Migration Letters

Volume: 21, No: 2, pp. 857-880

ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online)

www.migrationletters.com

Brand Valuation: The Integrated Valuation Method for City Brand Performance

Sutan Banuara[1], Rizal Edy Halim[2], Daniel Tumpal Hamonangan Aruan[3], Yogo Purwono[4]

Abstract

This study differs from previous ones that focused only on customer mindset or financial metrics. Its purpose is to evaluate the performance of city brands in Indonesia using a brand value chain model that combines both behavioral and financial approaches, providing a more comprehensive measurement of city brand performance. The method incorporates the City Brand Strength Index (CBSI) to capture key dimensions of city brand competitiveness and integrates with the royalty rate method to calculate the brand value of the city brand. The study involved 12,052 participants, and the results demonstrate the method's effectiveness in measuring city brand performance. The findings provide valuable insights into the contribution of brand valuatioan and city brands and recommend expanding the scope of the study to global comparisons, incorporating an international perspective in CBSI, and applying the method to other contexts such as publicly listed brands. This research contributes to a comprehensive understanding of brand valuation and its potential implications for strategic decision-making.

Keywords: *brand strength, royalty relief.*

1. Introduction

The importance of brand valuation has increased over time and is now essential for marketing, accounting, management, mergers, and acquisitions (Wasserman, 2015). Regular brand valuation allows for the development of effective marketing strategies, higher return on investment, and increased profitability (Haigh, 2003). The adoption of IFRS 3 Business Combinations has also led to a growing interest in brand value, as it requires companies to assess all intangible assets and switch from market value to book value intangible assets.

There are several reasons why brand valuation is becoming increasingly important. First, it optimizes brand management by maximizing the usage of brands in areas like marketing, product development, and acquisitions, which can be achieved by understanding the value of a brand (Ambler & Barwise, 1998; Salinas, 2009) and incorporating marketing and brand-measuring activities into the firm's measurements (Doyle, 2001).

[1] Faculty of Economics and Business University of Indonesia, sutan.banuara@outlook.com
[2] Faculty of Economics and Business University of Indonesia
[3] Faculty of Economics and Business University of Indonesia
[4] Faculty of Economics and Business University of Indonesia

It also helps companies plan better brand strategies by understanding brand values in a particular market and industry context. Additionally, brand valuation is useful for brand asset management, positioning strategy, brand portfolio optimization, and investment justification (Sinclair, 2011). Second, brand valuation serves as a tool for comprehensive and strategic decision-making for the firm, such as marketing accountability, brand manager performance, and brand investment (Fischer & Himme, 2017; Narayan, 2012; Yazdanparast & Bayar, 2021). By employing brand valuation data, firms can make better decisions and integrate it with other tangible and intangible assets to create stronger business processes (Doyle, 2001). Furthermore, firms can compare the cost of marketing and advertising campaigns to build their brands vs. buying an established brand (Ambler & Barwise, 1998; Blackett, 1991). Third, brand valuation helps protect a firm's brand from use or infringement by others (Huang, 2015). High brand value can be an effective tool in protecting a firm's brand rights. Fourth, brand valuation becomes a reference in acquisitions, as it is an important consideration in determining how valuable the brand is to the business (Ambler, 2000; Kapferer, 2012). Transparency and understanding of brand valuation policies can prevent potential conflicts, especially in M&A or brand license agreements. Fortune magazine's survey results show that 40–75% of a firm's intangible assets are often tied to brands (Kumar et al., 2019). Fifth, brand valuations increase transparency in a firm's financial statements and provide investors and shareholders with more complete information about a firm's assets and performance (Dorfleitner et al., 2019; Kerin & Sethuraman, 1998; Lee, 2012). Finally, brand valuation increases investor confidence by providing a trusted and transparent valuation that signals positive growth potential and profit potential (Laghi et al., 2020). A good understanding of brand valuation helps communicate better to shareholders, investors, and other stakeholders, strengthening their belief in the brand and enterprise value (Macias et al., 2021).

However, marketing faces challenges in quantifying and communicating the financial value generated by marketing activities to other disciplines, even though many firms rely on their brands for financial success (Keller & Brexendorf, 2018; Sinclair, 2011). There is a disagreement over how to evaluate a brand and who should perform the valuation, which is a significant challenge for managers and firms (Huang, 2015; Virvilaite & Jucaityte, 2008). Brand valuation is a complex process that requires appropriate measurement methods for the research purpose and context (Haigh & Knowles, 2004). Although various methods have been proposed, not all of them can be applied universally (Aghaei, 2020). Critics argue that these methods lack objectivity, and many companies do not assess brands due to the lack of proper methods (Beccacece & Borgonovo, 2009; Günther & Kriegbaum-Kling, 2001). Despite the evolution of models and methods, finding suitable and reliable valuation methods remains challenging (Seetharaman et al., 2001).

Companies and professionals in various fields should evaluate their valuation methods and find alternative methods if necessary to address the brand valuation gap (Kapferer, 2012). Regular updates to reflect market conditions, strategies, and business environments are crucial for maintaining brand value (Salinas, 2009). Transparency is essential, ensuring stakeholders have access to the data used in valuation. Regular monitoring of brand performance is crucial to understanding how changes in strategies and marketing efforts affect performance and values (Janoskova & Krizanova, 2017). Companies should have sufficient and quality data for valuation, evaluate resources for relevant data, and invite external views to evaluate brand valuation (Salinas, 2009). Continuous improvement in the brand valuation process, including repeated evaluations, methodological updates, and expertise development, is necessary. By taking these steps, companies can minimize brand valuation gaps, optimize their brand strategy, and understand brand values in a broader business context. A framework for measuring brand performance holistically has been proposed by Keller (2012) through the brand value chain model, which describes strong relationships at the consumer level that will have a monetary impact at the firm level due to marketing activities.

This study aims to develop a brand valuation method for city brands using Keller's brand value chain model, focusing on the relationships between customer mindset and market performance (Anselmsson & Bondesson, 2015). To test the valuation method, the research focuses on the relationship between customer mindset-marketing performance relationship which is transformed into a visitor mindset-economy performance relationship. The study does not include shareholder value, as it is too distant from the responsibility of a brand manager (Anselmsson & Bondesson, 2015). The data is collected on the perceptions of visitors towards the most visited cities, as they have had strong experiences as a baseline for assessment. If the study aims to measure city brand performance independently, using city residents as respondents can be accepted. However, if the goal is to indicate a competitive advantage in city brand ranking, using visitors as respondents provides more accurate, fair, and objective results (Anholt, 2006b, 2007). Visitor perceptions of cities are used as a unit of analysis at the city level, along with projections of city GDP, growth rate, and discount rate (Temporal, 2015).

2. Literature review

Brand value is created through marketing activities, which ultimately increases firm value from time to time (Mills, 2005). Therefore, brand valuation should not be ad hoc or designed against the owner's will, and brand owners must carefully consider what they are measuring and why (Haigh, 2003).

Brand valuation is a discipline that helps identify the financial worth of marketing and connects marketing and finance departments (Haigh, 2000). A regular brand valuation leads to higher returns on investment and profitability. Aaker and Jacobson (1994) and Doyle (2000) emphasize its importance for sustainable success, superior brand equity, and effective marketing management. Brand valuation helps companies achieve sustainable success and maintain superior brand equity.

Brand valuation is a process by experts that determines the value of a brand based on-premises or hypotheses, considering stakeholder objectives and opinions (Salinas, 2009). It is a management tool that helps in analyzing brand performance, particularly in terms of profit (Penrose & Moorhouse, 1989). Brand valuation helps in brand planning, advertising, and marketing strategy determination. It also aids in prioritizing financial resources, providing a solid basis for internal financial valuation and return on investment criteria, and aiding in determining royalty rates (Salinas, 2009). Overall, brand valuation is a crucial tool for businesses to assess their competitiveness and value (Chiaravutthi, 2010; Ginevièius & Guda čiauskas, 2004).

