It also informs potential consumers about firms' goods and services, highlighting the unique traits they may have and thus making it easier for consumers to choose between competing items. This informational role of branding not only raises awareness of firms' offerings, but also reduces the uncertainty that consumers face when making new purchases.

¹⁵ See Arrow (1962).

¹⁶ See Chapter 3 of WIPO (2011) for thorough discussion on how collaborative research and development (R&D) activities facilitate innovation, but can also give rise to concerns about anticompetitive behavior.

¹⁷ In economic theory, branding investments represent a form of endogenous sunk costs (Sutton, 1991).

A related point is that branding links products to the firms producing them. This association helps to promote the firms' newer products – even new products in markets that are new to these firms.¹⁸ The good experience that consumers may have had with previous purchases is likely to motivate them to continue purchasing products from these same firms.

As firms capitalize on their past successes, they develop a reputation that continues to reduce consumers' search costs. This reputation benefits the firms in several ways. For one, consumers would be more willing to pay more for these firms' products, as switching to competing products would entail extra search costs.¹⁹ One study, which examined how much it would cost for consumers to switch from one branded breakfast cereal product to another, estimated that the cost of switching to a different breakfast cereal brand is high; in fact it is higher than the cost of purchasing any branded cereal.²⁰ In addition, consumers can develop goodwill towards a brand over time, which in its strongest form be expressed as fierce brand loyalty.²¹ Even with purchases on online price comparison sites - where consumers can easily choose between similar products at different prices - brands continue to play an important role in consumers' final purchase choice.22

- 18 Cabral (2000).
- 19 In addition, Klemper (1987) argues that changing brand imposes a switching cost to the consumer and results in a loss in the consumer's utility.
- 20 Shum (2004) investigates how advertising may influence consumers to switch brand loyalty by looking at the purchases of breakfast cereal purchases in several districts in Chicago, Illinois in the United States of America (US). In this case, brand loyalty is defined by consumers' past purchases of particular cereal brands.
- 21 Homburg et al (2010).
- 22 See Smith and Brynjolfsson (2001), and Baye and Morgan (2009).

A second important way in which branding affects consumer behavior and firms' performance is that it enables firms to associate an image with a particular product. As discussed in Chapter 2, for many products – especially luxury products – image is an important product feature in and of itself. Through image-focused branding, firms can carve out a niche and can generate a higher willingness to pay among consumers whose preferences align with the product's image.

In many situations, firms differentiate their products based on a large number of characteristics along both horizontal and vertical dimensions. In fact, the most successful branding strategies are often those that manage to combine reputation and image in such a way that they reinforce each other and appeal to a variety of consumer tastes.

HOW DO BRANDING INVESTMENTS AFFECT FIRMS' PERFORMANCE?

To begin with, strong brand value – whether induced by reputation or by image – can have an important impact on firms' growth potential. In the first place, it can increase firms' financial value above the traditional accounting book value, which in turn can help them raise money in the financial market.²³ The money raised can then be used to generate more innovation. In addition, firms with strong brand value are more likely than their rivals – and tend to be faster than them – at introducing new products.²⁴ This is useful because studies have shown that a firm that breaks into a new market segment first is more likely to retain a significant share of the market.²⁵ Therefore, strong brand value not only helps raise money in the capital markets, but it can also help secure a firm's future revenue stream.

- 23 Subsection 1.3 contains a discussion on how brand plays a role in firms' stock value. See also Krasnikov et al (2009).
- 24 Thomas (1995).
- 25 Schmalensee (1982) shows that the order in which consumers are introduced to branded products influences their loyalty to the product, thus making the case for firms to be the first ones to enter the market. See also Guadagni and Little (1983).

It is unclear, however, whether branding channels such as advertising increases firms' profit margins.26 When empirical studies examine the impact of advertising on firm-level profits, the results are mixed.²⁷ The reason for this can be attributed to industry-specific factors.²⁸ However, when industry-specific factors are taken into consideration, this branding channel is found to increase the profit levels of firms in certain industries.²⁹ For example, Porter (1976) shows that the advertising-to-sales ratio increased profits for firms operating in convenience goods industries (i.e. non-durable goods that are easily purchased by consumers, and which tend to be low priced and widely available), but not in shopping goods industries, which consists of durable goods that tend to involve consumers in more selection and comparison effort than is required for purchasing non-durable goods.30

As outlined earlier, brand investments generate market power for firms. This market power is at the heart of brand equity and can be defined as the result of a firm's branding activities to promote itself – in comparison with other firms that do not engage in such activities.³¹ One of the outcomes of this equity is the ability of branded products to command higher prices than their generic counterparts, thus increasing their mark-up over production costs.³² This ability to command higher prices can be due to the firms' product differentiation efforts, such as investments to produce higher product quality, or to use more efficient production methods.³³ It also allows firms to distance themselves from their rivals and to compete on factors other than on just price.³⁴

- 26 See Shah and Akbar (2008).
- 27 Bloch (1974); Ayanian (1975).
- 28 Aggregating these different firms may neutralize any effect that advertising may have on firms in specific industries with firms where advertising has no impact. A related factor which contributes to the mixed result finding from studies on advertising profit is the method some studies use to account for firms' advertising expenditure in particular the rate at which advertising spending should depreciate over time. The depreciation rate determines how long the effect of spending on advertising would last, which also varies according to industry sectors. Therefore, studies that do not take into account the differences across industries, and their corresponding depreciation rates, are likely to be missing the nuanced picture of the advertising-profit relationship. See Shah and Akbar (2008).
- 29 Weiss (1969) and Comanor and Wilson (1974).
- 30 Porter (1974) attributes the distinction between convenience goods and shopping goods to consumers' buying habits. Convenience goods are, "[g]oods with relatively small unit price, purchased repeatedly and for which the consumer desires an easily accessible outlet. Probable gains from making price and quality comparisons small relative to consumer's appraisal of search costs." Shopping goods, on the other hand, are, "[g]oods where the consumer compares prices, quality and style; compares several stores; the purchase can be delayed; the purchase is relatively infrequent. Probable gains from making price and quality comparisons are large relative to the consumer's appraisal of search costs."
- 31 Aaker (1991); Dubin (1998); and Keller (2003).
 Researchers have proposed many ways to measure brand equity, which includes the customers' perspective, product and financial market outcomes (Ailawadi, Lehmann and Neslin, 2003). Chapter 1 of this report also suggests another way to measure brand equity.
- 32 Using scanner data from a large Midwestern chain in the United States, Barsky et al (2003) studied 19 different categories of products to compute how much higher branded goods are priced above their production costs. Many of the categories studied have estimated that mark-ups in general range from 1.40 to 2.10 times their marginal costs of production and delivery. These findings are consistent with previous studies that looked at mark-ups in the breakfast cereal industry and the saltine cracker food category (Nevo, 2001; Slade, 1998).
- 33 Wiggins and Raboy (1996) examine the factors that affect banana prices in North America and show that the quality of the banana, rather than the brand name, tends to explain a significant portion of the price difference between branded bananas and their generic counterparts.
- 34 See Joachimsthaler and Aaker (1997), Baye and Morgan (2009) and Desai and Waller (2010) on how consumers' choice of products or services is no longer primarily determined by price.

Strong brand names can also help firms venture into new markets, where they may have had no previous commercial experience; alternatively, it may enable firms to license out their name in return for royalty payments (see Section 1.4).35 In essence, these firms use their brands to draw consumers' attention to the quality of the firms' new products in the new markets. In many cases, this strategy has been proven to be guite successful, especially when firms have a strong brand reputation.³⁶ Ralph Lauren, an American fashion company, has successfully pursued the strategy of licensing out its name in order to diversify its business from clothing to perfumes and home furnishings. By licensing out its brand name, the Ralph Lauren company was able to expand its revenues from the design and manufacture of clothing lines to include royalty payments from the licensing activity. For the company that licensed in the Ralph Lauren brand name, the licensing provides a way to mitigate some of the costs and risks in building a brand by using an established name to enter new markets.37

However, there is the risk that the new products may undermine the original brand. When firms fail to deliver on their promises, consumers are likely to punish the brand by withholding future purchases or by bad-mouthing the brand.³⁸ This helps to explain why some firms prefer to create separate brands when commercializing new products in different market segments, or when introducing products in markets that are very different from their original product-based brand identity.³⁹ Consider, for example, Toyota's investments in building hybrid car technology.⁴⁰ The company has chosen to commercialize this innovation by creating a new sub-brand, Prius. Toyota's successful marketing and advertising efforts, coupled with its innovative technology, have led to the creation of a Prius brand that is based entirely on hybrid cars and, by extension, on environmental responsibility. In the meantime, Toyota's efforts to ensure that consumers continue to link the Prius brand with the Toyota brand have enhanced the company's image as an innovator.

This is not to say that branding is always a more profitable business strategy than selling generic products. Even if branded products generate a higher net profit on each sale, firms still need to recover their fixed investments in branding. Indeed, because consumers differ in their willingness to pay for reputation and image, there may well be room in the market for both generic and branded products, with both underlying business models being profitable.

Due to the often high upfront costs of establishing a brand, the presence of strong brands in a particular market may pose a barrier to entry into that market by new firms. Competition among existing brands may still be fierce and, as explained earlier, may be sufficiently strong to promote innovation. However, in selected cases, brands may become so powerful that they may result in the firms having dominant market positions – a topic to which Section 3.3 will return.

