The Concept of Brand Insecurity & Its Measurement for ISO 10668 Valuations

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Abstract
This paper facilitates the valuation of intangible assets in accordance with ISO 10668. It indicates a method to assess brand values when a company’s brand is inadvertently undermined by the actions of others who market similar products. The paper reports on commercial phenomena in China and provides conceptual analysis to enable company accounts to reflect the quantified phenomena. The paper defines an innovative concept-brand insecurity. It then argues for an accounting methodology to standardize, and make more accurate, the valuation of brands in situations which indicate brand insecurity. A leading feature of the index proposed for brand insecurity is its usefulness in comparisons between years, companies and diverse brands. This paper is the first to operationalize the incomes approach to brand insecurity in accordance with ISO 10668.

Keywords
Brand Insecurity, Brand Valuation, Risk Assessment, Intangible Assets, ISO 10668, Marketing, Accounting

1. Introduction
The importance of brand valuations derives from their contribution to the assessment of shareholder value and the provision of quality information for marketing decisions (Guilding & Pike, 1994). Recent work indicates some of the dynamics involved in the relationship between stock price and brand valuation (Kirk, Ray, & Wilson, 2013; Melo & Galan, 2011). Reports suggest that brand valuations can be between 20% and 75% of market capitalisation for a wide range of companies and marketing professionals demonstrate an acute interest in the valuation of brands (Franzen & Moriarty, 2009; Kitchen, 2010; Ringland & Young, 2006; Tollington, 2002). The valuation of brands is an exercise in the assessment of perception and a range of methods are in use, some of which link to marketing outcomes (Haxthausen, 2009). Company valuations in China often relate to strategic
mergers and acquisitions, and to growth strategies (Du, Liu, Bao, & Huang, 2013: p. 171).

We came to our theoretical work on brand valuations despite a confrontation with a practical problem. This was the situation of milk product marketing managers in China when the public perceptions of other companies and products in the same industry influence sales. The public sentiment—expressed in consumer behaviour—was the result of well-publicised public prosecutions of commercial corruption:

Adverse events associated with food safety are potentially disastrous for any foreign food brand in an increasingly complicated and often volatile global market. Foreign firms must evaluate potential heuristic risks to their brand equity due to associations with local counterparts in consumers’ eyes. Foreign firms should jealously protect their brands by avoiding their brand names being associated with “risky” local brands (Gao, Knight, Zhang, & Mather, 2011: p. 1049).

The present paper focuses on the balance sheet of product brands which were not directly involved in the scandals. Three academics describe the milk powder situation as a “crisis” in an emerging market (Custance, Walley, & Jiang, 2012; for a wider perspective on “crisis” see Greyser, 2009). As a consequence of the crisis, managers became unusually sceptical about brand valuations. Such scepticism is consistent with reports of valuation technologies from many countries (Olins, 2011: p. 10; Salinas & Ambler, 2009). However, in China (which both imports milk products from Western nations and produces milk products itself) the issues have cross-cultural dimensions. The relevance of cross-cultural perspectives in relation to brands has been highlighted recently in relation to Japan and Malaysia (Moschis, Ong, Mathur, Yamashita, & Benmoyal-Bouzaglo, 2011). Chinese companies have the benefit of recommendations on how to advance their brands if they plan to enter the European markets (Wang & Gao, 2010).

In the struggle with intangibles, accountants are more likely to make progress if they adopt a multi-disciplinary approach. Some editors’ claim that their compendium on brands and trademarks makes a “ground-breaking” contribution to multidisciplinary enquires and they indicate the relevant disciplines:

We believe the broad range of the contributions to this volume makes it unique. There are already works on trademark law, works on branding and marketing, works on linguistics and marketing, and works on sociological aspects of commercial identity, but no attempt to bring these approaches together. (Bently, Davis, & Ginsburg, 2008: p. 15)

The present paper draws upon analytic philosophy (for example, the techniques of conceptual analysis associated with Wittgenstein, 2001). It sets out to take a complex phenomenon, derive concepts that are relevant and then render one of these concepts as a stipulative definition. Work of this kind on brand valuation is reported by three Malaysian researchers who inter alia “critically analyse the existing methods of brand valuation in order to choose one as the best approach among all” (Seetharaman, Nadzir, & Gunalan, 2001: p. 244). Their work predates the announcement of many accounting standards that concern intangibles (Tonkin & Robertson, 1991 explore the accounting issues involved with intangible assets).