2.1 Conceptual framework of brand valuation for city brand

This study examines the brand value of a city brand using Keller's brand value chain framework, focusing on the relationship between customer mindset and marketing performance. It transforms customer mindset-marketing performance relationships into visitor mindset-economy performance relationships. The study does not measure the city development program's investment, as input quality is influenced by various factors (Keller, 2012). The study also excludes shareholder value as it is too far from the responsibility of the brand manager (Anselmsson & Bondesson, 2015). The visitor mindset is measured using city brand strength using a city brand hexagon (Anholt, 2006b), and the economic performance of a city brand is measured using the royalty rate method applied to the Gross Domestic Product (Rubio et al., 2016; Temporal, 2015).

The value chain starts with the city development program, which affects the visitor mindset. A visitor is an external customer of a city that uses its products and services, providing a more objective valuation than a resident (Temporal, 2015). They have significant leverage on a city's GDP due to their spending, skills, and capital capabilities

(Hospers, 2008; Jørgensen, 2014; Lahrech, Alabdulwahab, et al., 2020; Petrick, 2004; Schade et al., 2018; Turok, 2009).

Visitor mindset affects how visitors react, such as premium rates and the elasticity of tariffs. Despite higher prices, visitors are still willing to buy products and choose to visit, travel, and learn in the city, as the benefits obtained are still higher for them (Manthiou et al., 2014).

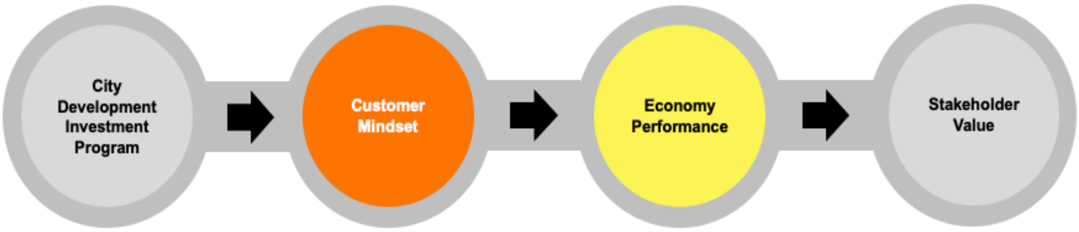


Figure 1. Brand Value Chain model for City Brand

The study uses visitor perception data from the most visited cities to evaluate city brand performance using the City Brand Strength Index, as a component in the financial method (Gupta et al., 2020; Temporal, 2015). The visitor perception is more accurate, fair, and objective than using city residents, as it allows for comparison of cities visited. Other data used includes projections of GRDP, growth rate, and discount rate.

2.2 Behavior approach

2.2.1 City Brand Strength Index

A strong brand offers differentiation and relevance, benefiting consumers and competing with other brands (Rubio et al., 2016). This differentiation affects revenue and profit levels, determining the royalty rate for brand users. Brand strength ensures future revenue as it is the customer's choice (Srinivasan et al., 2012), leading to increased sales, brand loyalty, and greater market share (He & Calder, 2020). A strong city brand not only increases transaction volume but also boosts the business value of the city by serving as a brand umbrella for goods produced and conducted there.

The city brand hexagon is used to measure brand strength, focusing on dimensions such as presence, potential, people, prerequisites, place, and pulse (Anholt, 2006b). These dimensions indicate a city's competitiveness, which is significant for economic performance. Brand strength is a non-monetary scale that measures the overall attraction of consumers to a brand compared to other brands (He & Calder, 2020). It is used in the brand valuation method to determine a brand's royalty rate by multiplying its royalty rate against the GRDP projection (Salinas, 2009).

Based on the description of brand strength above, the mathematical model of brand strength becomes City Brand Strength Index (CBSI) = ⨍ (Presence, Place, Potential, Pulse, People, Prerequisite) so that it can be written in the following equation:

$$\mathrm{CBSI} = \frac{\mathrm{Presence} + \mathrm{Place} + \mathrm{Potential} + \mathrm{Pulse} + \mathrm{People} + \mathrm{Prerequisite}}{\mathrm{MS}} \quad \text{... (3.1)}$$

Where:

MS : maximum score

2.3 Financial approach

Brand value can be measured using various methods, including cost-based, market-based, and income-based approaches (Seetharaman et al., 2001). Cost-based estimates the cost of creating and developing a brand, including name, logo, and marketing campaign. However, it is less preferred by marketers as it doesn't capture value-added in branding and marketing activities. Market-based estimates brand value by analyzing a firm's financial performance and comparing it to similar companies (Lagarden, 2012). The key challenge is determining market value, as there is no market for brand transactions like the stock market. Income-based valuation is popular and easy to use, based on potential future net revenue calculated using GRDP. Other income-based methods include Premium Price and Premium Volume, Royalty relief, income split, multi-period excess earning, and incremental cash flow. 77% of brand valuation methods use this approach, while 23% use royalty relief methods (Salinas, 2009).

2.3.1. Royalty relief

Royalty relief is a method used to estimate future income from royalty payments based on brand ownership (Laghi et al., 2020). It is preferred by many countries due to its simplicity and ease of application (Sattler et al., 2002). The method measures brand value based on documented real transactions and uses publicly available information, allowing direct comparisons from year to year. However, it has drawbacks like a lack of comparable royalty rate market data and subjectivity in determining royalty range. Accounting standards prioritize royalty relief as the most important method, as the assessed asset must meet accounting standards (Rubio et al., 2016).

A royalty range is a set of royalty rates applicable to economic sectors that generate Gross Regional Domestic Product (GRDP), including primary, secondary, and tertiary sectors (Temporal, 2015). The rate is applied to GRDP projections to determine revenue attributable to City Brand, which is then discounted at present value. The projected GRDP over the next five years represents Brand value, calculated by discounting the income attributable to City Brand at present market value (Haigh, 2010).

Royalty relief has many applications, but it must be smaller than the level of additional profit earned by the licensee, or the licensee will not sign the license contract. There are two general guidelines for determining royalty rates: the 25% rule and the 5% rule (Smith & Parr, 2018). In this study, the 5% rule based on income becomes an easier and more relevant reference to be applied to GRDP projections because, in the structure of GRDP, the term profit is not known. The royalty rate is accurately determined based on various sectors of the economy and applied to GRDP projections for the next five years (Temporal, 2015). The discount rate is then applied to the results of these calculations to account for the time value of money and the risks associated with brand assets (Hull, 2022). The result is the value that brands contribute to the economy (Temporal, 2015).

2.3.1.1 The royalty rate method for city brand

The first step is to assign the royalty range. Based on the analysis of generally available licensing agreements in primary, secondary, and tertiary sector industries, When the economic activity of a city moves from basic industrial products in the primary sector to more advanced services in the tertiary sector, the royalty rate increases due to the value added to the city's economy also getting bigger (Temporal, 2015).

The second step is to set a royalty range influenced by the City Brand. The royalty range is adjusted to consider the influence of the City brand in general in each economic sector. This analysis is to isolate the influence or portion of the city brands in each sector of the economy. Industries in the primary and secondary sectors are strongly influenced by city brands (e.g., California Papaya, Washington Apple). City brands are not a significant driver of demand for tertiary sectors such as financial services; therefore, the primary sector has a level of influence of 25 percent, 20 percent in the secondary sector, and 15 percent in the tertiary sector. As an illustration, if the royalty range in the primary sector is 2–6%, then with the influence of city brands in the primary sector of 25%, the royalty range in the primary sector is 0.5–1.5%, as seen in Table 1.

The third step is to calculate the royalty rate using CBSI. CBSI is applied to the royalty range for each economic sector to determine the royalty rate applicable to primary, secondary, and tertiary GRDP segments (Temporal, 2015). For example, if Palembang gets a CBSI score of 73, that is applied to the royalty range to determine the royalty rate that applies to City Brand. If the maximum royalty range in the primary sector is 1.5%, then the royalty rate to City Brand Palembang in the primary sector is 1.10%, in the secondary sector 1.17%, and in the tertiary sector 1.10%.