- 38 Klein and Leffer (1981); and Choi (1998). In 1986, Audi had an incident with the sudden acceleration problem in its Audi 5000 car, which reduced demand both for this model and for the Audi Quattro.
- 39 Pepall and Richards (2002).
- 40 Moorthy (2013).
- 35 See Randall et al (1998); Lei et al (2008) and Heath et al (2011) for empirical evidence on the use of brand reputation on brand stretching. A good example of brand stretching is the Virgin brand. This brand has been used on airlines, music stores, a banking brand, a train operating company and many other applications.
- 36 Cabral (2000).
- 37 See Aaker (2011) and Kapferer (2008).

3.2

BRANDING AND PROMOTING INNOVATION

How does branding promote innovation, in particular product innovation?

First, branding channels, such as sales and promotion activities, help firms to recoup their returns on investment in innovative activities. This ability to recover investments made, in order to produce innovation, provides a further incentive for firms to continue investing in innovative activities.

Second, effective branding channels not only promote firms' market offerings by increasing consumers' demand for their products, as well as increasing their willingness to pay for them, but they also help to build consumer trust in the firms' products, and by extension trust in the firms themselves. ⁴¹ This trust built over time, also known as consumer goodwill, provides another incentive for firms to continue producing innovative products.

3.2.1

HELPING FIRMS APPROPRIATE THEIR RETURNS TO INNOVATION

Branding is one of the ways that helps firms recover the investments they have made in innovating. Surveys conducted in the United States, Switzerland, the Netherlands, and Japan on how firms appropriate their returns on investment in innovation show how important branding activities are. The factor known as "sales or services efforts" appears as one of the top five important ways that firms use in order to appropriate their returns on investment in innovation; however, it is not the only method that firms use to achieve this objective (see Table 3.1).

Firms use branding activities as a way of promoting their product innovation (see Figure 3.1). In fact, firms that invest more in research and development (R&D) activities are also more likely to invest in branding activities. ⁴² This finding is not surprising given that branding channels, such as advertising, have been shown to be useful in promoting the sale of firms' goods or services. ⁴³ However, the duration of this effect and its significance varies across the types of goods and industrial sectors. ⁴⁴ For example, Zhao *et al* (2003) studied the effect of advertising on sales of durable and non-durable goods in China, and they found that advertising is more useful for the former than for the latter. ⁴⁵

- 42 Von Graevenitz (2009) shows that there is complementarity between firms that invest in R&D activities and the advertising expenditure of those firms.
- 43 Shah and Akbar (2008) provide a good review of the link between advertising and its impact on sales. Furthermore, it is worth emphasizing that while advertising does have an impact on sales, firms' sales also have an effect on this branding channel. For many firms, the size of their advertising budget is dependent on the firms' sales performances, whether past or projected. See Lee et al (1996) on this simultaneous causal relationship.
- 44 See Yip (1982); and Acs and Audretsch (1990).
- 45 Durable goods studied included air conditioners, color television sets, refrigerators and washing machines, while non-durable products included shampoos and skincare creams.

Table 3.1: Top five methods that firms use to protect their innovations

	Year Country		Survey sample	Product innovation					Process innovation				
				1	2	3	4	5	1	2	3	4	5
Yale	1982	US	Firms in the manufacturing sector (publicly traded), performing R&D	Sales or service efforts	Lead time	Fast learning curve	Patents	Secrecy	Lead time	Fast learning curve	Sales or service efforts	Secrecy	Patents
Harabi	1988	Switzerland	Firms, mainly in the manufacturing sector, engaging in R&D	Sales or service efforts	Lead time	Fast learning curve	Secrecy	Patents	Lead time	Sales or service efforts	Fast learning curve	Secrecy	Patents
Dutch CIS	1992	Netherlands	Firms in the manufacturing sector with (≥10 employees) that developed or introduced new or improved products, services or processes during the previous three years	Lead time	Retain skilled labor	Secrecy	Patents	Complexity of design	Lead time	Retain skilled labor	Secrecy	Com-plexity of design	Certifi- cation
Carnegie Mellon	1994	US	Firms in the manufacturing sector with (≥ 20 employees and ≥ USD 5 million in sales) carrying out R&D	Lead time	Secrecy	Comple- mentary assets	Sales or service efforts	Patents	Secrecy	Comple- mentary assets	Lead time	Sales or service efforts	Patents
Japan Carnegie Mellon	1994	Japan	Firms in the manufacturing sector carrying out R&D (≥ 1 billion Yen capitalization)	Lead time	Patents	Comple- mentary assets	Sales or service efforts	Secrecy	Comple- mentary assets	Secrecy	Lead time	Patents	Sales or services assets
RIETI- Georgia Tech	2007 n	Japan	Inventors who applied for triadic patents with patents with priority during the time period 2000 to 2003	Lead time	Comple- mentary assets	Secrecy	Comple- mentary assets	Patents		es not distingo nd process inn			
Berkeley	2008	US	Small manufacturing firms focusing on biotechnology, medical devices and software	Lead time	Secrecy	Comple- mentary assets	Patents	Reverse engineering difficulty		es not distingo nd process inn			

Source: WIPO, 2011

Firms that engage in marketing their product innovation as a percentage of all innovative firms 90 80 70 60 50 40 30 20 10 0 Austria Cyprus Lithuania Poland Sweden Romania Luxembourg Slovakia Szech Republic Croatia Netherlands Colombia ndonesia

Figure 3.1: Firms spend money on marketing their product innovation

Source: WIPO, based on country innovation surveys. Data for OECD countries were obtained from Eurostat, 2010. Other countries from the UNESCO Institute for Statistics, 2012.

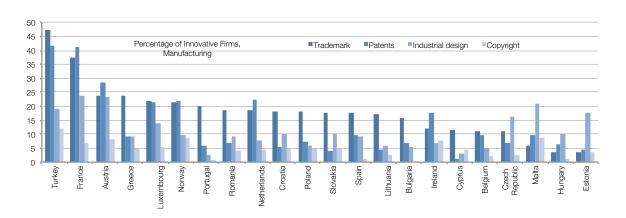
Note: The Oslo Manual (1992, 1995, 2005) defines market preparations for product introduction as activities that are aimed at introducing new or significantly improved goods or services to the market – across countries. Only responses from the manufacturing sector are considered here, in order to allow for cross-country comparison. However, there are other factors, which are specific to each country innovation survey, that prevent further comparison between countries.

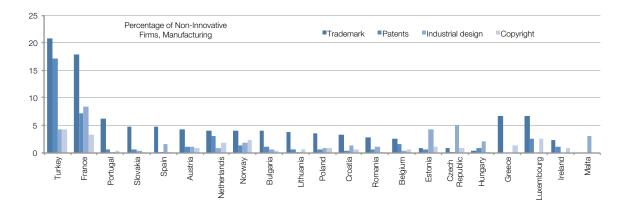
The results of Berkeley study (2008), which surveyed innovative firms in the highly innovative sectors, show that on average trademark protection is considered a "slightly" to "moderately" important means to help recoup the innovative firms' investments in innovative activities. While this IP instrument is often used in conjunction with other IP instruments such as patents and industrial designs, firms tend to use trademark protection more frequently than they do with other IP instruments. Figure 3.2 shows how important trademarke are in comparison to patents, industrial designs and copyright – for both innovative and non-innovative firms in both manufacturing and services sectors in several Organisation for Economic Co-operation and Development (OECD) countries.⁴⁶

The fact that trademark protection does not have a term limitation allows firms to prevent others from free-riding on investments made in order to build consumer goodwill, which then extends the firms' exclusivity over their brand names.

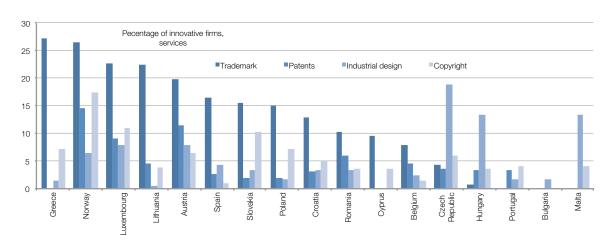
Figure 3.2: Firms are more likely to use trademarks than any other IP instrument

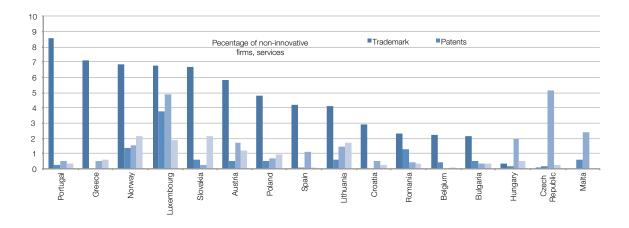
Firms using IP instruments as a percentage of all firms in OECD countries





Firms using IP instruments as a percentage of all non-innovative firms in OECD countries





Source: Eurostat, 2005.

Note: Interpret these cross-country results with caution. Idiosyncratic differences between countries' innovation surveys affect survey results, and thus impose limitations on cross-country comparability.

One such example can be seen in the pharmaceutical sector. Original drug manufacturers usually use the full term of patent protection, in order to protect their product from competition. Upon patent expiry, the original manufacturer would have to contend with generic drug entry into the market, which would eventually erode the original manufacturer's market share.

But pharmaceutical firms have been able to temporarily avoid this erosion of market share through investing in consumer goodwill.⁴⁷ Jennewein provides the anecdotal example of Bayer and its success with *Aspirin*. In 1897, one of Bayer's researchers discovered a method that produced a pure and durable form of acetylsalicylic acid more efficiently than was available at that time.⁴⁸ To protect its discovery, Bayer applied for a patent on the

- 47 Other methods used include the introduction of slight product differentiations, such as changes in the delivery method of the drug.
- 48 See Jennewein (2005).

process innovation and it also registered a trademark on the name Aspirin. In addition, the company invested in building its brand name by imprinting the Aspirin tablet with Bayer's name and logo. The rationale for adopting this approach was that whenever people consumed Aspirin, they would associate it with its original manufacturer, Bayer. Jennewein credits this branding strategy along with Bayer's efforts to build consumer goodwill, with the company's ability to maintain its market share even when the patent for Aspirin expired and was followed by competition from generic manufacturers. More empirically, Hurwitz and Caves (1988) considered how sales promotion activities, before and after patent expiry, helped protect the original drug manufacturer's market share from the manufacturers of generic competitors. They found that branding, through the use of trademark protection and advertising activities undertaken after patent term expiration, helps firms to extend some of this market power.⁴⁹ They attributed this success to consumer goodwill generated during and after patent protection. However, Hurwitz and Caves noted that over time this market power is likely to diminish, as more generic drug producers enter the market and competition forces the price of the drug to fall.

