

### BUSINESS VALUATION UPDATE

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TIMELY NEWS, ANALYSIS, AND RESOURCES FOR DEFENSIBLE VALUATIONS

## Indefinite Is *Not* Infinite—Solving a Dichotomy in Trademark Valuation

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The valuation of an intangible asset is based on its useful life. For trademarks, appraisers regularly opt for an indefinite life, when no obvious factors exist that would limit the future economic life of the trademark. However, almost all brands are finite, and assuming indefiniteness can have two serious effects: one on value and one on accounting. This article discusses such effects and suggests some guidelines and tools for how to analyze the life cycle of a brand and how to estimate its remaining useful life (RUL). It also presents new research that examines indefinite-lived trademarks and traces their reporting over the past 10 years.

The accounting framework. Accounting standards govern determination of useful life and amortization of intangible assets. In accounting history, useful life of intangibles was capped at a maximum of 40 years. Since the issuance of Financial Accounting Standard (FAS) 142 in 2001 (now Accounting Standards Codification Topic No. 350, or "ASC 350"), intangible assets may be assigned an indefinite useful life, provided that no legal, regulatory, contractual, competitive, economic, or other factors limit the useful life of this intangible asset.1 However, the term "indefinite" does not mean infinite. If an intangible asset is determined to have an indefinite useful life, it shall not be amortized until its useful life is determined to be no longer indefinite. Instead, the asset shall be tested for impairment at least once in each reporting period.

According to ASC 350-30-35-3, the estimation of the useful life of an intangible asset shall be based on an analysis of all pertinent factors. One of these factors is of particular importance for trademarks, namely, "the effects of obsolescence, demand, competition, and other economic factors (such as the stability of the industry, known technological advances, legislative action that results in an uncertain or changing regulatory environment, and expected changes in distribution channels)."

Further, ASC 350 provides that:

If no legal, regulatory, contractual, competitive, economic, or other factors limit the useful life of an intangible asset to the reporting entity, the useful life of the asset shall be considered to be indefinite. The term "indefinite" does not mean the same as infinite or indeterminable. The useful life of an intangible asset is indefinite if that life extends beyond a foreseeable horizon—that is, there is no foreseeable limit on the period of time over which it is expected to contribute to the cash flows of the reporting entity.<sup>2</sup>

Legally, the protection of trademarks can be renewed and extended any number of times, and economically trademarks can successfully subsist for a very long time as long-lived brands such as Coca-Cola, Colgate, or John Deere demonstrate.<sup>3</sup> For these reasons, trademarks

1 FAS 142, § 11.

<sup>2</sup> ASC 350-30-35-4.

<sup>3</sup> We all tend to forget the numerous brands and trade names that disappeared. In mature industries, the number of vanished brands is much higher than the

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are often assigned an indefinite life. However, the decision to assign an indefinite life to a trademark has two important effects. In discounted cash flow (DCF)-based valuation, indefiniteness results in infiniteness-revenues or cash flows are projected into perpetuity. In accounting, the problem is only postponed. Like any other assets, trademarks are wasting. At some point in the future, a decision must be taken as to the finiteness of the trademark's life.

ASC 350-30-35 contains an important little detail that is often overlooked and deals with the difference between the terms "determination" and "estimation." § 11 is headlined "Determining the Useful Life of an Intangible Asset," which suggests that the useful life could be precisely calculated. The following text in ASC 350-30-35 however uses the term "estimate" instead of "determine": "The estimate of the useful life of an intangible asset to an entity shall be based on an analysis of all pertinent factors." Similarly, IAS 38 uses the terms "uncertainty," "estimate," and "prudent." Accordingly, "uncertainty justifies estimating the useful life of an intangible asset on a prudent basis."4 These wordings suggest that the standard-setters preferred—whenever possible and advisable—an estimated definite to an indefinite life.

To avoid misunderstandings, the intention of the authors is not to motivate appraisers and accountants toward avoiding indefinite lives in valuations. For example, for goodwill, this would be simply impossible. We would however like to increase the awareness of the problems inherent in infiniteness and when and how to estimate a finite RUL of trademarks.