2.3.2 The process of forming the City Brand Valuation method

In general, additional advantages for licensees, π_l is the operating profit expected by the licensee due to the use of a brand license, π_L (which is expected to be obtained from the sale of the licensee, S_L) minus operating profits from unlicensed revenue, π_{NL} (to be obtained from the sale of the same or similar goods sold without a brand license, S_{NL}): $\pi_l = \pi_L - \pi_{NL}$. $r_{\pi l}$ is defined as the royalty rate to be selected if π_l is the royalty base. Suppose, for example, the licensor agrees to a 25/75 share of the licensee's profits, such that $r_\pi l$ = 25% (i.e. 25% to the licensor). Total royalties paid if additional profit as the royalty base, $R_{\pi I}$, will be 25% of the present value of the profit projected by the licensee, or $R_{\pi l} = 0.25 \text{ x } \pi l$. In general, it is written as follows

$$R_{\pi l} = r_{\pi l} \text{ x } \pi_l \qquad \text{... (3.2)}$$

r_{SI} is defined as the royalty rate paid based on the income received by the licensee, S_I, as the royalty base. Total royalties paid with additional income as royalty base, R_{SI} are as follows:

$$R_{SI} = r_{SI} \text{ x } S_I \qquad \text{... (3.3)}$$

Equation (3.3) is the fundamental equation for determining the royalty rate to be agreed upon. The market royalty rate is determined by the negotiation of additional profit sharing, as reflected in $r_{\pi l}$, The next question is how r_{SI} if $R_{SI} = R_{\pi l}$? When $R_{SI} = R_{\pi l}$, then $r_{SI} \text{ x } S_I = r_{\pi I} \text{ x } \pi_I$ so that the equation becomes:

$$r_{SI} = r\pi l \text{ x } \frac{\pi l}{SI} \qquad \text{... (3.4)}$$

Fiscal authorities require justification of brand value, to determine whether the value has been transferred to another fiscal jurisdiction at fair value and to ensure that no fiscal liability can be avoided (Salinas, 2009). If it is assumed that the firm operates within 1 period where the current period is t=0 and at the end of the year is t=1, then the value of R_{SI} after tax at the end of the period t=1 can be expressed as follows:

$$R_{SI,1} = [rSI \text{ x } SI \text{ x } (1 - tax)] \qquad \text{... (3.5)}$$

Equation (3.5) is the equation used if the royalty payment is made at the end of the period, but if the royalty payment is made in advance, the present value must be calculated at this time or at time t = 0, then the net royalty that must be paid at the beginning of the year is:

$$R_{SI,0} = \frac{rSI \text{ x } SI \text{ x } (1-tax)]}{(1+d)^1} \qquad \text{... (3.6)}$$

d is defined as the discount rate which is the interest rate that is assumed to apply constantly based on the average interest rate of the previous period to obtain the present value of the brand value.

According to Kapferer (2012), and Dorfleitner et al. (2019), a method for valuing brands entails estimating the projected annual revenue associated with the brand over 5 years. Beyond those periods, the assumption is that income is constant to infinity (Lindemann, 2010), and the net royalty value to be paid today or at time t = 0 as a result of utilizing a brand license can be stated as follows:

$$R_{SI,0} = [\frac{rSI \text{ x } SI \text{ x } (1-tax)}{(1+d)^1}] + [\frac{rSI \text{ x } SI \text{ x } (1+g)^1 \text{x } (1-tax)}{(1+d)^2}] + [\frac{rSI \text{ x } SI \text{ x } (1+g)^2 \text{x } (1-tax)}{(1+d)^3}] + [\frac{rSI \text{ x } SI \text{ x } (1+g)^3 \text{x } (1-tax)}{(1+d)^4}] + [\frac{rSI \text{ x } SI \text{ x } (1+g)^4 \text{x } (1-tax)}{(1+d)^5}] + [\frac{rSI \text{ x } SI{,}6 \text{ x } (1-tax)}{(1+d)^6}] +$$

$$[\frac{rSI \text{ x } SI,7 \text{ x } (1-tax)}{(1+d)^7}]+\ldots$$

The above formula can be simplified to:

$$R_{SI,0}= \frac{\sum_{t=1}^{5}[rSI \text{ x } SI \text{ x } (1+g)^{t-1} \text{ x } (1-tax)\,]}{(1+d)^t} + \frac{\sum_{6}^{\infty}[rSI \text{ x } SI,6 \text{ x } \left(1 + E5\ (g6)\right)^{5x}\ (1-tax)\,]}{(1+d)^t}$$

By applying the principle of geometric series addition to the equation above, the net royalty value that must be paid at the beginning of the period or when t = 0 can be expressed by the following equation:

$$R_{SI,0} = \frac{\sum_{t=1}^{5}[rSI \text{ x } SI \text{ x } (1+\,\varepsilon t-1(gt))^{t-1} \text{ x } (1-tax)\,]}{(1+dt)^t} + \frac{[rSI \text{ x } SI,6 \text{ x } \left(1+\varepsilon 5(g6)\right)^5 \text{x } (1-tax)]}{d6\ (1+d)^6} \quad \ldots (3.7)$$

g is defined as the growth rate which is the growth rate of revenue geometrically.

Equation (3.7) is used to calculate brand value independently but to distinguish the brand value of a brand in the same category. According to Rubio et al. (2016) and Salinas (2009), the royalty rate used must reflect "brand strength", which is the position of the brand in the market. Similar to how the position of product brands in the market affects the level of demand and selling prices, which affect the level of income. In the context of the city, brands also affect the level of demand and selling prices for goods and services offered by a city, which affects GRDP (Fetscherin & Dinnie, 2010; Kotler & Gertner, 2002; Paliaga et al., 2010; Sinclair, 2004); therefore, the equation becomes:

$$R_{SI,0}= \frac{\sum_{t=1}^{5}[r_{SI} \text{ x } BS \text{ x } SI \text{ x } (1+\,\varepsilon t-1(gt))^{t-1} \text{ x } (1-tax)\,]}{(1+d_t)^t} + \frac{[rSI \text{ x } BS \text{ x } SI,6 \text{ x } \left(1+\varepsilon 5(g6)\right)^5 \text{x } (1-tax)]}{d_6\ (1+d)^6} \quad \ldots (3.8)$$

BS is defined as Brand strength, which is an evaluative response or behavior that influences brand choice against competitors consisting of several dimensions in the form of percentages.

S_I : Sales in the t-period;

r_{SI} : Royalty Rate Per economic sectors applied to city brands;

tax : tax rates;

d_t : discount rate for year t, it is extracted from Indonesia Government Bond Yield and Price to obtain net present value.

$\varepsilon_{t-1(gt)}$: growth expectations in year t, if there is GRDP information and noise in previous periods

In the context of city brands that are influenced by brand strength, the equation above, becomes:

$$BV = \frac{\sum_{t=1}^{5}[RR \text{ x } BS \text{ x } GRDP_{t-1} \text{ x } (1+\,\varepsilon t-1(gt))^{t-1} \text{ x } (1-tax)\,]}{(1+d_t)^t} + \frac{[RR \text{ x } BS \text{ x}GRDP_5 \text{ x } \left(1+\varepsilon 5(g_6)\right)^5 \text{x } (1-tax)]}{d_6\ (1+d_6)^6} \quad \ldots (3.8)$$

GRDP : Gross Regional Domestic Product in the t-period;

RR : Royalty rate applied to city brand;

BS : Brand Strength

tax : tax rates;

d_t : discount rate for year t, it is extracted from Indonesia Government Bond Yield and Price to obtain net present value.

$\varepsilon_{t-1(gt)}$: growth expectations in year t, if there is GRDP information and noise in previous periods

2.4 Research method

The methodology for conducting brand valuation includes the following two stages: First, the behavior approach stage, which measures the City Brand Strength Index (CBSI); Second, the financial approach stage which measures the brand value consists of four steps, which are: 1a) Determining GRDP projections; 1b) establishing the Royalty Range per economic sector; 2a) establishing the royalty range with the influence of the city brand; 2b) setting the royalty rate using CBSI; 3) Determine the discount rate; 4) Conduct the Brand valuation.