3.2.2

BRANDING BASED ON PRODUCT VERSUS IMAGE

In general, branding activities promote innovation and innovation-related activities. However, there are instances where firms may use branding strategies to repackage an existing product instead of investing in innovation – for example, when a firm creates a different image for an existing product and markets it as a new product. Accordingly, branding can have two effects on product innovation: when firms invest in branding activities to sell an innovation-based product, branding complements innovation. ⁵⁰ But when firms rely on these activities to sell an image-based product, branding may substitute for innovation.

Two factors help determine whether firms invest in introducing innovation-based products as opposed to image-based products. The first factor relates to the cost-effectiveness of investing in either type of product. The second relates to broader considerations, such as whether the investment can be used across multiple products or technologies to maximize the firms' brand name.⁵¹

- 50 Branding may also play a role in process innovation. For example, the American retail chain Wal-Mart has successfully branded itself as a low-price retailer by investing in supply chain innovation, a type of process innovation, which gives it cost advantage over its competitors.
- 51 Sutton (1991) provides the theoretical model for this analysis. The model allows for two substitutable ways of increasing the quality of a product: either product innovation-based (objective) or advertising-based (perception). While consumers do not have a preference, firms do, and the decision is based on which means is more cost-effective. In any application, the investment that is more productive may be chosen. When weighing the productivity of R&D versus advertising, Sutton's analysis suggests that the possibility of leveraging the two investments across multiple products/technologies ought to be considered.

⁴⁹ See Conley and Sczoboscan (2001) and Conley *et al* (2008) for other examples.

The cost of investing in innovation-based products, as opposed to image-based products, is related to industryspecific factors as well as factors that are specific to the firm in question. Firms that operate in industries where the market is new, and there are avenues for product-based differentiation, may find it cost-effective to introduce product-based innovation. Conversely, firms that operate in markets where product differences are few and far between, and where further investments in product innovation may be counter-productive, may find that image-based products have a clear advantage. 52 Many convenience goods categories - low-priced consumer packaged goods, such as ready-to-eat cereals, canned soup, and chocolate bars - may fall into this category. Firm-specific factors that determine whether firms introduce innovation-based products or image-based products include the firms' market performance, technological prowess and reputation considerations. Firms that have strong R&D capabilities are likely to introduce product innovation. But if these firms find themselves so technologically advanced that their rivals are unable to keep up with them, they may exploit their strategic and reputational advantage - independent of activities that would lead to the creation of new products - and instead introduce image-based products to maintain their market lead.53

- 52 Moorthy (2012) discusses this subject in further detail.
- 53 Ofek and Sarvary (2003) examined in a dynamic competitive setting how firms decide whether or not to introduce new products based on their innovative or reputational advantage. The researchers make two reasonable assumptions: (i) a firm's position as the market leader can easily be toppled; and (ii) past successes have an impact on firms' investment decisions. They show that firms with strong research and development competence would invest more in R&D in order to retain their market leadership position. The more these firms invest in R&D, the less likely their followers would be able to compete with them. The smaller number of effective competitors in the market would motivate these firms to exploit their strategic advantages rather than continue to produce more innovative products.

WHEN BRANDING ACTIVITIES COMPLEMENT PRODUCT INNOVATION

How effective branding channels will be in terms of promoting innovation depends on the quality of information communicated to consumers.

Product innovations that have search attributes are relatively easier to promote than those with experience attributes. (See Box 3.2 on the distinction between the two traits). In particular, branding channels such as advertising are particularly effective in making claims for goods with search attributes. This is because goods with search attributes can be verified by consumers before they purchase them.⁵⁴ Here, advertising plays a clear, informative role by pointing out relevant product differences to consumers.

In the case of goods with experience attributes, however, advertising has to be both informative and persuasive. By definition, claims in advertising for experience goods cannot be verified before product purchase, and so consumers tend to discount these claims. Consequently, firms that produce experience goods may be more inclined to spend more on advertising than firms that produce search goods, since the quality of information conveyed may not be as relied upon as that used for promoting search goods. ⁵⁵ In general, investments in advertising increase according to the difficulty of demonstrating innovation superiority: in other words, investment is low for differentiated search goods; it is higher for differentiated experience goods, and it is highest for non-differentiated convenience goods.

- 54 Nelson (1974); Ford *et al* (1990); Anand and Shachar (2011).
- 55 Klein and Leffler (1981). Nelson (1974) argued that search goods do not require as much branding activity as experience goods, mainly because consumers can easily verify the differences in search goods prior to the purchase, unlike experience goods.

Box 3.2: Search versus experience attributes

The distinction between *search attributes* and *experience attributes* corresponds to the difference between *search goods* and *experience goods*, respectively.

Strictly speaking, search goods can be identified through their physical traits. They can therefore be examined and assessed by the consumer prior to purchase. Examples of physical traits include the design, size and color of a product. More generally, any product information that can be trusted — even if the information is not personally verifiable — falls under the search goods category. One such example is the nutrition information printed on a breakfast cereal box.

Experience goods, however, can only be assessed after the purchase has been made; in other words, the consumer needs to experience the good in order to differentiate it from others. Examples of experience-related product traits include those that refer to its quality, durability and reliability, or taste — such as in food or beverages.

Source: (Nelson, 1970, 1974).

However, this does not mean that firms that spend more on advertising necessarily produce better quality products, especially in the case of experience goods. So, how can consumers determine if the products advertised are good? In other words, can consumers rely on advertising expenditure as an indicator of product superiority?⁵⁶ It is difficult to definitively answer this question. Many factors can have an impact on the effectiveness of advertising as an indicator.

First, it depends on a firm's incentive to differentiate itself from others. Firms that are more likely to profit from advertising tend to spend more on advertising than firms that do not fall into that category. For example, a firm that wishes to distance itself from its rivals – because it has a higher quality product than its rivals – tends to invest more in advertising. In addition, because its consumers are likely to make repeat purchases, this firm should be able to recover some of the extra spending required in order to promote its products.

But this incentive may not be sufficient to determine the effectiveness of advertising as an indicator of product quality. ⁵⁷ If consumers in general consider that advertising does indeed provide a good indicator of product quality, then firms producing lower quality product would have the perverse motivation to advertise as much as their high-quality product rivals. ⁵⁸ In such a situation, advertising becomes a noisy indicator of product quality. However, if the cost of advertising is high – and consumers do not completely rely on advertising as an indicator of quality – then firms which need to advertise would do so. As a result, once again this branding channel becomes a good indicator of product quality. ⁵⁹

- 56 Firms often use a combination of both advertising and pricing to provide indicators to their consumers regarding the quality of their product (Fluet and Garella, 2002). However, pricing and its relationship to the product's quality is not discussed here. For further discussion on price, advertising and quality, see Archibald, Haulman and Moody (1983) and Klein and Leffler (1981), to name but a few.
- 57 Comanor and Wilson (1979).
- 58 Schmalensee (1978).
- 59 Levin et al (2009). Although Askenazy et al (2010) argued that the cost of advertising should be low, to allow for more R&D-based product innovation.

A second factor that determines how good the product quality is depends on how easily consumers can verify a firm's advertising claims before they make a purchase; this is especially true in the case of products with experience attributes. ⁶⁰ Here, the ability of consumers to verify advertising claims plays an important role in promoting sales of the product. ⁶¹ This verification may manifest itself in the form of repeat purchase, or third party review or certification. ⁶² Archibald *et al* (1983), for example, studied the relationship between quality, price and advertising in the case of running shoes. They found that evaluations published by the *Runner's World* magazine had a positive impact on the effectiveness of advertising as an indicator of product quality, when factors such as price differences were taken into account.

WHEN BRANDING ACTIVITIES MAY SUBSTITUTE FOR PRODUCT INNOVATION

Firms sometimes use image as a way to distinguish themselves from their rivals; in some cases this is a complement to their product innovation. But, strictly speaking, image-based identity is one that is created solely through advertising, and is independent of the final product. In general, advertising creates brand identity by associating the brand with a particular imagery. However, it can also do this by simply increasing awareness of the brand: more familiar brands are perceived by consumers to be higher in quality. ⁶³

- 60 Klein and Leffler (1981).
- 61 See Caves and Greene (1996); and Hakenes and Peitz (2009). Caves and Green (1996) calculated the correlation between brands' quality ratings and prices, and advertising expenditures, for about 200 products evaluated by the American Consumer Reports. They found that, in general, advertising serves as a good quality indicator only in cases where the quality of the product can be verified.
- 62 Firms that have built trustworthy brand names based on their product quality are more likely to be able to promote their product innovation with experience attributes. But this trust in brand name gives rise to a moral hazard problem whereby firms may deviate from providing high-quality products. However, it has been shown that consumers can punish the firms for such deviation by, for example, withholding future purchases from the firm. See Klein and Leffer (1981); and Choi (1998).
- 63 Stokes (1985); Hoyer and Brown (1990).