Conceptual projects examine the foundations of the practical concerns and the concepts that are extant in the methodologies accountants use to value brands. Practitioners show the need for this work as they develop their own instruments. For example, Scott Davis, at Kuczmarski & Associates in Chicago, works with the Brand Value-Perception Index, a measurement tool that considers several values including those for brand personality, competitive brand positioning, brand experience, brand commitment, brand awareness and brand extendibility. In their work, the Chicago consultants use standardised interview techniques and qualitative, open-ended questions that they ultimately wish to analyse with a Likert scale (www.brandtools.info).

The recent development of national and international standards for the valuation of brands (particularly ISO 10668, see below) urges conceptual work upon us. Accountants need valuation methods they can justify in accordance with the new standards. Our paper summarises the development of brand valuations, describes ISO 10668, presents the situation with regard to milk products in China (with Guangzhou as our example), sets up an algorithm for the measurement of certain consumer perceptions concerning brands, and, finally, assesses the prospects for the algorithm. We call the new parameter that we propose in this paper \( \iota \) (Greek iota). \( \iota \), the brand insecurity index, is a standardised measure of brand insecurity (the concept was first proposed by Yuan, Yang, & Xiao, 2012). We define the brand insecurity index as the discount rate to apply to brand valuations in accordance with an objective assessment of the perception of brands identified by consumers as holding a relationship to kindred products. Later in this paper, we argue that this particular stipulative definition is desirable in
a number of very specific situations although not generally.

2. The Evolution of International Brand Valuation Methodologies

The history of brand valuation suggests many factors which are relevant in our consideration of brand insecurity. The concept of brand insecurity emerges naturally from the development of accounting requirements which culminated in ISO 10668. What gave rise to ISO 10668? This section provides the background necessary to understand the accounting requirements for brands as these relate to brand insecurity.

The valuation of brands became a conceptual and practical issue first about thirty years ago in Britain. The impetus for the innovation in accounting was a need for comprehensive company valuations during mergers and acquisitions. Brands were capitalised into accounts in 1988, by Rank Hovis McDougall Limited, a United Kingdom food business that was involved in acquisition processes (Roberts, 2011: p. 47). Subsequently, the emphasis in brand valuations moved to issues within competitive analysis, marketing strategy, legal disputation and finally into mainstream accounting practices. Some assert that within mainstream business practices it is the on-going management of brands which is the most important use of data (Fisk, 2003). In the same year, American academics (Abratt & Bick, 2003) provide a useful review of the brand valuation literature. Several commentators at that time assert that it is the Royalty Method of brand valuation which is in most common use and many indicate the inadequacies of that method. For example, believing extant methods lack sufficient objectivity, the Japanese Ministry of Economy, Trade and Labour established a committee to define “brand” and produce a methodology to measure the value of brands in accordance with data derived from publicly available balance sheets. Known as the Hirose Methodology, it has been criticised because the outputs of the model are not of significant use to financial decision-makers. An alternative model, which, its authors claim, facilitates direct financial interpretation and risk analysis, then, became available (Beccacece, Borgonovo, & Reggiani, 2006).

The inconsistency and unreliability of brand valuations, particularly in company financial accounts, prompted work to establish national standards and ultimately international standards (Cañibano, Covarsí, & Sánchez, 1999). For example, the Netherlands and Germany recently issued new standards on the valuation of intangibles, brands and patents (Menninger & Wellens, 2011). Of importance in these developments was a report from the German offices of nine major accounting firms. The nine firms had formed a group to work on the problem of brand valuation and make recommendations (Brand Valuation Forum, 2008). In their major report, the Brand Valuation Forum argued for the application of ten principles that “any serious brand valuation must measure up to” (Brand Valuation Forum, 2008: p. 10):

1. Consideration of the occasion for the valuation of its function;
2. Consideration of the kind of brand and its function;
3. Consideration of brand protection;
4. Consideration of the brand and target group relevance;
5. Consideration of the current brand status using representative data of the relevant target group;
6. Consideration of the economic life of the brand;
7. Isolation of brand-specific cash flows;
8. Consideration of a net present value method and an appropriate discount rate;
9. Brand-specific risks (market and competitive risks);

As number 9 pertains to brand insecurity consider the Forum’s statement on risks in relation to future income:

Future income is, as is in the nature of the future, subject to risk, i.e. uncertainty. The corporate risk may be different from the brand risk. Hence, a consideration of the corporate risk—understood as capital costs—may, depending on the circumstances, be insufficient. Moreover, brand-specific risks must be accounted for adequately (Brand Valuation Forum, 2008, p. 12).