The CBSI measurement method uses the city brand hexagon coined by Anholt (2006b), while the financial approach uses the royalty relief method (Bagna et al., 2017; Chiaravutthi, 2010; Rubio et al., 2016). CBSI measurement is performed through direct surveys of visitors to the city (Anholt, 2006b), while the financial approach stage uses the GRDP performance, growth rate, discount rate, and tax rate (Temporal, 2015). GRDP performance data is obtained from the Central Bureau of Statistics, and the discount rate is obtained through the extraction of Indonesian government bond yield and price from the Indonesia Bond Pricing Agency using the method described by Hull (2022). The determination of the growth rate is performed using the time series analysis method described by Box et al. (2016) the quarterly performance of GRDP in 2011–2022, which will be used to forecast GRDP for 2023–2028.

3 Result

3.1. Data Analysis

The primary data collection to measure the City Brand Strength Index (CBSI) was performed using Google Forms, which were circulated through social media. The target respondents are visitors who have visited cities in Indonesia. The questionnaire distributed through social media generated 15,680 respondents. After removing the invalid data by filtering questions, duplicate data, and an assessment of their home city, which tends to be non-objective, the valid data to be used in measuring CBSI are 12,052 respondents with the following profile, as seen in Figure 2.

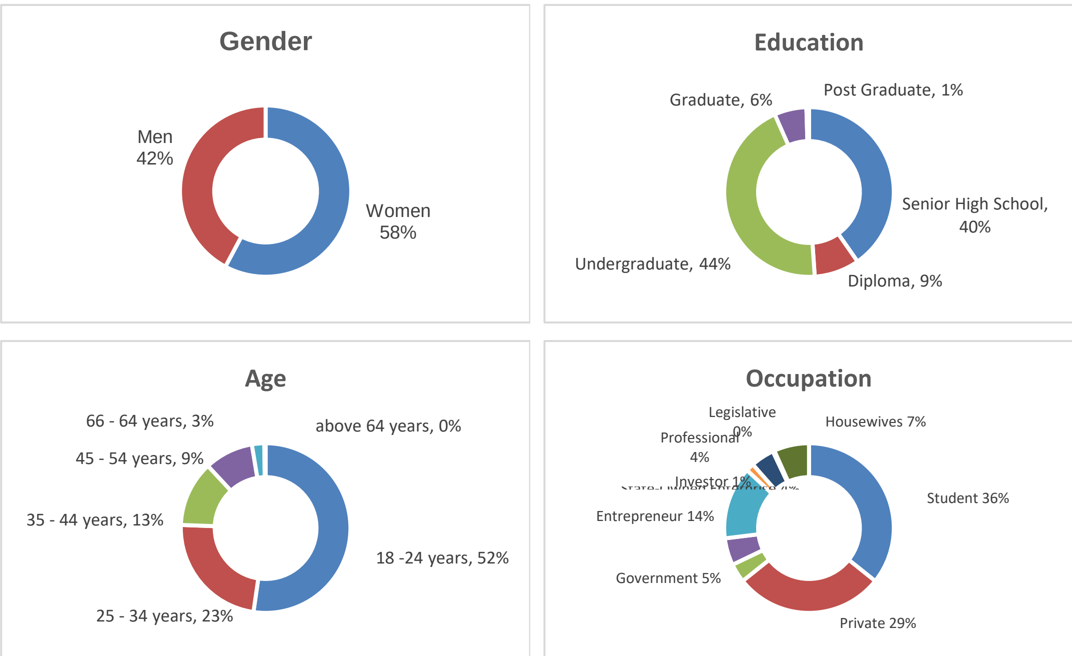


Figure 2. Respondent profile

Ten cities were visited and rated by 83.65% of respondents, and twenty cities were visited and rated by 92.81% of respondents. The 20 most visited cities in Indonesia, including Bandung, Yogyakarta, Denpasar, Jakarta, Surabaya, Semarang, Medan, Bandar Lampung, Palembang, Padang, Malang, Makassar, Manado, Pontianak, Bogor, Banda Aceh, Pangkalpinang, Solo, Banjarmasin, and Ambon, have sufficient data for assessment. Other cities were excluded due to too few respondents.

Major cities in Indonesia dominate the respondents' origin city; twenty cities with the highest number of respondents, including Jakarta, Bandung, Tangerang, Bekasi, Yogyakarta, Semarang, Surabaya, Bogor, Medan, Denpasar, Bandar Lampung, Jambi, Palembang, Banjarmasin, Makassar, Pekanbaru, Pontianak, Serang, Depok, and Manado, are listed in Figure 3. The remaining are 152 cities in Indonesia.

Forty respondents came from Singapore, Sydney, Melbourne, Perth, Taipei, Kuala Lumpur, Johor, Bangkok, Beijing, Berlin, Clausthal Zellerfeld (Germany), Bartin (Turkey), Busan, Hong Kong, Zimbabwe, Phnompen, London, Los Angeles, Sacramento, San Francisco, Seattle, Nigata (Japan), Saint Ives, and Vancouver.

3.2. City Brand Strength Index Results

CBSI measurements are calculated by computing the mean value on a scale of 1 to 10 (Anholt, 2006b; Rubio et al., 2016). A higher mean value implies that the City Brand is stronger, indicating that the visitor has a positive opinion of the city brand since the city delivers benefits or value to the visitor in numerous qualities (Keller, 2012; Raggio & Leone, 2007). The CBSI is then determined as a percentage to be utilized as a moderator of the royalty rate (Salinas, 2009).

According to the CBSI, Denpasar has the strongest City Brand in Indonesia. The CBSI score ranges from 12.7 points at the maximum, with a CBSI score of 80.5 for the city of Denpasar and a brand rating of AAA- (very strong), to 69.5 for Banjarmasin, with a score of 69.5 and a brand rating of AA- (very strong).

Rank	City Brand	City Brand Strength Index	Brand rating	
1	Denpasar	80,5	AAA-	Extremely strong
2	Yogyakarta	79,3	AA+	Very strong
3	Bandung	77,0	AA+	Very strong
4	Malang	76,9	AA+	Very strong
5	Solo	76,7	AA+	Very strong
6	Padang	76,1	AA+	Very strong
7	Bogor	75,5	AA+	Very strong
8	Surabaya	74,9	AA	Very strong
9	Jakarta	74,7	AA	Very strong
10	Medan	74,7	AA	Very strong
11	Semarang	74,5	AA	Very strong
12	Manado	74,1	AA	Very strong
13	Pangkalpinang	74,1	AA	Very strong
14	Pontianak	73,5	AA	Very strong
15	Palembang	73,1	AA	Very strong

16	Ambon	72,0	AA	Very strong
17	Makassar	71,9	AA	Very strong
18	Banda Aceh	71,1	AA	Very strong
19	Bandar Lampung	69,6	AA-	Very strong
20	Banjarmasin	69,5	AA-	Very strong

Table 3. Brand Performance Ranking of 20 Cities in Indonesia based on

CBSI is a tool that assesses the value of visitors to a city brand based on their interaction with the brand. It provides a detailed score that highlights the competitiveness of each brand and areas for improvement. Understanding CBSI scores can help marketers and city governments identify areas for improvement. However, the key question is whether visitor perception impacts the city's economic performance, specifically GRDP growth. The CBSI score is a leading indicator of the effectiveness of city government efforts, but it cannot provide a definitive answer. Brand valuation is used to analyze economic performance, determining the city's brand value as a monetary result of efforts and investments in building the brand (Keller, 2012).

3.3. Brand Valuation

3.3.1. Calculating GRDP Projections

GRDP projections for cities selected and assessed by respondents, using a database of GRDP performance per quarter for the period 2010–2022, so that there are 44 time series data that are sufficiently used—more than the minimum number needed of 30 data—to be processed using the Autoregressive Integrated Moving Average model (ARIMA) using STATA application version 14.0. The ARIMA model is very accurate for short-term forecasting because the forecasting carried out for the period 2023–2028 is the right choice.

The results of calculating all recommended ARIMA models are then compared to see which model best meets the criteria, as seen in Table 4, to be used to forecast the GRDP period 2023–2028 to be used in brand valuation. The results of forecasting Palembang's GRDP data for the 2023–2028 period using the ARIMA model are listed in Table 8 below.