Brands that build their name based on image tend to fall into the realm of persuasive advertising. This type of advertising can appeal to consumers in a specific age group; one such example is Pepsi advertising, which appeals to young people – the "Pepsi generation". Persuasive advertising may also associate itself with a cause that has a broader appeal, e.g., "Dove is for girls' self-esteem." ⁶⁴ The strategy of firms that use persuasive advertising involves targeting specific consumer groups by appealing to their personal, subjective and, often, emotional preferences.

The power of image-based brand identities is illustrated in Allison and Uhl's (1964) beer experiments. In these experiments, consumers rated several brands of beer after tasting them – once in a blind taste test with the brand names hidden, and a second time with the brand names visible. The authors found that consumers' ratings changed from the first to the second evaluation, even though the order in which the beers were tasted was exactly the same. This shows that image-created branding plays a big role in influencing consumers' views of products. Marketing folklore is replete with stories of brands being positioned differently at different times, even though the product itself never changed.⁸⁵

- 64 Moorthy (2013).
- 65 The Marlboro brand was introduced as a women's cigarette in 1924, with the slogan "Mild as May". In 1954, it was repositioned as men's cigarette, with advertisements featuring a tattooed man. See: www.rochester.edu/College/ANT/faculty/foster/ANT226/Spring01/history.html

3.2.3

BRANDING ACTIVITIES THAT MAY RAISE COMPETITION CONCERNS

Investments in branding activities may raise competition concerns. This is because branding activities make it difficult for competitors to convince consumers to switch from branded goods, due to established goodwill. In addition, firms with strong brand reputation can deter the entry of competitors into new markets.⁶⁶

How do branding activities raise competitive concerns? First, effective branding channels can create market entry barriers; for example they may lead to higher advertising costs for all manufacturers in the market. ⁶⁷ If consumers were easily swayed by advertising, this would lead firms to spend more money on sales promotion activities. The increase in marketing and advertising expenditure could lower firms' profit margins, which in turn could force smaller firms to exit the market. New firms, on the other hand, could be deterred by high advertising costs and therefore would not enter the market at all. ⁶⁸

Second, effective branding activities may lead to market segmentation, which in turn affects the level of effective competition in the market. ⁶⁹ Branding activities do this by persuading consumers to consider similar products as completely different from one another to the extent that these products are considered imperfect substitutes for one another and compete in different market segments (see Subsection 3.3.1 for further discussion on product substitutability and how it relates to competition). Such market segmentation may then affect the level of competition that firms face, and can result in a scenario where a firm may find itself as the only producer in the market. This in turn creates potential for anticompetitive behavior.

And, finally, branding activities may lead to a concentration of market power in the hands of a few firms. Both the higher barrier to market entry and the lack of contestability between branded and non-branded products due to branding activities can lead to a decrease in the number of firms in the market. This market concentration creates the potential for collusive and anticompetitive behavior between the remaining firms in the market. More importantly, it can have an adverse effect on innovation, although this depends on industry-specific factors.⁷⁰

- 66 Choi and Scarpa (1986) considered how firms use a brand proliferation strategy to deter the entry of new competitors. Brand proliferation usually applies in the horizontal product differentiation market, and refers to situations where firms use their brand name and the reputation they have acquired in order to enter new markets. Schmalensee (1978) documented one such case in the breakfast cereal ready-to-eat market.
- 67 Comanor and Wilson (1967).
- 68 See Sutton (1991).

- 69 There is no legal definition of effective competition.

 However, competition authorities refer to this term in order to describe a competition framework that captures the essential concept of perfect competition, as described by economic theory. See OECD (2012).
- 70 Dixit and Stiglitz (1977).

3.3

SAFEGUARDING COMPETITION

The previous discussion has highlighted how branding activities may give rise to competition concerns. These concerns revolve around the influence of strong brand names and high market entry barriers – due to branding activities – on competition and price.

Competition authorities generally condone the existence of strong brand name and reputation. These are investments that firms have cultivated over time in order to build consumers' trust and goodwill as part of the normal functioning of competitive markets. There is a *priori* no reason why these firms cannot profit from consumers' goodwill, which may manifest itself in the form of strong consumer loyalty and less sensitivity to price changes.⁷¹

In addition, competition authorities see trademark protection as complementary to and supportive of innovation and competition, as it prevents rivals from confusing consumers or from free-riding on the goodwill developed by firms. Rivals are not permitted to use the same trademark as the rights holders, in order to promote their products, but they are free to sell the same products under different names and identities.⁷²

One area where competition authorities have expressed concern is in situations where firms consolidate their market power through financial transactions, such as mergers and acquisitions (M&As), and through vertical arrangements. In the case of M&As, competition authorities may worry that the combined branded assets of the merged entity will result in an increased likelihood of coordinated and collusive behavior between competing firms; alternatively, they may worry that the merged entity is likely to have obtained significant market power, such that it can behave independently of its competitors, like a monopolist.⁷³ In the case of vertical arrangements, the authorities may be concerned that certain distribution clauses - inserted at the request of the stronger negotiating party - are anticompetitive and may result in a reduction in overall consumer welfare. 74 Specifically in the case of branding, the authorities would take into consideration whether the stronger negotiating party attributes its market power to having strong brand assets.

- 71 See Desai and Waller (2010).
- 72 For instance, a trademark owner may have registered a trademark relating to running shoes, which entitles the trademark owner to prevent competitors from selling running shoes with a similar trademark that may confuse customers. Competitors may still sell running shoes, but those shoes must have a different name. Rivals can also choose to sell their products as non-branded running shoes.
- 73 In the European Union (EU) anticompetitive acts are referred to as abuse of dominance, while in the United States they are referred to as monopolization. A firm is considered to have dominance when it can behave in a manner that is independent of its consumers, customers and competitors, although this definition vary between different jurisdictions. In some cases, the exercise of this significant market power may be reflected in the firm's ability, and motivation, to raise or maintain prices above competitive levels. For more details, see the EC's Technology Transfer Guidelines (2004), the United States FTC and Department of Justice (2010) to name but a few. See also United Brands Company and United Brands Continental BV v Commission of the European Communities (1978).
- 74 The distribution clauses may include choices of distribution channels, selection of specific retailers, product/service sale conditions, etc.

3.3.1

ASSESSING FIRMS' MARKET POWER

Brands play an important role in the competition authorities' assessments of M&As. Brands are one of the factors that determine the extent of firms' market power. Firms with strong branded products tend to have the ability to raise the prices of their goods or services without seeing a reduction in the demand of their products by consumers.⁷⁵ This market power derives from the fact that the branded goods belong to a class of goods that are imperfect substitutes for one another. What this imperfect substitutability implies is that consumers would be less inclined to switch from the branded product to a competing one, even if there were an increase in the price of the branded product (see Box 3.3).

Competition authorities take into consideration firms' brand assets, in order to identify the relevant product market and assess the competitive effects of the proposed M&A.⁷⁶ A narrow definition of the relevant market implies that branded firms have strong market power; conversely, a broad definition implies the opposite.

One example of how competition authorities use firms' brands to identify the relevant product market for assessment is the 2010 European Commission (EC) analysis of the deodorant product category in the Unilever/Sara Lee merger case.⁷⁷ Of all the product categories where Unilever and Sara Lee had overlapping economic activities, the deodorant category had the highest degree of product differentiation, and market competition was mainly between brand name deodorants.78 Both Unilever and Sara Lee contended that there was only one deodorant market, while the EC argued for a narrower definition of male and non-male deodorant market segmentations. When the narrower definition of relevant product market was used, the EC found that the proposed merger would result in potential anticompetitive effects in the non-male deodorant markets in several European Union (EU) territories.79

- 75 Economists refer to this type of market power as the firm facing low price elasticity of demand.
- 76 Identification of the relevant market is the first step in assessing a firm's market power. The relevant market is one where the products or services of a specific group are considered substitutes by consumers. This assessment is often undertaken with respect to a specific set of products or services in which the firm has allegedly conducted an unlawful practice.
- 77 Unilever/Sara Lee Body Care (2010). Unilever exists as two separate entities, Unilever N.V. and Unilever Plc., but operates as a single economic unit.
- 78 According to the submission of Unilever and Sara Lee, there were seven product categories where they had other overlapping economic activities: deodorant, skin cleansing, skin care, fabric care, aftershave treatments, oral care, hair care, and household cleaning.
- 79 Unilever owns the trademark to the deodorant brand names Axe (Lynx in the United Kingdom), Rexona (Sure in United Kingdom), Dove, Vaseline and Impulse, while Sara Lee markets its products under the brand name Sanex.

The EC's reasoning for separating the deodorant product market into two segments highlights how this competition authority may consider brands when identifying and delineating the relevant market. First, the EC considered consumers' perception of the deodorant market. Based on a survey it conducted, consumers overwhelmingly perceived male deodorants as distinctly different from the non-male deodorants. Second, the EC considered firms' sales and promotion efforts as well as the supplyside constraints that would prevent them from switching between producing either male or non-male deodorants. The EC found that the substantial time and financial investments needed to produce and market the product for one gender segment restricted a firm's ability to either enter the market, or easily switch between catering for one market segment to catering for another. The EC also took into consideration how retailers marketed the products and noted the different placements assigned to deodorants, based on the gender of consumers. Finally, the EC undertook the hypothetical monopolist test where it assessed the substitutability between the two types of deodorants using the small but significant non-transitory increase in price (SSNIP) test (see Box 3.3). Using scanner data submitted by Unilever, the EC found that a hypothetical monopolist producing deodorants for the non-male market segment would not face competition from its competitors in the male market segment.80 All of the assessments made clearly pointed to the gender-based market distinction in the deodorant product category.