Herein is a challenge. It is the assessment of risk in diverse circumstances, which, of their nature, are going to require diverse methods of estimation. Any search for a universal methodology to assess risk in the diversity of circumstances is bound to fail. One example of the many considerations that might be relevant in number 9 is “competitive strength”:

Valuation methods that fail to account for the specific competitive strength—and hence reliability of future brand earnings—fail to consider the risk inherent in assessing he future value creation by the brand and
consequently lead to excessively high brand valuations (Brand Valuation Forum, 2008: p. 28).

Therein is the danger for companies. Our paper seeks to ameliorate that danger in a very precise circumstance, which is that amenable to the concept of brand insecurity.

It became apparent to national administrations and accounting bodies (such as the nine firms that participated in the Brand Valuation Forum), that authoritative, internationally recognised, methodological guidance on the valuation of brands would be useful. After three years of deliberation, the International Organization for Standardization (the international non-governmental federation of national standards bodies), in August 2010, published Brand Valuation—Requirements for Monetary Brand Valuation (ISO 10668, 2012). This standard specifies a framework for brand valuation, including objectives, bases of valuation, approaches to valuation, methods of valuation and sourcing of quality data and assumptions. It also specifies methods for reporting the results of such valuations. According to ISO 10668, companies can use three financial analysis techniques to value brands. They are:

1. Market Approach (the value estimate is based on multiples or prices from market transactions involving the sale of convertible assets);
2. Cost Approach (the value estimate is the reproduction/replacement cost adjusted for depreciation and obsolescence);
3. Income Approach (the value estimate is the present value of earnings attributable to the asset or costs avoided because of asset ownership) (ISO 10668, 2010: p. 3-4).

The methodology for the inclusion of brand insecurity in the assessment is a refinement of the income approach, which some claim is the most popular method (Roberts, 2011: p. 49). The international standard describes the income approach, “The income approach measures the value of the brand by reference to the present value of the economic benefits expected to be received over the remaining useful economic life of the brand” (ISO 10668, 2010: 5.2.1). The prescribed approach is to estimate the after-tax cash flow streams attributable to the asset over its remaining useful economic life, and to convert these after-tax cash flow streams to present value through discounting with an appropriate discount rate (ISO 10668, 2010: 5.2.1). The question addressed in the present paper is how do you “estimate the after-tax cash flow streams attributable to the asset over its remaining useful economic life” when these streams can be impacted on by events outside of the control of the company and involve significant misunderstandings and fears on the part of the consumer. What we propose is that the company produces a base estimate in accordance with the technique that is largely given in ISO 10668 and then produces a separate estimate of brand insecurity (by a method we elaborate below). The estimate of brand insecurity is a factor that accountants will apply to the base estimate. Thus, accountants can show that they have expressly taken into account significant uncertainty in the business environment.

ISO 10668 prescribes several methods to determine cash flows, the Price premium method (ISO 10668, 2010: 5.2.2.2), the Volume premium method (ISO 10668, 2010: 5.2.2.3), the Income-split method (ISO 10668, 2010: 5.2.2.4), the Multi-period excess earnings method (ISO 10668, 2010: 5.2.2.5), the Incremental cash flow method (ISO 10668, 2010: 5.2.2.6), and the Royalty relief method (ISO 10668, 2010: 5.2.2.7). The Standard allows for alternative measures of brand earnings (ISO 10668, 2010: 5.2.2.1). In all cases the criteria to meet is that the “cash flows used in brand valuation shall be those case flows reasonably attributable to the brand” (ISO 10668, 2010: 5.2.2.1). The notion of attribution entails a notion of causation. There must, to meet the criteria, be some evaluation of a probable causative relationship between cash flow and brand. The problem in practice is that the direct reasonably attributable cash flow might not be the realised cash flow, not because the causative relationship is not holding but because the business environment came to entail a factor not accounted for in the direct assessment of cash flow. There is a threat to the totality of the business situation for the company and we need to have a way of allowing for that in the determination of cash flows.