Year	Actual (USD billion)	Forecasting (USD billion)
2010	4,31	
2011	4,78	4,83
2012	5,31	5,35
2013	6,01	5,98
2014	6,71	6,67
2015	7,63	7,56
2016	8,35	8,33
2017	9,13	9,09
2018	10,01	9,96
2019	10,89	10,85

2020	10,99	11,17
2021	11,47	11,51
2022	12,64	12,57
2023		12,80
2024		13,45
2025		14,10
2026		14,75
2027		15,60
2028		16,27

Table 4. The GRDP of Palembang City: Actual Data versus Forecasting for 2012–2028 (USD billion)

Table 4 shows the predicted GRDP of Palembang for the period 2023–2028 based on historical actual data for the GRDP period 2010–2022. By using the ARIMA model (3, 1, 3), it is projected to deliver the most accurate results of the economic performance of Palembang for the next five years. Figure 3 is the illustration of Table 4, which indicates a good level of congruence between the actual data of the GRDP period 2010–2022 and the projected GRDP for 2023–2028.

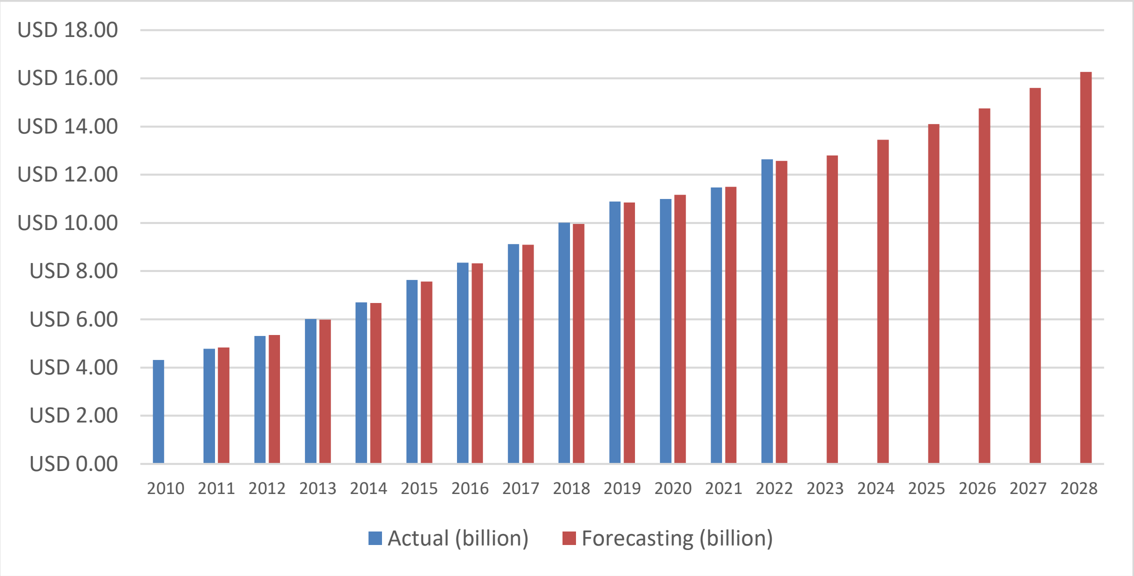


Figure 3. The GRDP of Palembang City: Actual Data versus Forecasting for the 2012–2028

3.3.2. Calculating Royalty Rate

The process of calculating the city brand royalty rate was previously explained, beginning with determining the royalty range in each economic sector of the GRDP, including the contribution of the city brand to the royalty range, to obtain an accurate royalty rate for each city brand based on its brand strength.

3.3.3. Determining the Discount Rate

The discount rate used in calculating city brand value is based on the government bond yield and the price reported by the Indonesia Bond Pricing Agency (www.ibpa.co.id). The discount rate is best suited for determining the worth of city brands, which are intangible assets owned by the city government.

3.3.4. Calculating Brand Value

The final stage is to calculate the brand value of the city brand utilizing the brand valuation method below.

$$BV = \frac{\sum_{t=1}^{5}[RR \text{ x } BS \text{ x } GRDP_{t-1} \text{ x } (1 + \varepsilon t - 1(gt))^{t-1} \text{ x } (1 - tax)\ ]}{(1 + d_t)^t} + \frac{[RR \text{ x } BS \text{ x} GRDP_5 \text{ x } \left(1 + \varepsilon 5(g_6)\right)^5 \text{x } (1 - tax)]}{d_6\ (1 + d_6)^6}$$

Brand valuation using the royalty rate formula employs CBSI components that indicate the competitiveness of each city brand (Gupta et al., 2020; Temporal, 2015). After obtaining the brand value of the twenty city brands, it can be arranged in the ranking of 20 city brands with the most valuable brand. The city with the most valuable brand in Indonesia is Jakarta, with a value of USD 47.814 billion—the details of the ranking as seen in Table 6.

BV ranking	City	Brand Value (USD billion)
1	Jakarta	47.814
2	Surabaya	9.640
3	Bandung	5.136
4	Medan	4.361
5	Semarang	3.458
6	Makassar	3.233
7	Palembang	3.061
8	Yogyakarta	2.623
9	Malang	1.349
10	Padang	1.160
11	Bandar Lampung	1.051
12	Denpasar	983
13	Solo	849
14	Bogor	836
15	Pontianak	757
16	Manado	573
17	Banjarmasin	523
18	Ambon	340
19	Pangkalpinang	248
20	Banda Aceh	208