Box 3.3: How competition authorities determine relevant market for differentiated goods

Competition authorities are often engaged in complex product and geographic market definitions, in order to assess the actual or potential competitive harm caused by a specific firm's, or firms', behavior. They employ several empirical methods in order to define the relevant market for antitrust enforcement purposes.

Measures of whether products are direct substitutes of one another tend to be based on the metric of *cross-price elasticity of demand* between two products. This measure determines how responsive the demand of one product is to a change in the price of a second, similar product. If there is some effect, and the effect is such that an increase in the price of the first product results in an increase in the demand of the second product, then these two products are considered substitutable and can belong in the same relevant market. If there is no effect, then the products are not considered substitutes and do not belong to the same market.

Differentiated products tend to be imperfect substitutes for one another. This implies that the products, while not direct substitutes, are similar enough that they compete with each other in the same product category. Take the example of Coca-Cola and Pepsi. A consumer may still prefer to purchase a can of Coca-Cola, even if the price of the Coca-Cola product is higher than the price of the equivalent Pepsi product. However, if the Coca-Cola beverage is not available, the same consumer may be inclined to purchase a can of Pepsi.

In order to measure whether two products belong in the same relevant market, more sophisticated measures have been employed.

One of the most widely used tests is the so-called *small but significant non-transitory increase in price* (SSNIP) test. The SSNIP test assesses the relevant market from the perspective of a hypothetical monopolist. It considers a relevant market as one that includes the narrowest grouping of all relevant products and regions where the monopolist would be able to impose this small but significant increase in price. The SSNIP test is arguably an international standard for market definition, with countries such as the United States, Canada, New Zealand, Australia and EU member states applying it when assessing merger cases.

However, in markets with differentiated products where brands play an important role, market shares – based on relevant markets defined throug the SSNIP test – may not capture the actual market power of firms and may therefore lead to an incorrect assessment of the competitive dynamics within a specific market.

The drawback identified in using the SSNIP test has given more prominence to using a different test, referred to as the *upward pricing pressure* (UPP) index. This index, proposed by competition economists Joseph Farrell and Carl Shapiro (Farrell and Shapiro, 2008, 2010), who served in the Federal Trade Commission (FTC) and the Department of Justice (DOJ) in the United States, respectively, measures the incentives that merging firms may have to increase the post-merger prices on their products, although it is not able to predict the magnitude of such increase. The index considers how close the substitutable products of merging firms are in comparison to other products, a measurement that is known as the *diversion ratio*. Simply put, this diversion ratio measures the fraction of sales lost by a merging product (A) with the other merging product (B), as a result of an increase in the price of the former merging product (A).

Both the SSNIP and UPP tests attempt to answer the same question: does the proposed merger result in an increased incentive to raise prices on the combined products without suffering the consequences of a reduced demand for those products, as would normally be expected in a competitive environment?⁸¹

However, the way in which these tests answer the question is different. The SSNIP test considers the hypothetical case of a monopolist and a basket of products in comparison to an alternative basket of products, while the UPP index test carries out the exercise with respect to the proposed merging firms and their combined basket of products. In addition, the UPP index also takes into consideration the competition faced by the firms in the marketplace, something which the SSNIP test does not.

Note: For further discussion on this issue, see OECD (2012).

Competition authorities may also consider the firm's trademarks, or set of trademarks, when reviewing the effects of a proposed merger on a market. If the firm has a strong brand name or a set of brand names applicable to several products, all of which are protected by trademarks, the competition authorities may suggest that the firm divest itself of a few of these trademarks before approving the proposed merger. One such example is the merger between Dreyer and Nestlé in the premium brand ice cream market - specifically, the market for superpremium ice cream. In March 2003, the United States FTC sought a preliminary injunction to block the merger of Nestlé and Dreyer. The FTC was concerned that the merger would result in Nestlé controlling about 60 percent of the superpremium ice cream market. Since Nestlé markets its superpremium ice cream under the trademark Häagen-Dazs, while Dreyer's included Dreamery, Godiva and Starbucks, the FTC assessed that there would be strong evidence of a high level of concentration if the merger were to proceed as envisioned.82 As a remedy, Nestlé and Dreyer agreed to divest three of Dreyer's brands as well as Nestlé's distribution assets.83

- 81 In a competitive environment, an increase in the price of a product is likely to induce consumers to switch to a substitutable product.
- 82 Dreyer marketed its superpremium ice creams under the trademark Godiva, under license with Godiva Chocolatier, Inc., and Starbucks, under a joint venture with Starbucks Corporation respectively.
- 83 See Federal Trade Commission Press Release, June 25, 2003, "Nestlé-Dreyer Settle FTC Charges," available online at www.ftc.gov/opa/2003/06/nestle.shtm.

A related example of where the competition authority used trademark divestment as a remedy to counter potentially anticompetitive effects was in the acquisition of Moulinex by Société d'Emboutissage de Bourgogne's (SEB) two brands of kitchen appliances. ⁸⁴ SEB is the owner of two global brands, namely Tefal and Rowenta, while Moulinex has control over two equally well-known brands, namely Moulinex and Krups. In order to allow the merger to proceed, the EC temporarily suspended the SEB's use of its newly acquired trademark, Moulinex, for eight years; within this eight-year period, SEB would have to license the trademark out to a third party for five years, and refrain from using it for three years. ⁸⁵

Strong brand names built through branding activities can result in low contestability of the market for branded products, and can create strong market power for the holders of the branded goods or services; in turn, this can result in anticompetitive concerns. The case of the General Mills-Pillsbury (2001) merger in the pancake mix market raised such concerns. Both firms were successful in creating separate brands for functionally equivalent baking products. Due to their branding efforts, the FTC considered that the firms were able to behave relatively independently of their rivals: any increase in the price of these branded goods was unlikely to induce a switch by their consumers to other similar baking products, including unbranded flour. The General Mills-Pillsbury merger was allowed to proceed only after Pillsbury agreed to divest itself of its baking products line.86 In a similar line of reasoning, the 1995 merger between Kimberly-Clark Corp. and Scott Paper Co. was rejected because it was deemed likely to result in harm for consumers of tissue paper and baby wipes.

In both merger cases, each of the merging parties had strong brand names. By merging, the competition authorities determined that the consolidation of these brand names would make it difficult for newcomers to enter the market, and could potentially harm consumer welfare.

A related example of competitive concerns due to effective branding channels is the Babyliss SA v Commission case.87 Babyliss, as a new entrant to the kitchen appliances market, challenged the EC's decision to allow the acquisition of Moulinex by SEB, as described above, arguing that the EC did not consider all possible anticompetitive impacts of the merger on new market entrants. In its submission, Babyliss argued that the cost and time necessary to build its brand awareness - in order to be on par with the newly merged entity - would place it in a severely disadvantaged position. It also argued that the merger would concentrate a significant share of the most powerful small kitchen appliance brands into one already dominant company. While Babyliss was not successful in preventing the merger, it did trigger an assessment from the Court of First Instance on the potential anticompetitive effects of the merger.

For the moment, neither the courts nor competition authorities have conclusively clarified the role played by brands in determining a firm's market power. Nonetheless, there seems to be at least a growing awareness of the necessity to deepen the understanding of branding and competition, as more and more private investment is devoted to the strengthening of brand image and reputation in order to enhance competitiveness.

⁸⁴ See: http://europa.eu/rapid/pressrelease IP-03-1531 en.htm

⁸⁵ See Babyliss Sa v. Commission of the European Communities (2003).

⁸⁶ General Mills Inc./Diageo PLC/Pillsbury Co. (2001).

3.3.2

THE CASE OF VERTICAL ARRANGEMENTS

Related to the discussion of brand names and market power is the issue of vertical arrangements. Vertical arrangements are arrangements between market players that operate at different levels of the supply chain – for example an agreement between a manufacturer and a distributor. In vertical arrangements, competition authorities are generally concerned that a firm may use its strong brand name and reputation to limit competition with its rivals – for example by imposing certain restrictions on the distribution of its products. Vertical arrangements can relate to intra-brand or inter-brand competition (see Box 3.4); in either case, they restrict the competitive behavior of one of the parties to the agreement.

Box 3.4: Two types of competition associated with vertical arrangements

Vertical arrangements can relate to two types of competition. The first type is *intra-brand competition*, which takes place between retailers of the same branded goods or services in the same geographic market. This kind of competition is usually limited by specific clauses in distribution contracts; such clauses provide either for a certain territorial exclusivity or for recommended/imposed prices, as in the case of resale price maintenance. Here, competition authorities often try to determine whether any limitations on the economic freedom of retailers, placed by the vertical arrangement, are motivated by high-level consumer service imperatives.

The second type is *inter-brand competition*, where competition takes place between different branded products belonging to the same goods or services market. Here, the question at hand is the ability of firms with strong brands to prevent others from competing in the same market by imposing certain clauses that may foreclose their rivals. For example, a manufacturing firm may decide to enter into a vertical arrangement with a distribution firm in the interest of continually improving the quality of its goods or services, and also in order to gain competitive edge over the firm's rivals. In its arrangement, the manufacturing firm imposes a restrictive clause on the distribution firm, which stipulates that the distribution firm cannot service products that rival the manufacturing firm's products. And because this firm has strong market power, due to its ownership of branded products, the distribution firm may readily accept this restrictive clause and avoid servicing other rival products. This type of restrictive arrangement is one that competition authorities would most likely consider anticompetitive. Therefore, the objective of the competition authority in the inter-brand competition case is to ensure that any arrangement undertaken promotes market competition between brands rather than hinders it.

HOW DO BRANDING ACTIVITIES RELATE TO VERTICAL ARRANGEMENTS?