Observations in the accounting field. Indefinite-lived intangibles were introduced into corporate accounting in the U.S. through FAS 142 in 2001 and internationally through IAS 38 in 2004. Under these rules, appraisers and accountants are required to consider the option of indefiniteness in their valuation of trademarks.

number of those that remain.

4 IAS 38 margin number 93.

In a recent article, Rüssli and Binder analyzed in detail what useful lives appraisers and accountants applied in the field since 2003.<sup>5</sup> According to MARKABLES<sup>6</sup> data, one-half of all trademark valuations performed between 2003 and 2013 assume an indefinite life. For the remaining half of trademarks with a finite life, the RUL ranged from less than six months to a maximum of 50 years, with an average of 10.7 years.

If we assume that corporations develop detailed business plans and forecasts for a five-year period, an RUL of five years and less would be equivalent to a clear intent to cease the brand and its products or to replace it by another brand within this period. Therefore, the determination of trademark RUL in such cases is more a part of corporate business planning than a delicate estimation by the appraiser. Based on the MARKABLES data, 36% of all trademarks with definite RUL<sup>7</sup> fall into this category of "clear intent to cease." In the remaining cases of RUL extending beyond the five-year planning period,8 the appraiser had to analyze and estimate RUL. The appraiser assigned a definite life to only 39% of these trademarks, and 61% received the status of indefiniteness.

These are the averages over a 10-year period. When looking at the trend, it is apparent that appraisers increasingly try to be more precise and to determine definite RULs more frequently. During the observation period, the share of indefinite-lived trademarks decreased from 80% in 2004 to 40% in 2013, and the average RUL of the finite-lived trademarks decreased from 12 years to 10 years. There seems to be an increasing awareness among appraisers and accountants of the importance of assigning an

5 Stefan Rüssli and Christof Binder, "The Useful Life of Trademarks," World Trademark Review, December 2014, pp 22-25. appropriate and reasonable life to trademarks where able and of the difficulties that can arise from indefiniteness.

From ambiguity to clarity? Both ASC 350 and IAS 38 expressly and identically state that "the term indefinite does not mean (the same as) infinite." To account for this, the Financial Accounting Standards Board (FASB) developed two additional concepts. One is that indefinite-lived assets shall be tested at least annually for impairment. The second is that the RUL of an indefinite-lived asset shall be reviewed annually to determine whether events and circumstances continue to support an indefinite useful life. In other words, the standard-setters did in no way contemplate the creation of an asset category that would sit on the balance sheet forever.

With this in mind, we tried to understand what happens to accounted trademarks once they are assigned indefiniteness and to find out whether FASB's vision of a later finiteness would come true. Therefore, we analyzed how 100 brands (or brand portfolios) that had been valued and accounted in the year 2004 with an indefinite life developed in the accounts during the following 10 years. The sample was taken from the MARKABLES database<sup>10</sup> and included the 100 largest trademarks (or trademark portfolios) resulting from business combinations and reported in 2004 by entities listed in the United States. We traced the reporting of these trademarks from 2004 until the 2013/2014 reporting season.

A first finding is that 28 brands from the original sample later became part of another transaction, resulting in a new business combination and a new valuation.<sup>11</sup> In these cases, the issue of infiniteness sorted itself out and eventually restarted from zero.

The remaining 72 brands were presumably subjected to annual impairment test and RUL

<sup>6</sup> MARKABLES is a self-service online database providing comparables from over 6,200 audited and published trademark valuations worldwide. www. markables.net.

<sup>7</sup> Corresponding to 18% of all trademarks in the sample.

<sup>8</sup> Eighty-two percent of all cases.

<sup>9</sup> ASC 350-30-35-4, IAS 38 margin number 91.

<sup>10</sup> www.markables.net.

<sup>11</sup> This number corresponds roughly to an acquisition rate of listed companies of 3% per annum.

review. The results of these reviews after 10 years are illustrated in Exhibit 1. Nearly one-half (47%) of the brands remained unchanged, and the other half (53%) experienced some sort of depreciation:

- Twenty-eight brands (39%) were partly impaired.<sup>12</sup> The impairments range from 1% to 90% of the original value, with an average impairment of 20%, or 2% per year. Excluding the abnormal effect of the financial crisis in 2008 and 2009, the average impairment cycle is every six years per brand.
- Four brands (6%) were fully impaired, of which three were replaced/rebranded and one was ceased.
- Six brands (8%) were reclassified as definite-lived, with RULs ranging from four to 20 years and averaging 12 years.