Table 5. Top 20 City Brands Value Performance in Indonesia

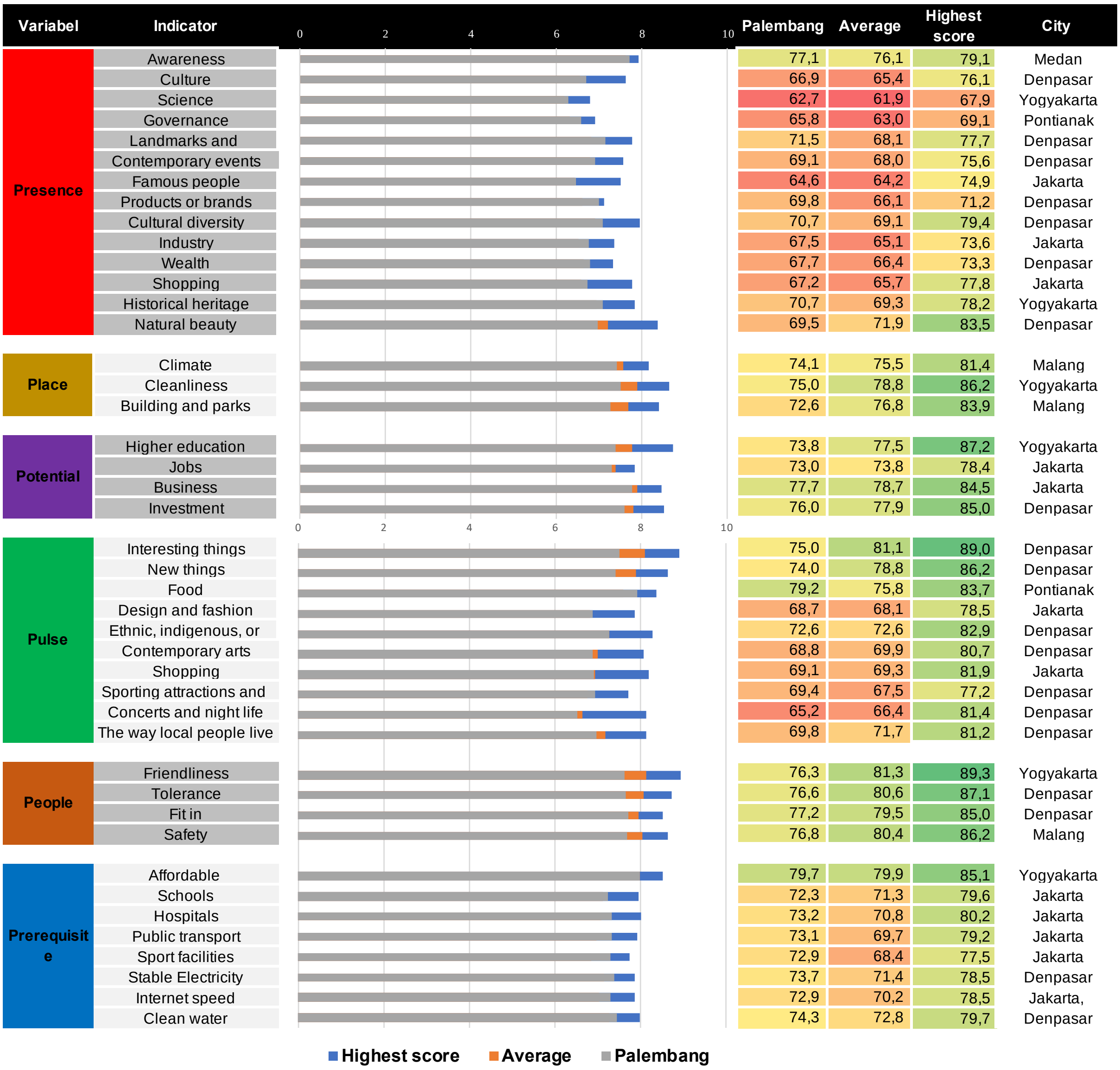
4. Discussion

The brand valuation method is a crucial tool for evaluating the performance of city brands at both visitor and government levels. It explains the relationship between visitor perception and economic performance, highlighting that higher visitor perception leads to a higher royalty rate against projected economic performance, resulting in higher brand value (Anselmsson & Bondesson, 2015; Keller, 2012). The CBSI component of the brand valuation method can identify dimensions that city governments must develop to deliver higher benefits to visitors. The royalty rate method can demonstrate city brand contribution from increased economic activity, allowing central and city governments to allocate investment funds more effectively (Fischer & Himme, 2017; Yazdanparast & Bayar, 2021).

However, the method is only suitable for city brands and should be carried out by both central and city governments to improve the city's ability to provide benefits to visitors and increase economic activity, impacting economic growth (Wymer & Casidy, 2019). Regular valuations are necessary to monitor the effectiveness of budget allocation and trends in city development investment programs (Haigh, 2000).

The CBSI method addresses gaps in method objectivity, transparency, adequacy, quality of data, and relevant data sources. Brand value is crucial for a city brand's profitability and potential to improve GRDP and Original Local Government Revenue surplus (Kumar et al., 2019). The growth of brand value may indicate the potential economic growth of the city brand with increasing visitors, investors, and workers. This intangible asset value, which is the most valuable asset in business, is similar to the increase in tangible asset values like land and buildings due to greater economic potential (Penrose and Moorhouse 1989). The growth of the brand value may indicate the potential of the economic growth of the city brand' in the future with increasing visitors, investors, and workers.

A superior city brand must be superior when compared to all other city brands, as visitors favor the city brand (Turok, 2009). Every brand must have a competitive advantage in key areas (Aaker & Joahimstaller, 2000). Similarly, a superior city brand must be superior when compared to all other city brands (Turok, 2009). If a city brand attains a higher ranking, economic performance should improve because visitors favor the city brand (Barth et al., 1998; Hsu et al., 2013; Kallapur & Kwan, 2004; Kumar et al., 2019). If superior positions have no impact on economic performance, the local government has failed to capitalize on these superiorities. Superiority allows city brands to control tourism market share, investment funds, trade surplus, and highly qualified human resources. An analysis of brand performance at the visitor level can be performed to improve brand performance and catch up with superior city brands as seen in Figure 4.



Variabel	Indicator	Palembang	Average	Highest score	City
Presence	Awareness	77,1	76,1	79,1	Medan
	Culture	66,9	65,4	76,1	Denpasar
	Science	62,7	61,9	67,9	Yogyakarta
	Governance	65,8	63,0	69,1	Pontianak
	Landmarks and	71,5	68,1	77,7	Denpasar
	Contemporary events	69,1	68,0	75,6	Denpasar
	Famous people	64,6	64,2	74,9	Jakarta
	Products or brands	69,8	66,1	71,2	Denpasar
	Cultural diversity	70,7	69,1	79,4	Denpasar
	Industry	67,5	65,1	73,6	Jakarta
	Wealth	67,7	66,4	73,3	Denpasar
	Shopping	67,2	65,7	77,8	Jakarta
	Historical heritage	70,7	69,3	78,2	Yogyakarta
	Natural beauty	69,5	71,9	83,5	Denpasar
Place	Climate	74,1	75,5	81,4	Malang
	Cleanliness	75,0	78,8	86,2	Yogyakarta
	Building and parks	72,6	76,8	83,9	Malang
Potential	Higher education	73,8	77,5	87,2	Yogyakarta
	Jobs	73,0	73,8	78,4	Jakarta
	Business	77,7	78,7	84,5	Jakarta
	Investment	76,0	77,9	85,0	Denpasar
Pulse	Interesting things	75,0	81,1	89,0	Denpasar
	New things	74,0	78,8	86,2	Denpasar
	Food	79,2	75,8	83,7	Pontianak
	Design and fashion	68,7	68,1	78,5	Jakarta
	Ethnic, indigenous, or	72,6	72,6	82,9	Denpasar
	Contemporary arts	68,8	69,9	80,7	Denpasar
	Shopping	69,1	69,3	81,9	Jakarta
	Sporting attractions and	69,4	67,5	77,2	Denpasar
	Concerts and night life	65,2	66,4	81,4	Denpasar
	The way local people live	69,8	71,7	81,2	Denpasar
People	Friendliness	76,3	81,3	89,3	Yogyakarta
	Tolerance	76,6	80,6	87,1	Denpasar
	Fit in	77,2	79,5	85,0	Denpasar
	Safety	76,8	80,4	86,2	Malang
Prerequisite	Affordable	79,7	79,9	85,1	Yogyakarta
	Schools	72,3	71,3	79,6	Jakarta
	Hospitals	73,2	70,8	80,2	Jakarta
	Public transport	73,1	69,7	79,2	Jakarta
	Sport facilities	72,9	68,4	77,5	Jakarta
	Stable Electricity	73,7	71,4	78,5	Denpasar
	Internet speed	72,9	70,2	78,5	Jakarta,
	Clean water	74,3	72,8	79,7	Denpasar

Figure 4. The CBSI of Palembang vs. Average Score vs. Highest Score

Figure 4 shows a brand performance study using CBSI Scores for monitoring and decision-making in Palembang, Indonesia. The city government needs to improve all aspects that score below average to become a superior city brand. The blue color indicates that Palembang's performance has not established superiority over competitors. The chart identifies city brands with superior positions in each indicator, allowing Palembang to benchmark best practices. Although 23 out of 43 CBSI measures are above average, no single assessment parameter demonstrates Palembang's superior position compared to other city brands in Indonesia.

The Palembang city government needs to innovate and develop programs that promote cleanliness to attract more visitors. For instance, water tourism on the Musi River offers a more pleasant dinner cruise experience than Bangkok's, due to cleaner water, neater banks, magnificent bridges, interesting scenery, and delicious food. The city government must also make numerous improvements and innovations to attract more visitors and enhance the overall experience.

The Denpasar city brand ranks first in brand performance measurement using the behavior approach, with a CBSI score of 80.5 and a brand rating of AAA- (very strong). This discovery validates Denpasar as a strong city brand, as well as Bali Island is a world-class tourist destination. According to the CBSI rankings, no city brand in

Indonesia gets a AAA+ (very strong) grade. This is undoubtedly homework for all city brands to review all city development program investments so that city brands in Indonesia may compete with the cities of London, Sydney, Paris, New York, and Rome, which now hold the top positions on the Anholt City Brands Index in 2020.