Vertical arrangements relate to branding activities through trademark licensing. Firms that own valuable trademarked names can license out those trademarks for specific commercial purposes. For example, the licensing could be related to an authorization on the use of the trademarked name to a distributor, or it could even be in the form of franchise agreements. In practice, franchise agreements are the most relevant agreements regarding the licensing of trademarks. ⁸⁸ Companies such as McDonald's, Subway and 7-Eleven have successfully franchised their brand names and business models, thus allowing independent entities to do business under their brand names at individual locations. ⁸⁹

WHEN DO BRANDING ACTIVITIES IN VERTICAL ARRANGEMENTS GIVE RISE TO COMPETITION ISSUES?

The types of vertical arrangements that may worry competition authorities are those where one of the parties to the vertical arrangement leverages its strong brand name to create an even stronger market position and, in doing so, reduces overall consumer welfare. In order to allay anticompetitive concerns, the authorities would ensure that vertical arrangement contracts are based on efficiency gains reasons.

- 88 Franchising agreements may take the following three general forms: (i) ownership by one person (the franchisor) of the rights to a trademark, brand name or other similar sign; (ii) the grant of a license to selected independent retailers, not agents, (the franchisees) to use the trademark, brand name or other sign in exchange for some agreed upon payment in order to provide retail products or services; (iii) a license (franchise) agreement establishing an ongoing contractual relationship between franchisor and franchisee of significant duration, and specifying some set of obligations on the franchisee, the franchisor, or both. See Section 1.4 and OECD (1994).
- 89 These franchising agreements are generally part of strict licensing and contract agreements that govern how the businesses will be conducted, and how the brand will be used and displayed.

Resale price maintenance (RPM) is one of the most contentious vertical arrangements relating to branding activities. It restricts the distributors from selling the manufacturer's product below a specific suggested price. On the one hand, RPM is beneficial to the manufacturer in two ways. First, it enables the manufacturer to maintain its brand name reputation by setting a certain price level benchmark. This price level may signal to consumers that the product is of certain high quality (see Subsection 3.2.2). Second, RPM provides incentives to the distributor to engage in sales and promotional activities that it might not otherwise have engaged in were the arrangement not in place; such activities might include offering pre-sale demonstrations free of charge. This may help build the manufacturing firm's brand name, especially in situations where the product being sold is new to the market, or where the provision of demonstrations to consumers may be required before they use the product for the first time. In addition, RPM enables distributors to make some profits, and it may motivate them to actively promote the product, even by way of offering after-sales services, which in turn are beneficial for the manufacturer.90

On the other hand, RPM limits price competition. For example, fixed and minimum price arrangements of RPM eliminate or reduce intra-brand competition and may result in prices above the competitive level. 91 This is the reason why the EC competition authorities fined Yamaha in 2003. 92 Another example is where RPM takes the form of a company policy that limits sales only to resellers who adhere to the manufacturer's suggested retail prices. 93

In the past, regulators in both the United States and EU have considered RPM as a hardcore restriction which should be prohibited without any further analysis. For example, in 1911, the United States Supreme Court in *Dr. Miles* held that a supplier cannot lawfully restrict its reseller's pricing freedom.

Current trends, however, indicate a move away from this strict approach and allow for a rule of reason review of RPM. This new position can be seen in the subsequent rulings of the *Colgate*, *State Oil v. Khan* and *Leegin* cases in the United States and in the slight changes set out in the EC's *Guidelines on Vertical Restraints* in Europe. ⁹⁴ Under the rule of reason regime, the pro- and anticompetitive effects of potential violations of antitrust law will be analyzed. If the pro-competitive effects outweigh the anticompetitive effects, the behavior in question will not be regarded as a violation of antitrust law.

- 90 RPM works best when the distributor can impose territorial limitations on the sale of the products. In other words, when the RPM is accompanied by limitations stating that other distributors cannot service the same market as one another. See Areeda and Kaplow (2004).
- 91 See Verras (2009).
- 92 See Yamaha (2003).
- 93 Verras (2009).
- 94 United States v. Colgate & Co. (1919); State Oil
 Co. v. Khan (1997); and Leegin Creative Leather
 Products, Inc. v. PSKS, Inc. (2007). However, in
 Europe, RPM is still considered a blacklisted clause.

Indeed, it seems appropriate to apply a rule of reason approach regarding RPM, particularly in cases involving trademarks; this is because the traditional elements of the competition analysis do not necessarily apply in the case of strong brands. More importantly, price competition is less relevant in the case of strong trademarks and the resulting brand loyalty than in traditional competition analysis. Finally, as described above, RPM may also have pro-competitive effects which cast doubt on applying strict prohibition on this type of vertical arrangements.

Finally, how vertical restraint arrangements affect competition is also a key consideration for policymakers who must decide on whether to permit the *parallel* importation of trademarked goods distributed in foreign markets. Trademark laws regulate this question through the so-called exhaustion doctrine (see Box 3.5). Where policies allow for parallel importation, competition rules can in turn play an important role in scrutinizing private contractual arrangements that seek to unduly limit competition from foreign-sold goods.

Box 3.5: Trademark exhaustion and parallel imports

Trademark laws – like laws for other IP instruments – typically set rules on how far trademark holders can control the distribution of their goods after their first sale on the market. It is possible to broadly distinguish between two approaches. Under a rule of "national exhaustion", trademark holders cannot control the resale of goods first sold in the domestic market, but they can prevent the parallel importation of these goods if they were first sold abroad. By contrast, under a rule of "international exhaustion", trademark holders cannot control the resale of their goods, regardless of where they were first sold; in other words, parallel importation of goods first sold abroad is legal.

What precisely are parallel imports? Parallel trade refers to trade in genuine goods outside official channels of distribution. For instance, an independent firm may purchase goods from a trademark holder's official wholesaler in country A and then sell them on to a retailer in country B. Alternatively, a trademark holder's official distributor can directly engage in parallel trade by entering a foreign market in competition with other official distributors. In either case, parallel trade leads to greater intra-brand competition (see Box 3.5).

A policy of restricting parallel importation amounts to a market-segmenting vertical restraint linked to national territories. Assessing the pros and cons of such a policy involves similar considerations to those required for assessing vertical restraints in trademark licensing or franchising arrangements, as outlined in the subsection 3.3.2. In particular, do benefits such as better sales services for consumers outweigh the costs of reduced intra-brand competition? And how do consumers fare under internationally differentiated pricing structures?

Different jurisdictions have opted for different exhaustion rules. The EU has adopted a hybrid regime that denies parallel importation from outside the EU territories, but allows parallel trade within the EU's single market. 95 United States law generally permits parallel importation of trademarked goods, subject to certain requirements – such as the imported goods in question not differing from domestically sold goods, so as to deliberately confuse consumers. 96

Some countries, such as Japan, have adopted an approach whereby exhaustion is at the discretion of the trademark owner. In particular, parallel imports are permissible, unless trademark holders indicate otherwise in licensing and purchasing agreements. In principle, this approach enables the case-by-case evaluation of the competitive effects of vertical restraints by competition authorities, as is generally advocated by economists and lawyers.

⁹⁵ Calboli (2002).

⁹⁶ Another requirement is that the domestic and foreign trademark are owned by the same economic entity.

See Lever Brothers Company v United States (1993).

3.4

CONCLUSIONS AND DIRECTIONS FOR FUTURE RESEARCH

Building brand names is an important investment component of the process of creating sustainable competitive advantage for firms in the world today. It helps firms differentiate themselves from others, it promotes firms' goods and services, and it can even help firms venture into new markets. When effective, branding activities can help firms increase their market share, encourage consumers to demand more of these branded products, and persuade them to pay more for them in comparison to their generic counterparts.⁹⁷

More importantly, branding helps firms to appropriate their investments in innovation. Branding channels, such as sales promotion activities, marketing and advertising, can extend firms' market power.

It is therefore not surprising that firms that invest more in innovation also invest more in branding. Of course, how effective these sales promotion activities are depends on the types of product innovation being promoted. Once consumers are familiar with and are satisfied with firms' brands, they may develop goodwill towards them, which tends to be expressed in the form of brand loyalty.

Notwithstanding a generally complementary relationship, branding activities can, under certain circumstances, substitute for product innovation. Firms may prefer to invest in introducing products that are based solely on image, and are independent of any technological improvements. This can happen when firms benefit from strong consumer goodwill and are able to leverage this goodwill to promote their image-based products.

Finally, investments in branding may give rise to competition concerns. High costs of advertising, for example, can discourage or prevent the entry of new competitors into the market. Another cause for concern is where firms use their strong trademarked brand name to limit competition in downstream markets.

AREAS FOR FUTURE RESEARCH

In better understanding how branding affects innovation and competition, several avenues for future research stand out:

Relatively few research studies have analyzed how branding activities may substitute for product innovation, especially in the case of vertical product differentiation, where firms introduce higher quality products to rival their competitors. Given that these types of innovative products tend to have experience attributes, it is possible that firms may engage in additional branding activities aimed at persuading consumers about the quality of their products, rather than investing in innovative activities to achieve the same objective. In Hoyer and Brown's (1990) laboratory experiment using peanut butter, the researchers found that brands can compensate for deficiencies in objective quality by advertising more than the higher quality product. But, the question is, what circumstances in the real world would lead to this outcome? Do the same circumstances apply across all industries? In other words, at what point do branding channels, such as advertising, become more effective at selling firms' goods or services than the introduction of new innovative products?