There are two major conclusions from this analysis.

1. A substantial part of all indefinite-lived trademarks remains "untouched" during the 10-year period. This tends to happen when the original valuation was conservative (with a low royalty rate) and the business was growing substantially after the acquisition. In this situation, the impairment test of the brand will necessarily result in a fair value being much higher than its carrying value. The problem is that after 20 years brands will have the same financial value as 20 years before, but in reality they have little to nothing in common with the "former" brands. The changes in brand since then are fully attributable to brand investments that happened after the valuation, thus there are internally created value additions.

Once indefinite—always indefinite. Only in very few cases, the option of shifting from indefiniteness to finiteness was chosen. Appraisers and accountants who opted for indefiniteness in their original valuation seem to maintain this preference permanently; they continue to prefer annual impairment testing and irregular impairments over a determination of RUL and regular amortization. While not subject to empirical testing, reasons for this may include difficulty in estimating an RUL, lack of objective, observable data, management belief that the trademark will live forever, and management's aversion to amortization expense. This approach is however not fully in line with ASC 350-30-35-4 and IAS 38, stating, "The term indefinite does not mean (the same as) infinite." At some point in time, an end of the trademark's life should be foreseeable.

#### The discounting sensitivity of indefiniteness.

Almost all published trademark valuations apply the relief from royalty method or in some exceptional cases the multiperiod excess earnings method. Both methods are income- or DCF-based methods that project future earnings from the trademark and discount them to a net present value (NPV). Mathematically, the projection of future earnings extends into perpetuity—the projected income stream will not stop. As a result of discounting, the contribution of earnings to NPV diminishes over time. The higher the discount rate, the sooner future earnings

Exhibit 1. Indefinite-Lived Tradmarks:
Results of Annual Reviews After 10 Years

unchanged
47%
47%
47%
48%
Source: markables.net

<sup>12</sup> An additional three brands were impaired prior to being reclassified as definite-lived.

from the trademark become negligible for its present value.

Simply speaking, the result of a valuation will be different depending on the length of the RUL and the length of the income projection into the future. An income over 200 years is obviously more than the same income over 35 years. This increasing effect over time is overlapped by the discounting. The key question here is at what discount rate the difference between a (long) finite RUL and an indefinite RUL becomes negligible.

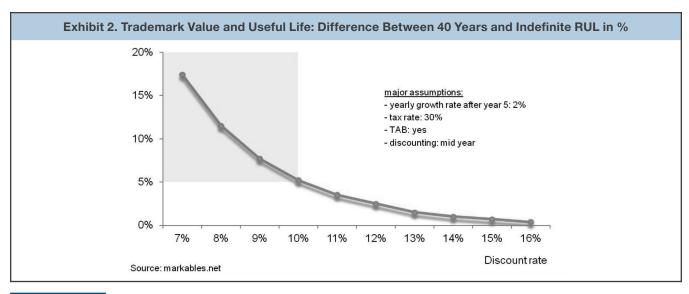
Many valuation professionals say that the difference between applying indefiniteness and (long) finiteness in a valuation is negligible. It depends however on the discount rate if this view is true. To illustrate this, we compared the NPV difference for a trademark with indefinite RUL to a trademark with an RUL of 40 years for different discount rates. Exhibit 2 illustrates that the NPV difference is less than 5% if the discount rate is 10% and higher. For lower discount rates, the NPV difference is higher and approaches 20%.

It is almost a philosophical question which difference one would accept to be negligible. For now, a difference of 5% or less shall be deemed to be acceptable. In the illustration, the 5% threshold would be surpassed at a discount rate of 10%

or less, or at a net discount rate of 8% considering the 2% growth rate assumed. From other analyses, we know that between 20% and 25% of all trademark valuations apply discount rates lower than 8%.<sup>14</sup> In these cases, the resulting trademark value would be more than 5% higher than in the 40 years' RUL scenario and therefore no longer negligible. It seems like this issue is of growing importance since interest rates decreased globally, often resulting in lower cost of capital and lower discount rates.