Denpasar is superior on 20 indicators (culture, landmarks and architecture, contemporary events, products or brands, cultural diversity, wealth, natural beauty, investment, interesting things, new things, ethnic, indigenous, or minority culture, contemporary arts, sports attractions, and events, concerts, and nightlife, the way local people live, tolerance, fitting in, stable electricity, interconnectivity, etc.) Medan is superior on 1 indicator, Yogyakarta is superior on 6 indicators, Pontianak is superior on 2 indicators, Jakarta is superior on 11 indicators, and Malang is superior on 3 indicators. It is expected that the superiority of Indonesian city brands will develop with time, enabling them to compete with city brands from around the world, such as London and New York, which have become the locomotives of great change.

Table 6 shows the difference in rating between brand performance ratings based on CBSI and brand performance ratings based on brand value for each city brand. Denpasar is the city brand with the highest CBSI rank, although it ranks 12th in terms of brand value. The city government of Denpasar has three duties to achieve. The first is to maintain its lead in 19 indicators. Second, improving the superior position in 24 indications where it is still underperforming other city brands. Third, strengthen the ability to capitalize on 19 indicators with a higher possibility of enhancing GRDP.

Jakarta, a city brand with a value of USD 47.6 billion, ranks first in terms of brand value but has a third-ranked brand performance ranking based on CBSI. The city government needs to improve its superior position to significantly increase its GRDP. CBSI identifies 23 indicators for improvement, while 32 indicators from other city brands must be taken to strengthen Jakarta's visitor mindset. Additionally, by increasing the capitalization of the superior position of Jakarta can increase its brand value ratio from 24.34% to above 28.09%, similar to Denpasar's brand, the increase of CBSI potentially increase the GDP of Jakarta by USD 7.118 billion. It is recommended that Table 3 be used as a complement to measure brand performance ratings based on brand value because brand value indicates the city brand's overall brand performance.

Understanding the importance of brand value will improve the government's understanding of the importance of not just maintaining and exploiting tangible assets (land, buildings, physical infrastructure), but also developing intangible assets that may boost GRDP more than tangible assets. As a result, City Brand has huge potential to become an intangible asset capable of increasing GRDP if managed properly.

CBSI, which is employed as one component of the brand value technique, can identify aspects that the local government must develop to deliver higher benefits to visitors. Meanwhile, the royalty rate approach employed can demonstrate increased economic activity as a result of visitor selections because they receive greater benefits in that city when compared to other locations. The central government and city governments can allocate investment funds to city development projects more effectively.

If the same strategy is applied to Bali and Komodo Islands tourist areas that are aiming to become premium tourism destinations, it will generate revenue, profit, and substantial benefits (Davis, 2002). The capability of the method to reveal the brand performance holistically is what encourages the author to adopt Brand Value as the ultimate performance indicator for City Brands in Indonesia.

4.1 Theoretical Contributions and Managerial Implications

4.1.1 Theoretical Contributions

The first theoretical contribution relates to the conceptual framework of brand performance measurement. In the previous literature, most of the literature used a behavior approach in measuring brand performance that only measures the customer mindset (Anholt, 2006a, 2006b; Fetscherin & Dinnie, 2010; Lahrech, Juusola, et al., 2020; Mikulić et al., 2016) or just uses a financial approach (Guenther & Guenther, 2019; Mohanty & Stephen, 2017). This study used an integrated method that incorporated the influences of behavior approach towards financial approach so that brand performance measurement becomes more holistic. Brand performance is measured financially, but using CBSI as a component that moderates the high and low of the brand value of a city brand.

Second, this study provides an empirical application of the brand value chain model (Keller, 2012) to city brands, which has previously only been applied in the context of product and corporate brands in the FMCG (Anselmsson & Bondesson, 2015); and B2C (Fischer & Himme, 2017). City brand valuation is more complex since it involves more stakeholders in the public and private sectors (Hankinson, 2004; Houghton & Stevens, 2011; Virgo & de Chernatony, 2006), who are influenced by multiple factors beyond the control of the city government (Donner & Fort, 2018).

The final theoretical contribution is the integrated valuation formula, which is the simplest and best fit for application in the context of city branding and is easily comprehended by marketing professionals. The royalty rate method has never been employed in the context of a city brand. The royalty rate method is employed in this study, which improves accuracy with the brand strength component. Previous research only aimed to calculate the brand value as brand performance independently, but if it is used to measure brand performance which demonstrates brand superiority in the same category, then the royalty rate must be equipped with a "component" of brand strength" (Rubio et al., 2016; Salinas & Ambler, 2009).

4.1.2 Practical Implications

The first managerial implication, city brand valuation is a crucial tool for assessing the performance of urban development strategies and programs, as it demonstrates the link between the City Brand Strength Index (CBSI) and the growth of Gross Domestic Product (GRDP). Effective development strategies can increase visitor numbers and economic activity, while also benefiting local governments by increasing GRDP. Second, Brand valuation should be conducted periodically to monitor the impact of city development program investments and ensure they significantly contribute to GRDP growth. City governments should evaluate non-significant programs and take corrective actions to improve effectiveness.

Third, the royalty rate from the city brand can generate revenue for the city government, as it can be used to manage tangible and intangible assets owned by the city government through collaborations with third parties (Malafeh & Sharp, 2015). Fourth, tracking the growth of tangible and intangible assets is essential for optimizing GRDP and financing the local budget (Haigh, 2000). Brand valuation allows city governments to monitor the annual growth of intangible assets from the city brand, indicating effective implementation of development strategies.

Fifth, the City Brand Strength Index (CBSI) is a leading indicator for city governments, predicting the success of development programs that increase a city's GRDP through a competitive advantage in various urban development aspects (Lahrech, Juusola, et al., 2020).

The survey results show that the average score for the people element is the highest among the five categories, showing that building a city's community culture is equally important as building its physical infrastructure. This is the sixth managerial implication. The first step in creating a community culture should be for city government officials to have an effective culture that enables them to provide visitor-facing services that are swift, simple, and efficient. A strong identity for the people dimension of the city brand can be created by the culture of the city government, which can also influence the culture of the city's population by making visitors feel at home and safe (Dejanović & Ljubojević, 2015; Temporal, 2015).

Seventh, the city development strategy should prioritize the city brand above all other tangible and intangible assets. The city brand strategy is created from the city development plan and a representation of the vision of the city that encompasses the interests of all stakeholders. The effectiveness of the city's development program can be evaluated using brand valuation.

Eighth, city governments should improve effective city brand communication to make the city's strengths more known and attract more visitors (students, workers, entrepreneurs, investors, and tourists). A good product without effective communication will not generate optimal revenue. Similarly, a good development strategy without effective public communication will not generate an optimal GRDP (Schade et al., 2018).

Ninth, establishing a city branding organization (CBO) to oversee city branding implementation would help ensure that city brand management is handled professionally (Dinnie, 2008; Hospers, 2008). In Indonesia, the improvement of city branding relies on this organization. The CBO should actively manage stakeholder interests, develop a superior city brand identity, oversee and assess implementation, conduct socialization and training for public sector workers and business actors, and promote a positive image for the city, which will give it a competitive advantage (Lindemann, 2010). Building relationships locally, nationally, and internationally is a key component of the CBO's objective, particularly in uniting the public and private sectors for marketing initiatives while clearly articulating the city's brand position to draw in tourists, business people, and investors.

Tenth, it is time for city governments to independently manage development and economic growth by utilizing, managing, and communicating every tangible and intangible asset in their area to generate profits, as done by the Mayor of Paris who manages Paris as a city brand that generates profits (Kapferer, 2012).

The survey results indicate that building a city's community culture is crucial, as it is equally important as building its physical infrastructure. City government officials should have an effective culture that enables swift, simple, and efficient visitor-facing services. A strong identity for the people dimension of the city brand can be created by the city government's culture, which can influence the city's population by making visitors feel at home and safe.

The city development strategy should prioritize the city brand above all other tangible and intangible assets, evaluating its effectiveness using brand valuation. City governments should improve effective city brand communication to make the city's strengths more known and attract more visitors. A good product without effective communication will not generate optimal revenue or GDP.