- The Internet has changed how consumers make new purchases. It has reduced the time input and cost required to conduct research on potential purchases, and it has simplified how consumers make purchases. How have these factors affected the way firms introduce new products? Are they obliged to introduce more new products at a more frequent rate? In other words, has the Internet changed firms' product life cycle? Has it also changed how firms appropriate their returns on investment in innovation? In the past, firms reported that lead-time advantage was one of the most effective ways to appropriate their returns on investment in innovation.⁹⁸ Are branding activities online a better way for firms to improving their chances of securing a return on investment to innovation?
- The Internet enables the collection of large amounts of data that can be used to answer specific brandingrelated research questions. Google, for example, is able to track how many times a firm's brand name or its branded product is searched over time. Combining this information with the amount of money a firm spends on building its brand or marketing its products may provide better insights into exactly how effective a firm's branding activities are. Further research studies need to be conducted using "big data" in combination with newly available trademark data (see the proposal set out in Chapter 2.4 in relation to research using trademark data). As well as creating a better understanding of how firms use branding activities, these research studies would also shed new light on the effectiveness of branding activities in terms of promoting firms' sales and growth.
- Lastly, assessing a firm's market power based on its ownership of brand names is not easy. The current methods used to identify the relevant market, and assess whether the firm in question has market power, need more rigorous study and analysis. Most of the current tools rely on traditional economic analysis, which can produce contradictory findings. It would be both timely and useful to conduct additional research studies to identify how best to incorporate determinants of consumers' choices, such as brand reputation and brand loyalty, in these assessments.

REFERENCES

Aaker, D.A. (1991). Managing Brand Equity. New York: The Free Press.

Aaker, D.A. (2011). Brand Relevance: Making Competitors Irrelevant. New York: Jossey-Bass

Acs, Z.J., & Audretsch, D.B. (1990). Innovation and Small Firms. Cambridge, MA: MIT Press.

Aghion, P., Bloom, N., Blundell, R., Griffith, R., & Howitt, P. (2005). Competition and Innovation: An Inverted-U Relationship. *Quarterly Journal of Economics*, 120(2), 701-728.

Ailawadi, K.L., Lehmann, D.R., & Neslin, S.A. (2003). Revenue Premium as an Outcome Measure of Brand Equity. *Journal of Marketing*, 67, 1-17.

Allison, R.I., & Uhl, K.P. (1964). Influence of Beer Brand Indentification on Taste Perception. Journal of *Marketing Research*, 1(3), 36-39.

Anand, B.N., & Shachar, R. (2011). Advertising, the Matchmaker. The RAND Journal of Economics, 42(2), 205-245.

Archibald, R.B., Haulman, C.A., & Moody, C.E., Jr. (1983). Quality, Price, Advertising, and Published Quality Ratings. *Journal of Consumer Research*, 9(4), 347-356.

Areeda, P. E., & Kaplow, L. (2004). Antitrust Analysis: Problems, Text, Cases (6th ed.). New York: Aspen Publishers.

Arrow, K. (1962). Economic Welfare and the Allocation of Resources for Invention. In R.R. Nelson (Ed.), *The Rate and Direction of Inventive Activity: Economic and Social Factors* (pp. 609-626). Princeton, NJ: Princeton University Press.

Askenazy, P., Breda, T., & Irac, D. (2010). Advertising and R&D: Theory and Evidence from France. *Paris School of Economics Working Paper, No. 2010-45*.

Ayanian, R. (1975). Advertising and Rate of Return. *Journal of Law and Economics*, 18, 479-506.

Babyliss Sa v. Commission of the European Communities - Case T-114/02 II-01279 (Court of First Instance 2003).

Barsky, R., Bergen, M., Dutta, S., & Levy, D. (2003). What Can the Price Gap between Branded and Private-Label Products Tell Us about Markups? In R.C. Feenstra & M.D. Shapiro (Eds.), Scanner Data and Price Indexes (pp. 165-228): University of Chicago Press.

Baye, M.R., & Morgan, J. (2009). Brand and Price Advertising in Online Markets. *Management Science*, 55(7), 1139-1151.

Bloch, H. (1974). Advertising and Profitability: A Reappraisal. *Journal of Political Economy*, 82, 112-128.

Böckem, S. (1994). A Generalized Model of Horizontal Product Differentiation. *Journal of Industrial Economics*, 42(3), 287-298.

Bresnahan, T.F., Stern, S., & Trajtenberg, M. (1997). Market Segmentation and the Sources of Rents from Innovation: Personal Computers in the Late 1980s. *The RAND Journal of Economics*, 28(ArticleType: researcharticle/Issue Title: No. 0, Special Issue in Honor of Richard E. Quandt/Full publication date: 1997/Copyright ⊚ 1997 RAND Corporation), S17-S44.

Cabral, L.M.B. (2000). Stretching Firm and Brand Reputation *The RAND Journal of Economics*, *31*(4), 658-673.

Calboli, I. (2002). Trademark Exhaustion in the European Union: Community-Wide or International? The Saga Continues. Marguette Intellectual Property Law Review, 6, 47-90.

Caves, R.E., & Greene, D.P. (1996). Brands' Quality Levels, Prices, and Advertising Outlays: Empirical Evidence on Signals and Information Costs. International Journal of Industrial Organization, 14(1), 29-52.

Chen, Y., & Schwartz, M. (2013). Product Innovation Incentives: Monopoly vs. Competition. *Journal of Economics & Management Strategy*, 22(3), 513-528.

Choi, J.P. (1998). Brand Extension and Informational Leverage. *Review of Economic Studies, 65*, 655-669.

Cohen, W. M., Nelson, R. R., & Walsh, J. P. (2000). Protecting Their Intellectual Assets: Appropriability Conditions and Why U.S. Manufacturing Firms Patent (or Not). *National Bureau* of Economic Research Working Paper, No. 7552. Comanor, W.S., & Wilson, T.A. (1967). Advertising Market Structure and Performance. The Review of Economics and Statistics, 49(4), 423-440.

Comanor, W.S., & Wilson, T.A. (1974). Advertising and Market Power. Cambridge, MA: Harvard University Press.

Comanor, W.S., & Wilson, T.A. (1979). The Effect of Advertising on Competition: A Survey. *Journal of Economic Literature*, 17(2), 453-476.

Conley, J.G., Berry, J.D., DeWitt, L., & Dziersk, M. (2008). Inventing Brands: Opportunities at the Nexus of Semiotics and Intellectual Property. Design Management Review, 19(2), 58-67.

Conley, J.G., & Szobocsan, J. (2001). Snow White Shows the Way. *Managing Intellectual Property, 6*(1), 1-5.

D'Asprement, C., Gabszewicz, J.J., & Thisse, J.F. (1979). On Hotelling's "Stability in Competition". *Econometrica*, 47(5), 1145 - 1150.

Desai, D.R., & Waller, S. (2010). Brands, Competition and the Law. Brigham Young University Law Review, 2010(5), 1425-1499.

Dixit, A.K., & Stiglitz, J.E. (1977). Monopolistic Competition and Optimum Product Diversity. *The American Economic Review*, 67(3), 297-308.

Dubin, J.A. (1998). The Demand for Branded and Unbranded Products: An Econometric Method for Valuing Intangible Assets Studies in Consumer Demand: Econometric Methods Applied to Market Data (pp. 77-127). Norwell, MA: Kluwer Academic Publishers.

EC. (2004). Technology Transfer Guidelines. Brussels: European Commission.

Farrell, J., & Shapiro, C. (2008). Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition. Working Paper.

Farrell, J., & Shapiro, C. (2010). Upward Pricing Pressure and Critical Loss Analysis: Reponses. *The CPI Antitrust Journal*.

Fluet, C., & Garella, P.G. (2002). Advertising and Prices as Signals of Quality in a Regime of Price Rivalry. *International Journal of Industrial Organization*, 20(7), 907-930.

Ford, G.T., Smith, D.B., & Swasy, J.L. (1990). Consumer Skepticism of Advertising Claims: Testing Hypotheses from Economics of Information. *Journal of Consumer Research*, 16(4), 433-441.

General Mills, Inc./ Diageo plc/ Pillsbury Co. - FTC File No. 001-0213 (U.S. Federal Trade Commission 2001).

Gilbert, R.J. (2006). Looking for Mr. Schumpeter: Where are We in the Competition-Innovation Debate? In A.B. Jaffe, J. Lerner & S. Stern (Eds.), Innovation Policy and the Economy (Vol. 6). Cambridge: The MIT Press.

Goettler, R.L., & Gordon, B.R. (2013). Competition and Product Competition in Dynamic Oligopoly. *University of Rochester Working Paper.*

Greenstein, S., & Ramey, G. (1998). Market Structure, Innovation and Vertical Product Innovation. *International Journal of Industrial Organization*, 16, 285-311.

Guadagni, P.M., & Little, J.D.C. (1983). A Logit Model of Brand Choice Calibrated on Scanner Data. *Marketing Science, 2*(3), 203-238.

Hakenes, H., & Peitz, M. (2009). Umbrella Branding and External Certification. *European Economic Review*, 53(2), 186-196.

Heath, T., DelVecchio, D., & McCarthy, M.S. (2011). The Asymmetric Effects of Extending Brands to Lower and Higher Quality. *Journal of Marketing*, *75*(3), 3-20.

Homburg, C., Klarmann, M., & Schmitt, J. (2010). Brand Awareness in Business Markets: When is it Related to Firm Performance? *International Journal of Research in Marketing*, 27, 201-212.

Hotelling, H. (1929). Stability in Competition. Economic Journal, 39, 41-57.

Hoyer, W.D., & Brown, S.P. (1990). Effects of Brand Awareness on Choice for a Common, Repeat-Purchase Product. Journal of Consumer Research, 17(2), 141-148.

Hurwitz, M.A., & Caves, R.E. (1988). Persuasion or Information? Promotion and the Shares of Brand Name and Generic Pharmaceuticals. *Journal of Law and Economics*, 31(2), 299-320.