Once again, we cite ASC 350-30-35-4, which states: "The term indefinite does not mean the same as infinite." Appraisers must be aware that a valuation into perpetuity can result in an overstated value, depending on the discount rate. To avoid this, the appraiser may either cap the RUL at around 40 years or account for the higher uncertainty of indefiniteness with a higher discount rate.

Understanding the reasons for trademark obsolescence. Our above analysis showed that appraisers frequently consider the RUL of a trademark as indefinite if and as long as its owner intends to continue to use the trademark or has no specified plans to the contrary. Half of all valued trademarks are assigned an indefinite life, and a large part of these remain indefinite



<sup>13</sup> We choose 40 years because this was the maximum RUL for assets prior to the introduction of FAS 142 in 2001.

<sup>14</sup> See www.markables.net/trademark discount rate.

for quite a long time. However, accounting into indefiniteness was neither the intention of the standard-setters nor is it advisable to follow this simplification in lieu of further analysis of all the factors that may cause the trademark's dormancy or extinction. <sup>15</sup> Appraisers ought to perform a detailed RUL analysis before they opt for indefiniteness.

Before one starts to estimate trademark RUL, it is important to understand for what trademarks are used and why they can die. In their beginnings, trademarks (brands) emerge to provide for the clear identification and a condensed description of a (product or service) offering and for an easy orientation of the target buyers. The marking or branding is a prerequisite to establish any commercial offering in the marketplace. Later in their lives, branding and brands become subject to more economic decisions. Accordingly, the returns attributable to a brand shall be higher than the cost spent to maintain and develop it. Brand returns are quantified or estimated as additional sales plus additional price premium, which would not be achieved without the brand. minus expenses for branding. A trademark will die if its use makes no more economic sense.

The use of a trademark may cease to make economic sense for three major reasons:<sup>16</sup>

a. Product obsolescence. The products or services sold under a trademark reach the end of their life cycle. With the products dying, the brand attached to them will die, too (Southern Bell, for example). This happens if and when the brand is closely associated with a specific product (a product brand) and has no or little flexibility to be switched to other products. This can be observed in the case of product specialist brands or product names. With short product life cycles—like in hi-tech or software industries—brands eventually move too slowly to climb on the bandwagon of the next product generation. Typically for such businesses, the value of the brand is relatively low compared to the value of technologies and customers. Sometimes, a product life cycle can end abruptly if the market is subject to governmental regulations or subsidies.

b. *Trademark obsolescence*. Through the course of the years, a trademark itself may grow old and outdated (Tenneco, for example). Often the products, services, or ranges sold under a trademark change and innovate faster than the trademark can follow them. This phenomenon is typically called trademark obsolescence.

Products and services sold under a trademark are continuously improved, renewed, adopted, refreshed, or otherwise kept up-to-date. In most industries, this change is substantial. A Ford of today has little in common with a Ford of 1970. An Apple computer of today is very different from one of 1990. A fashion brand changes its complete range twice every year. Even for a trademark that seems to be immutable such as Coca-Cola, the changes over time are substantial.

Trademarks (or brands) are rather the opposite. Their main purpose is to provide recognition and trust to the existing customer base. But, at the same time, they have to be innovative, launch new products, and renew themselves. Sometimes, brands are adapted, too, for example, through a modernized logotype. Essentially, brands are not made to keep pace forever with the dynamic product or service ranges sold under them, and they may become signs of the past for products of today.

<sup>15</sup> John Elmore, "The Valuation of Trademark-Related Intangible Property," *Willamette Insights*, Winter 2015, p 72.

<sup>16</sup> In reality, these three reasons are not fully independent of each other and may overlap; for simplification, we discuss them independently here. Further, it is not helpful to include all and any extraordinary mortality risk such as catastrophes, assaults, accidents, etc. in the analysis. If such incidental events happen, testing for impairment applies.