The problem we discern is to estimate economic benefits when the business environment contains elements that significantly affect consumer perception and thus undermine the value of a brand. The international standard envisages our project in a very general way when it refers to the incorporation of behavioural analysis into financial assessments:

In order to assess the value of the brand, the financial analysis shall incorporate an analysis of the behavioural aspects of the brand related to the stakeholders. When applying the income approach, an analysis of the behavioural aspects of the brand is necessary in order to determine the monetary proportion attributable to the brand and to assess the risk connected to the brand when determining the discount rate. (ISO 10668,
Some studies concerned with brand valuations emphasise the empirical nature of their work and attempt to relate their findings to utilitarian outcomes. It is said the “empirical start” originated in Britain in the 1980s and continued unabated (Beccacece et al., 2006: p. 1). This drive to pragmatism may undermine the reliability and validity of the measurement techniques. It is apparent within such studies (to the present authors at least) that it is common for analysts to adhere to a model of accounting that derives from scientism. There is an excessive belief in method as procedure and trial and error. We argue, contra empiricists and pragmatists, that many of the problems businesses encounter in the valuation of brands are conceptual problems. The first step has to be the completion of substantial conceptual work. Essentially, regarding brand valuations, the problems are about the derivation of appropriate categories concomitant upon a sound appreciation of the business environment. This is conceptual work.

3. Brand Insecurity

Marketing managers and accountants in China confront a specific problem that the “milk powdered safety” issue exemplifies. Consumers’ knowledge of milk has changed in recent years and people can be very fearful about products when there is little understanding of their biological and chemical properties (Assmann, 2013). In these circumstances trusted products can command a premium price (Bai, Zhang, & Jiang, 2013). Mindful of such circumstances, those responsible for marketing and the recording of true values for brands are rightly concerned that, most probably through no fault of their own organisations; customer sentiment can turn against their brand at any time (these concerns contrast with those of managers of just a decade ago, see for example Aaler, 1996). How is this more recent, legitimate and substantial concern to be reflected in a statement of financial position? There were other instances of a similar (or the same) phenomena identified, for example in industries where a brand is likely to be effectively stolen by a company which markets a similar brand and thus deceives customers. Such situations require careful conceptual work prior to the stipulation of operational definitions. Stipulative definitions are a class of definitions which the German philosopher of mathematics and language, Gottlob Frege, develops in relation to the foundations of arithmetic (Shieh, 2008), and which are essential in the quantifying of policy and business phenomena (Shaw, 1993; Walton, 2006). Accounting standards are structures of stipulative definitions. Management accountants generally decide what will appear as line items in budgets and line items may be associated with precise definitions. In many businesses there is little done to be precise about the definitions that apply to line items in budgets, but when problems are encountered, such as those of brand insecurity, precision in definition becomes paramount. The response to new international standards frequently generates projects that concern issues of definition and there is a proliferation of stipulative definitions. One researcher identified over 80 projects that dealt with a range of problems related to measurement frameworks which were derived from 10 international standards including ISO 10668 (Agarwal, 2012: p. 1299-1300).

We contend the concept of brand insecurity is essential to the quantification of brand assets in particular circumstances. How are managers to know if those circumstances pertain in relation to particular products? In the examples we considered in our practical work the identification of situations and products was never a problem. There are many informal indications of the brand insecurity situation: customers in their buying behaviour and in what they say often alert sale persons and marketing personnel to their concern about “generic risk” regarding products. As the causative link between the subject product and that which generates the problem for the subject product is mediated by anxiety on the part of the consumer, all the signs of consumer anxiety are relevant in the identification of instances of brand insecurity. In addition to observations of consumer behaviour, managers also will be aware of the indications of brand insecurity given in the media. Television, radio, internet and newspaper reports of consumer disquiet send a clear message to managers. In Guangzhou, as in other parts of China, media reports regarding potential problems with milk products have been substantial and for many this is what alerted them to brand insecurity. Early attempts to assess brand insecurity as a reaction to the uncertainty generated by on-going media reports were hampered by the lack of a relevant, practical and internationally recognized standard. With the advent of ISO 10668 there was authoritative guidance, although not the prescription of a practical method.

4. Brand Insecurity Index, $\iota$

Brand insecurity algorithms require a defined parameter which reflects the extent of the insecurity. We call the
parameter that we propose in this paper $i$ (Greek $\iota$). Iota, the *brand insecurity index*, is a standardized measure of *brand insecurity* (The concept was first proposed in Yuan et al., 2012). The *brand insecurity index* ($i$) we define as the discount rate to apply to individual brand valuations in accordance with an objective assessment of customer perception of other brands which hold a relationship to the subject brand. Thus, *brand insecurity* is about an existing situation. It is not relevant how the situation was brought about: the parameter $i$ is descriptive of a relationship that exists at the time when $i$ is measured. The reasons why $i$ has this value, or the causes of there being a particular $i$, are not relevant in the accounting measure. It might be that one or more companies have undermined the industry, a sector or a particular product. It is possible that the actions of the subject company have themselves, in whole or in part, contributed to the level of *brand insecurity*. Such things are not relevant in the assessment and use of $i$. Thus, $i$ is to this extent is an objective measure of a current uncertainty. It is not a subjective measure in any way liked to the origins uncertainty derived from negative consumer perception.