Jennewein, K. (2005). Intellectual Property Management: The Role of Technology-Brands in the Appropriation of Technological Innovation. Heidelberg: Physica-Verlag.

Joachimsthaler, E., & Aaker, D.A. (1997). Building Brands Without Mass Media. *Harvard Business Review*, 75(1), 39-48.

Kapferer, J.N. (2008). The New Strategic Brand Management: Creating and Sustaining Brand Equity Long Term. London: Kogan Page.

Keller, K.L. (2003). Strategic Brand Management: Building, Measuring, and Managing Customer-Based Brand Equity (Second ed.). Upper Saddle River, New Jersev: Prentice Hall.

Klein, B., & Leffler, K.B. (1981). The Role of Market Forces in Assuring Contractual Performance. *Journal of Political Economy*, 89(4), 615-641.

Klemperer, P. (1987). Entry Deterrence in Markets with Consumer Switching Costs. *The Economic Journal*, *97*, 99-117.

Krasnikov, A., Mishra, S., & Orozco, D. (2009). Evaluating the Financial Impact of Branding Using Trademarks: A Framework and Empirical Evidence. *Journal of Marketing*, 73, 154-166.

Lee, J., Shin, B.S., & Chung, I. (1996). Causality between Advertising and Sales: New Evidence from Cointegration. Applied Economics Letters, 3(5), 299-301.

Leegin Creative Leather Products, Inc. v. PSKS, Inc., 551 U.S. 877 (United States Supreme Court 2007).

Lei, J., Ruyter, K.D., & Wetzels, M. (2008). Consumer Responses to Vertical Service Line Extensions. *Journal of Retailing*, 84(3), 268-280.

Lever Brothers Company v United States, 981 F.2d 1330 (United States Court of Appeals 1993).

Levin, D., Peck, J., & Ye, L. (2009). Quality Disclosure and Competition. The Journal of Industrial Economics, 57(1), 167-196.

Moorthy, S. (2012). Brand Extension Strategy: An Integrative Framework. In D. Soberman & D. Soman (Eds.), Flux: What Marketing Managers Need to Know to Navigate the New Environment. Toronto: University of Toronto Press.

Moorthy, S. (2013). *Branding, Innovation and Competition.*Unpublished Background Research Commissioned for the World IP Report 2013. Geneva: World Intellectual Property Organization.

Nelson, P. (1970). Information and Consumer Behavior. *Journal of Political Economy*, 78, 311-329.

Nelson, P. (1974). Advertising as Information. The *Journal of Political Economy, 82*(4), 729-754.

Nevo, A. (2001). Measuring Market Power in the Ready-to-Eat Cereal Industry. *Econometrica*, 69(2), 307-342.

OECD. (1994). Competition Policy and Vertical Restraints: Franchising Agreements. Paris: Organisation for Economic Cooperation and Development.

OECD. (2012). *Market Definition.* Paris: Organisation of Economic Co-operation and Development.

Ofek, E., & Sarvary, M. (2003). R&D, Marketing, and the Success of Next-Generation Products. *Marketing Science*, 22(3), 355-370.

Pepall, L.M., & Richards, D.J. (2002). The Simple Economics of Brand Stretching. *The Journal of Business, 75*(3), 535-552.

Porter, M.E. (1974). Consumer Behavior, Retailer Power and Market Performance in Consumer Goods Industries. *The Review of Economics and Statistics*, 56(4), 419-436.

Porter, M.E. (1976). Interbrand Choice, Media Mix and Market Performance. *The American Economic Review, 66*(2), 398-406.

Randall, T., Ulrich, K., & Reibstein, D. (1998). Brand Equity and Vertical Product Line Extent. *Marketing Science*, *17*(4), 356-379.

Romer, P. (1986). Increasing Returns and Long-Run Growth. *Journal of Political Economy*, 94(5), 1002-1037. Romer, P. (1990). Endogenous Technical Change. Journal of Political Economy, 94(5), 1--21.

Scherer, F.M. (1979). The Welfare Economics of Product Variety: An Application to the Ready-to- Eat Cereals Industry. The Journal of Industrial Economics, 28(2), 113-134.

Schmalensee, R. (1978). A Model of Advertising and Product Quality. *Journal of Political Economy*, 86(3), 485-503.

Schmalensee, R. (1982). Product Differentiation Advantages of Pioneering Brands. *The American Economic Review, 72*(3), 349-365.

Shah, S.Z.A., & Akbar, S. (2008). Value Relevance of Advertising Expenditure: A Review of the Literature. *International Journal of Management Review, 10*(4), 301-325.

Shaked, A., & Sutton, J. (1982). Relaxing Price Competition Through Product Differentiation. *The Review of Economic Studies*, 49(1), 3-13.

Shaked, A., & Sutton, J. (1983). Natural Oligopolies. *Econometrica, 51*(5), 1469-1483.

Slade, M.E. (1998). Optimal Pricing with Costly Adjustment: Evidence from Retail-Grocery Prices. The Review of Economic Studies, 65(1), 87-107.

Smith, M.D., & Brynjolfsson, E. (2001). Consumer Decision-Making at an Internet Shopbot: Brand Still Matters. *The Journal of Industrial Economics*, 49(4), 541-558.

State Oil Co. v. Khan et al., 522 U.S. 3 (United States Supreme Court 1997).

Stokes, R.C. (1985). The Effects of Price, Package Design, and Brand Familiarity on Perceived Quality. In J. Jacoby & J. Olson (Eds.), *Perceived Quality*. Lezington: Lexington Books.

Sullivan, M. (1990). Measuring Image Spillovers in Umbrella-Branded Products. *Journal of Business*, 63, 309-329.

Sutton, J. (1991). Sunk Costs and Market Structure: Price Competition, Advertising and the Evolution of Concentration. Cambridge: The MIT Press.

Thomas, L.A. (1995). Brand Capital and Incumbent Firms' Positions in Evolving Markets. *The Review of Economics and Statistics*, 77(3), 522-534.

U. S. Department of Justice, & Federal Trade Commission. (2010). Horizontal Merger Guidelines.

Unilever/Sara Lee Body Care - Case No COMP/M.5658 (European Commission 2010).

United Brands Company and United Brands Continentaal BV v Commission of the European Communities 207 (European Court of Justice 1978).

United States v. Colgate & Co. - No. 828, 250 U.S. 300 (United States Supreme Court 1919).

Verras, N. (2009). Resale Price Maintenance in E.U. Competition Law: Thoughts in Relation to the Vertical Restriants Review Procedure. *The Columbia Journal of European Law, 16, 37-41.*

Weiss, L.W. (1969). Advertising, Profits, and Corporate Taxes. The Review of Economics and Statistics, 51(4), 421-430.

Wiggins, S.N., & Raboy, D.G. (1996). Price Premia to Name Brands: An Empirical Analysis. *The Journal of Industrial Economics*, 44(4), 377-388.

WIPO. (2011). World Intellectual Property Report 2011: The Changing Face of Innovation. Geneva: World Intellectual Property Organization.

Yamaha - Case COMP/37.975 PO (European Commission 2003).

Yip, G. (1982). Barriers to Entry: A Corporate Strategy Perspective. Lexington, MA: D.C. Health.

Zhou, N., Zhou, D., & Ouyang, M. (2003). Long-Term Effects of Television Advertising on Sales of Consumer Durables and Nondurables: The Case of China. *Journal of Advertising*, 32(2), 45-54.

R&D

RPM

SCB

Research and Development

Resale Price Maintenance

Statistics Sweden

ACRONYMS

ABS	Australia Bureau of Statistics	SEB	Société d'Emboutissage de Bourgogne
BEA	Bureau of Economic Analysis	SEC	Securities and Exchange Commission
BoP	Balance of Payments	SIPO	State Intellectual Property Office of the
BvD	Bureau van Dijk		People's Republic of China
CANSIM	Canadian Socioeconomic Information	SME	Small and Medium-Sized Enterprise
	Management System	SSNIP	Small but Significant Non-Transitory
ccTLDs	Country Code Top-Level Domains		Increase in Price
CTM	Community Trade Mark	TRIPS	Trade-Related Aspects of Intellectual
DOJ	Department of Justice		Property Rights
EBOPS	Extended Balance of	UDRP	Uniform Domain Name Dispute
	Payments Services		Resolution Policy
EC	European Commission	UK	United Kingdom
EMA	European Medicines Agency	UKIPO	United Kingdom Intellectual
EPO	European Patent Office		Property Office
EFF	European Franchise Federation	UPP	Upward Pricing Pressure
EU	European Union	US	United States
FTC	Federal Trade Commission	USD	United States Dollar
GDP	Gross Domestic Product	USPTO	United States Patent and
GI	Geographical Indication		Trademark Office
gTLDs	Generic Top-Level Domains	WIPO	World Intellectual Property Organization
ICANN	Internet Corporation for Assigned	WTO	World Trade Organization
	Names and Numbers		
INPI	Instituto Nacional da		
	Propriedade Industrial		
IP	Intellectual Property		
JPO	Japanese Patent Office		
LIMA	International Licensing Industry and		
	Merchandisers' Association		
M&A	Mergers and Acquisition		
MSITS	Manual on Statistics of International		
	Trade in Services		
NAICS	North American Industry		
	Classification System		
NBI	Nation Brands Index		
OECD	Organisation for Economic Co-		
	operation and Development		
OHIM	Office for Harmonization in the		
	Internal Market		
OPH PPP	Internal Market Output per Hour Purchasing Power Parity		



For more information contact **WIPO** at www.wipo.int

World Intellectual Property Organization 34, chemin des Colombettes P.O. Box 18 CH-1211 Geneva 20 Switzerland

Telephone:

+4122 338 91 11

Fax:

+4122 733 54 28