There are different root causes for trademark obsolescence.<sup>17</sup> The most important is technological innovation resulting in improved and/or cheaper products. Think of the changes happening in the handheld or PDA category: from Walkman and MP3 player, integrating telephone, camera, and small computer to the smartphone. In dynamic markets, such changes can happen very fast. A second cause relates to changes in consumer behavior. This does not necessarily involve innovation; often it relates to old or existing products. For example, low-carb food products have existed since long ago, but their recent success results from a substantial shift in consumer preferences. Trademarks associated with the "old" behavior may then be perceived to be out-of-date. A third cause relates to changes in social behavior. In some areas of life, people want to be part of social groups, thereby being distinguishable from people belonging to other social groups. Often this is referred to as lifestyles, and it involves their selection of brands. Lifestyles change over time and with age; trademarks may face difficulties in coping with such changes in lifestyles. Often, such changes in social behavior relate to products where styles and look are important.18

c. Trademark consolidation. Sometimes, businesses own and operate more than one brand in the same category, often as a result of merger activities. In these cases, the trademark becomes subject to a corporate consolidation, whereby one trademark is replaced by another established trademark of the same owner to increase efficiency and to lower cost (Pontiac, for example). The cost of the rebranding plus the losses from customer confusion must

be outweighed by the present value of future cost savings from dropping one brand. This is the simple principle, and in many cases it works provided that the business and customers of the abandoned trademark can be kept to a large extent. This is probably one of the most frequent reasons for a trademark to disappear, for the very trivial objective of trademark economies of scale.

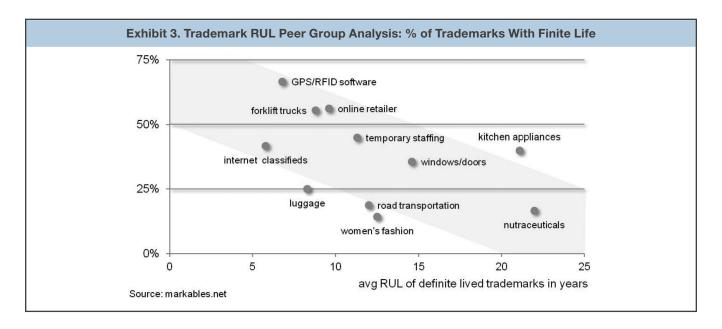
# Peer group analysis of trademark RUL. Accounting standards, textbooks, course materials, and relevant literature provide an overview on the different factors that might influence the RUL of trademarks but little to no guidance on methodologies and tools to quantify or estimate it. In a first step toward estimating trademark RUL, it is helpful for trademark appraisers to understand the general mortality risk of trademarks in the subject industry. Two simple tools help to achieve this:

a. Randomly pick a population of competitor brands that were active in the subject industry a couple of years ago. The composition of the population is less important; more important is the size (ideally 20 brands, minimum 10), and how many years passed (ideally 10 years, minimum five). The source of such a historic population can be: all participants at a specific trade fair at that time, all brands that advertised in the trade magazine at that time, the members' list of the industry association at that time, and all brands that were then covered in the report of the consumer research or market intelligence company. Then find out which of these brands still exist today. By dividing the number of remaining brands by the number of brands in the former population, you get an approximate survivor ratio and annual mortality rate.

If four out of 20 competitor brands that existed 10 years ago disappeared in the meantime, the average annual mortality rate would be 2%; assuming a constant mortality rate and projecting this trend into the future, all brands would have disappeared

<sup>17</sup> Smith and Richey use a different categorization but discuss similar reasons for obsolescence risks. Gordon Smith and Susan Richey, "Trademark Valuation—A Tool for Brand Management," Wiley, 2013, p. 145-152.

<sup>18</sup> It is surprising to see how many fashion and sports brands are deemed to have indefinite lives.



by year 40, and the average RUL of the existing brands would be 20 years.<sup>19</sup>

b. It can be helpful to see how other appraisers dealt with similar situations in the past. Therefore, you should have a look at the RULs assigned to other trademarks in the subject industry in earlier trademark valuations. Such data can be found in the financial reporting of listed companies in relation to their purchase accounting and accounting for intangible assets in connection with business combinations. More conveniently, you can retrieve such data from the MARKABLES database. Exhibit 3 illustrates the RULs found in peer group analyses for various industries based on MARKABLES data. The results show that: (a) trademark mortality risk differs by industry; and (b) plentiful guideline data are available.