The present paper should be sufficient to enable companies to interpret and make practical the requirements of ISO 10668 for products where *brand insecurity* is a concern. In doing this, each company will develop its own particular methods of research in accordance with the principles we annunciate. In every case they should measure $i$ and thus achieve a standardized index that can be used to compare products in a particular year, compare different methods of assessment and thus gain an indication of reliability, and compare annual trends in *brand insecurity*.

**5. The Steps to Assess Brand Insecurity**

For those who have identified *brand insecurity* as an issue, the steps towards the inclusion of this factor in the financial accounts, in broad outline, are:

1. On the basis of incomes data use the usual techniques to forecast the income derived from a particular brand;
2. Identify the brands that are major contributors to *brand insecurity*. An objective method should be used to achieve this. Most companies will use exist surveys or focus groups. Although you might identify several brands that undermine your reputation it is probably best to focus on one of these in your initial valuations. In the steps that follow you are using data from one product as a surrogate of an amorphous public perception;
3. Establish a methodology which will assess the customers’ reaction to both your brand and the brand that generates the *brand insecurity*. Focus group and survey methodologies will be usual, but other methods are possible;
4. From your data generate the *brand insecurity index* in accordance with the definition given in the present paper. If the survey data uses a Likert scale, convert the outcomes to a percentage using one of the standard methods (Göb, McCollin, & Ramalhoto, 2007; Likert, 1932). As the data is comparative this procedure should be sufficiently valid and reliable. Some marketing researchers prefer the SERVQUAL approach to the measurement of attitudes which was introduced by Parasuramann a few decades ago. SERVQUAL consumer surveys are easy to manage and facilitate cardinal data (Göb et al., 2007)—they may be useful in the assessment of *brand insecurity*;
5. In your statement of financial position record the value of your brand, as per 1 above, and then show how you apply the *brand insecurity index* to discount your brand.

Accordingly, there are two movements in the assessment of $i$: 1) the identification of second-party brands with both positive and negative associations; 2) the assessment of the strength of those associations as a whole using a particular brand as a surrogate for the whole. Incidentally, methods which attempt to measure the strength of the consumers’ reaction to the whole situation address something which is too amorphous to produce reliable data. The surrogate has the advantage of being concrete and thus something consumer informants can report on it in a meaningful way. If there are no relevant second-party brands, or if their total effect is neither positive nor negative (calculated neutrality), the value of $i$ is 1. If the effect of second-party brands overwhelms the subject brand, the value of $i$ will be 0. The zero value indicates the subject band is valueless because of *brand insecurity*.

It is worth being explicit that *brand insecurity* is only indirectly related to competition. The definition of *brand insecurity* which is used in the valuations assumes the normal valuation techniques for brands take into account the presence and effects of competitors. *Brand insecurity* is a characteristic of a generic situation and not of any brand although use is made of a particular brand in the assessment of *brand insecurity*. 

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6. Conclusion

The valuation of intangibles—particularly dynamic brands—will continue to challenge managers and accountants in China’s dynamic and open economy. Because of the significant sums of money involved when valuations mislead investors and management decision-makers, it behoves us to improve the validity and reliability of brand valuations. ISO 10668 assists governments, accountants and line managers in companies to focus on important matters regarding brand valuation measurement. However, the standard says little about practical methods and leaves it to business to determine operational/research procedures. The standard problematizes the method. It challenges managers to select and develop the method of assessment that is most appropriate in their situation. Before managers can do this in many companies—those involved with the brand insecurity phenomena—further conceptual work is necessary. The present paper provides this work and introduces the brand insecurity index, \( i \). The index should facilitate the development of practical research strategies to address the precise situation of each company. It is not difficult to identify the threat of brand insecurity but establishing an appropriate comparative product for the assessment of the level of threat can be a challenge—remembering that the index to be calculated is a relative parameter facilities the process. Social science methodologies that measure perceptions, in general, are more accurate when they report comparisons. Brand insecurity refers to the consumers’ subjective perception and worry about the potential and actual threat from related brands. The steps we cite give sufficient guidance to managers; however, as it is important that each company develops its methods in accordance with its local situation and requirements, it is sensible not to prescribe a detailed method at this time. It remains the responsibility of the company officials to think through their situation and make professional judgments.

References


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