Such industry-based trademark mortality analyses rarely provide evidence for zero mortality or infiniteness. In almost all cases, some trademarks have disappeared in the observation

period or are expected to disappear. Of course, the average RUL resulting from these peer group analyses is not directly applicable for the subject trademark. But it provides a first understanding of the trademark dynamics in the subject industry and a guideline as to whether an indefinite RUL is justifiable.

Estimation of trademark-specific RUL. The RUL of the subject trademark depends on some specific characteristics in relation to its environment and customers. The following analytical steps are helpful to understand the specific position of the subject trademark in various cycles and to provide a best estimate of RUL.

Product life cycle. The product life cycle theory provides five stages in the life of a product or service forming a typical S-shaped curve: introduction, growth, maturity, saturation, and decline. For RUL estimation, two aspects are important. First, it is important to understand the current position of the trademarked products in the cycle. And, second, it is important to anticipate the total length of the cycle. Products incorporating high-technology (such as pharmaceuticals, software, or semiconductors) can have very short life cycles, sometimes not exceeding five years. Other products and services (for example, coffee

<sup>19</sup> In reality, consolidation and mortality happen in waves and end at some mature stage in the cycle. Some businesses and brands survive the endgame, some don't, and the important question is whether the subject brand will likely be part of the former or the latter group.

- or hairdressing services) reached the saturation stage long ago but exhibit no signs of decline.
- 2. Brand specificity and brand architecture. A brand will not necessarily die because the branded product has reached the end of its life cycle. The ability of brands to keep pace with change and innovation depends very much on their specificity. Some brands are closely tied to a specific product, such as pharmaceuticals or other product name brands. Such brands will necessarily die when their products reach the end of their life cycles. Other brands are much less specific, having more flexibility in terms of the variance and modifiability of the products or services they carry. They can successfully absorb product variants and new product generations. For the life of such brands, numerous individual product life cycles add to one another, thereby separating the brand's life from products' lives.

In RUL analysis, it is important to understand the brand architecture of the subject business. Often, businesses operate brands at different levels. Product brand names provide branding at the level of products or individual services. Corporate brand names or umbrella brands provide branding at the level of a company or business unit, grouping different products under one and the same branding. Often, branding incorporates a combination of both umbrella and product brand names. Obviously, product brand names will have shorter lives than corporate or umbrella brand names, and it is advisable to attribute different RULs to brand names at such different levels.

On the other side, the appraiser must understand that the level of specificity of a brand can affect its returns. A less specific brand may have a very long life but at the same time may have a lower profit margin compared to a very specific specialist

- brand. In some way, this phenomenon relates to the issue of niche versus mass market branding strategy.
- 3. Brand strength. When a market begins to decline, not all brands will die at the same time or at the same rate. Some will disappear sooner, and some will survive until the very end or even create the next upturn of the market. This is a question of the strength of each particular brand. Several factors determine brand strength with regard to its RUL.

One factor is the relative size of the brand, or its relative market share compared to its competitors. Small brands will very likely disappear faster than market-leading brands. Another factor is relative growth. If the subject brand grew more slowly—or declined faster—than market average, it will likely disappear sooner than other brands. And a last factor is brand profitability. The more profitable a brand is relative to its competitors, the more likely it can survive the endgame.

4. Industry consolidation cycle. One major reason for trademarks to disappear is trademark consolidation.<sup>20</sup> If a business owns and operates more than one trademark in the same category or segment, it has the option to merge one of the trademarks into another. The appraiser should consider and carefully analyze this option even if management expresses its intent to continuously use the subject trademark indefinitely in the future.

Concentration measures often describe the structure of an industry. Concentration is a function of the number of competitors and their respective shares of the total market. In competition and antitrust law, the Herfindahl index<sup>21</sup> is the most frequently

<sup>20</sup> See further above.

<sup>21</sup> The Herfindahl or Herfindahl-Hirschman Index (HHI) is a measure of market concentration and is

used concentration measure. Another, more convenient, concentration measure is the sum of the market share of the top three or top four players, described as CR3 or CR4 ratios. CR3 50% means that the top three players of the industry hold a combined 50% market share.

Structure and concentration rates of industries change over time. Typically, industries follow a concentration curve, which resembles the S-shaped product life cycle curve.<sup>22</sup> In the emerging stage of an industry, the concentration rate will be high (sometimes 100%), with very few competitors. The more promising and growing this new market, the more players will enter, thereby reducing the market share of each player and the CR3 rate. Very fragmented markets with many players can have CR3 ratios of less than 10%. With decreasing growth rates, the industry will start to consolidate through mergers. The number of players will decrease, and CR3 will increase to a maximum level. In very mature industries. not more than a handful of players are left, and CR3 reaches 80%. In the mature stage of the curve, the need to consolidate further is very limited.23 Sometimes, such mature industries decline to their demise; sometimes new small entrants make their appearance and attack the old players with new varieties, thereby reducing CR3 again. Exhibit 4 illustrates the typical S-shaped

expressed as:  $HHI = (s1^2 + s2^2 + s3^2 + ... + sn^2) \times 100$ , where sn is the market share of the nth firm. The U.S. Department of Justice considers a market with an HHI of less than 1,500 to be a competitive market while an HHI of 2,500 or greater to be highly concentrated. (www.justice.gov/atr/public/guidelines/hhi. html)

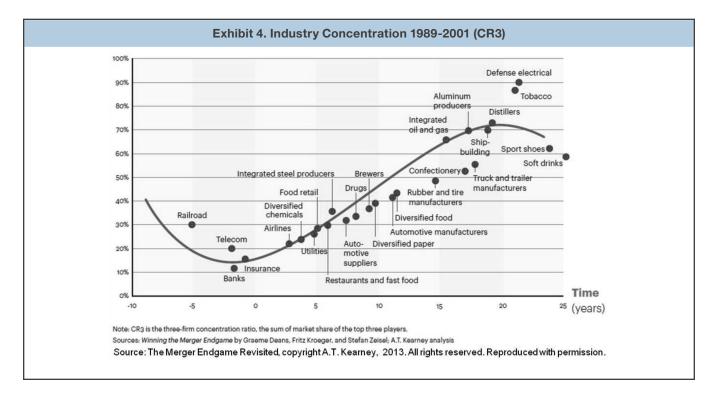
- 22 For further detail, see Graeme Deans, Fritz Kroeger, and Stefan Zeisel, Winning the Merger Endgame, McGraw-Hill 2003; Graeme Deans, Fritz Kroeger, and Stefan Zeisel, "The Consolidation Curve," Harvard Business Review, December 2002; Jürgen Rothenbuecher, Joerg Schrottke, and Sandra Niewiem, "The Merger Endgame Revisited," ATKearney White Paper 2013.
- 23 I.e., because of antitrust or complexity.

curve of industry consolidation. For the trademark appraiser, it is important to understand the shape (the duration) of the S curve of the subject industry and its current position on the curve.

The U.S. Census Bureau publishes concentration ratios every five years for the four, eight, 20, and 50 largest firms by NAICS codes. Exhibit 4 illustrates that some old industries are still very fragmented (such as banks) and some younger industries are much more concentrated. Obviously, intensity and speed of consolidation follow different, industry-specific patterns. The major reason for this is cost structure, more specifically the fraction of fixed cost. The higher the share of fixed cost in an industry, the higher the advantage of being large, and the higher and faster consolidation. Hi-tech industries typically have a high share of fixed cost for R&D. Surprisingly, the beer industry is another example of high fixed cost;<sup>24</sup> its concentration rate CR4 in the US stands at around 90% for 15 years now and has reached its maximum, constant level.

From the existing concentration rate, the current number of remaining players, and from the M&A and consolidation rate in the past years, the appraiser can develop a projection of the likely average annual consolidation rate for the next period, until a mature and stable stage will be reached. Such consolidation at the company, firm, or business level is a strong indicator for the pressure on the consolidation of trademarks. However, even if companies or firms merge and consolidate, they can still continue to use more than one trademark in the same industry. Their decisions to consolidate their trademarks are the result of trademark-specific economies of scale, which require some additional analysis.

<sup>24</sup> Raw material and labor are cheap; fully automated plants and the high cost for marketing and sales are mostly fixed.



Trademark consolidation economies. One major reason for trademarks to disappear is trademark consolidation.<sup>25</sup> If a business owns and operates more than one trademark in the same category or segment (often as a result of industry consolidation and M&A), it has the option to merge one of the trademarks into another. The appraiser should consider and carefully analyze this option even if management expresses its intent to continuously use the subject trademark indefinitely in the future. The key question is whether the cost savings from the trademark consolidation outweigh the additional costs and the eventual loss of business/customers from the rebrandina.

Cost savings from a trademark consolidation can be estimated by comparing the variable cost of brand marketing of the larger brand with the total cost of brand marketing of the smaller brand (in percentages or revenues). Eventually, there would

be an additional gain from reorganizing or combining two separate sales forces. The net present value of these savings projected into the future represents the total consolidation gain, which needs to be larger than the one-time cost of the rebranding. In most businesses, cost of brand marketing is more fixed than variable/marginal, thus supporting trademark consolidation.

The nature of the customer relation determines the cost of rebranding. In a direct and personal relation, customers can be informed directly about the rebranding, at low cost. In anonymous relations, it takes time and expensive media budgets to make sure that all customers get the message. In addition, there is the-often negligible—cost of redesigning graphics, layouts, packaging, business stationery, etc. The replacement of illuminated signs and advertisements can be expensive. The rebranding of a business-to-business brand or a subscription-based consumer goods brand will be relatively inexpensive, while rebranding a stapled consumer goods brand sold through retail channels can be quite expensive.

<sup>25</sup> See further above.

Further, the cost of rebranding includes an estimation of the loss of business resulting from the confusion of customers or from customers who are not willing to purchase the rebranded offering. Such loss may occur if: (a) the information of existing customers is incomplete and not fully comprehensive; (b) the nature of the brand to be consolidated is rather image-based than feature- or performance-based; or (c) the consolidated brand had a perceptibly different positioning, value proposition, or customer group.

It is important to understand that the likelihood of trademark consolidation will increase over time after a merger. Immediately after the merger, the acquirer is often concerned about the stability of customer relations and about losing business and customers due to a rebranding. The more confident the acquirer becomes through the course of time about the loyalty of these customers (and the acquired sales force), the more likely becomes the option of rebranding in the future. The appraiser may consider the likelihood of such trademark consolidation/rebranding sometime in the future in his estimation of trademark RUL if the difference between savings and additional cost is already small today.

Conclusion. The determination of trademark RUL somewhere beyond year 5 but before infinity can be a difficult challenge. The standard-setters considered these difficulties, providing for the possibility of indefinite useful life on one side and for the admission of "best estimation" instead of "determination" on the other. The appraiser should be aware that an indefinite RUL can be a delicate route. Under certain circumstances, indefiniteness may result in overstated value or in an old trademark sitting unalterably on the balance sheet.

Still, best estimation of trademark RUL needs some sort of quantitative analysis and justification. A careful analysis of all relevant factors, including the current situation of the brand as well as past and future life cycle and consolidation dynamics, helps to develop such best estimates. The purpose of an RUL analysis is not to conclude with a precisely determined RUL of 22.5 years. Its first purpose is to develop a clear understanding of the likelihood that the subject trademark will live longer or shorter than 50 (40) years. If shorter, the second purpose is to best estimate whether the RUL will most likely be closer to 10 or 50 (40) years or somewhere in between.

The data analyzed suggest that the prevailing practice is to conclude (perhaps with a preconceived notion) that trademarks have *indefinite* lives. Further, the data suggest that once a trademark is determined as an *indefinite*-lived asset, it is rare that a life is subsequently assigned to the asset. The reasons for this, some of which are suggested in this article, are elusive. However, the accounting literature is very clear: *Indefinite* does not mean *infinite*. As has been proven in the past, the accounting standard-setters and regulators may, if need be, establish policy regarding issues such as this if the profession (i.e., certified public accounting and intangible asset valuation) does not do so on its own. •

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