Establishing a city branding organization (CBO) to oversee city branding implementation ensures professional handling of city brand management. In Indonesia, the improvement of city branding relies on this organization, which should actively manage stakeholder interests, develop a superior city brand identity, oversee and assess implementation, conduct socialization and training for public sector workers and business actors, and promote a positive image for the city. Building relationships locally, nationally, and internationally is a key component of the CBO's objective.

In conclusion, city governments should independently manage development and economic growth by utilizing, managing, and communicating every tangible and intangible asset in their area to generate profits.

4.2 Conclusion and Future Research Direction

4.2.1 Research Conclusion

This study presents an integrated brand valuation method, demonstrating Keller's (2012) brand value chain model's ability to empirically measure city brand performance. The brand valuation method for city brands is a more complex context than the product and corporate brands (Kavaratzis, 2009; Moilanen & Rainisto, 2009).

Brand valuation for city brands is a more comprehensive method to measure city brand performance than measuring the visitor mindset perceptions only, the method measures benefits given to two levels of different stakeholders, as it considers benefits received by visitors and the city government.

Brand valuation in this study not only succeeded in measuring city brand performance independently but also jointly against all brands in the category, city brands in Indonesia, to produce the ranking of the Most Valuable City Brands in Indonesia.

The article proposes a method of simultaneous equations to understand the interaction between behavioral and financial approach variables in creating value in the context of a city brand. The results suggest that city governments need to consider the dynamic interaction of their decision variables and performance to fully evaluate the impact of their decisions on the economic growth of the city (Bagna et al., 2017).

The resulting brand valuation method meets the following criteria: First, reliable because it has a scope that covers almost all aspects of the city, consisting of 43 CBSI index indicators and monetary performance (Anholt, 2006b); Second, easy to understand and easy to apply both locally, nationally, and globally. CBSI has been implemented globally and tested in the Indonesian context; Third, cost-effective in terms of data sources. GRDP data is available to the public for free, and primary data is easily obtained from all cities in Indonesia using the power of social media. Fourth, it allows it to adapt to changing conditions that occur. Dimensions and measurement indicators can be adjusted and equipped based on the situation. Fifth, It is comprehensive because the scope includes tangible and intangible aspects of the city brand; Sixth reflects the strategic objectives of the city brand, including providing benefits that can be felt and measured at the customer level and the city government level (Aghaei, 2020); seven, the brand valuation method is difficult to manipulate because secondary data can be accessed by the public at any time and primary data can be tested (Dorfleitner et al., 2019); and eight, is robust because it allows for monitoring brand performance from time to time (Haigh, 2003).

A brand valuation can be used to track city development program investments, measure visitor impact, and evaluate whether programs need improvement, expansion, or termination. It can also be used to track investments in the primary, secondary, and tertiary sectors, ensuring economic growth and visitor satisfaction through the CBSI dimension used in the brand valuation method. CBSI allows marketers to track and evaluate marketing and branding efforts that significantly impact the visitor mindset (Anholt, 2009; Florek et al., 2021).

The policy development of the central government emphasizes the importance of beneficial programs and high-value sustainable national development priorities. A brand valuation can aid in improving the ability of the city and central government to allocate budgets for sustainable development programs to the city with the most significant city brand value growth in Indonesia (Fischer & Himme, 2017; Haigh, 2000; Yazdanparast & Bayar, 2021).

4.3 Research Limitations and Advice

This study is limited to cities in Indonesia, for city brands in Indonesia to have global competitiveness, this research should be expanded to the ASEAN, Asia, and even global contexts to compete with cities like Singapore, Kuala Lumpur, Bangkok, Tokyo, Hong Kong, London, Paris, New York, and other business cities. This will allow us to compare how city brands in Indonesia are perceived compared to global city brands by visitors from Indonesia. The measurement of city brand performance should be compared with city brands worldwide due to the global competition for capital resources, tourists, and human resources (Anholt, 2006b; Kotler & Gertner, 2002; Salinas, 2009; Temporal, 2015; Virgo & de Chernatony, 2006; Wang & Zhang, 2018).

The study is still dominated by respondents from Indonesia. If city brands in Indonesia want to assess their competitiveness with city brands from around the world, a City Brand Strength Index (CBSI) based on the perspective of foreign visitors, especially from potential target markets such as students, workers, entrepreneurs, and investors interested in cities in Indonesia, is needed. This will provide a more accurate and effective measurement of city brand competitiveness in Indonesia on a global level, to be used as a component in brand valuation. The challenge may be the availability of GRDP data for cities worldwide, which may not be publicly available.

The integrated brand valuation method can be applied in different contexts, such as measuring the performance of brands listed on the Indonesia Stock Exchange, where financial performance data is available to the public.

Funding

The authors received no direct funding for this research

References

Aaker, D., & Joahimstaller, E. (2000). Brand Leadership.

Aaker, D. A., & Jacobson, R. (1994). Financial Information Content of Perceived Quality. Journal of Marketing Research, XXXI(2), 191-201. https://doi.org/http://dx.doi.org/10.2307/3152193

Aghaei, M. (2020). Valuation of the Hamrah-e-Aval brand based on brand valuation models using Topsis multi-criteria decision-making model. Journal of Revenue and Pricing Management. https://doi.org/http://dx.doi.org/10.1057/s41272-020-00261-3

Ambler, T. (2000). Marketing Metrics. Business Strategy Review, 11(2), 59-66. https://doi.org/http://dx.doi.org/10.1111/1467-8616.00138

Ambler, T., & Barwise, P. (1998). The trouble with brand valuation. Journal of Brand Management, 5(5), 367-377. https://doi.org/http://dx.doi.org/10.1057/bm.1998.25

Anholt, S. (2006a). Anholt Nation Brands Index: How Does the World See America? Journal of Advertising Research, 45(03). https://doi.org/http://dx.doi.org/10.1017/s0021849905050336

Anholt, S. (2006b). The Anholt-GMI City Brands Index How the world sees the world's cities. Place Branding and Public Diplomacy, 2(1), 18–31. https://doi.org/http://dx.doi.org/10.1057/palgrave.pb.5990042

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

Anholt, S. (2009). Places: Identity, Image and Reputation. Palgrave Macmillan London. https://doi.org/https://doi.org/10.1007/978-0-230-25128-1

Anselmsson, J., & Bondesson, N. (2015). Brand value chain in practise; the relationship between mindset and market performance metrics: A study of the Swedish market for FMCG. Journal of Retailing and Consumer Services, 25, 58-70. https://doi.org/http://dx.doi.org/10.1016/j.jretconser.2015.03.006

Bagna, E., Dicuonzo, G., Perrone, A., & Dell'Atti, V. (2017). The value relevance of brand valuation. Applied Economics, 49(58), 5865-5876. https://doi.org/http://dx.doi.org/10.1080/00036846.2017.1352078

Barth, M. E., Clement, M. B., Foster, G., & Kasznik, R. (1998). Brand Values and Capital Market Valuation. Review of Accounting Studies, 3, 41–68. https://doi.org/https://doi.org/10.1023/A:1009620132177

Beccacece, F., & Borgonovo, E. (2009). Brand valuation: a comparison of alternative models. International Journal Operational Research, 6(2), 247-266. https://doi.org/http://dx.doi.org/10.1504/IJOR.2009.026537

Blackett, T. (1991). The Valuation of Brands. Marketing Intelligence & Planning, 9(1), 27-35. https://doi.org/http://dx.doi.org/10.1108/02634509110135442

Box, G. E. P., Jenkins, G. M., Reinsel, G. C., & Ljung, G. M. (2016). Time Series Analysis: Forecasting and Control (Vol. 5th). www.wiley.com

Chiaravutthi, Y. (2010). Brand valuation of ICT products: the case of Thailand. Asia-Pacific Journal of Business Administration, 2(2), 185-202. https://doi.org/http://dx.doi.org/10.1108/17574321011078210

Davis, S. (2002). Brand Asset Management: how businesses can profit from the power of brand. Journal of Consumer Marketing, 19(4), 351-358. https://doi.org/http://dx.doi.org/10.1108/07363760210433654

Dejanović, A., & Ljubojević, Č. (2015). City Branding As A Potential For Economic Developments. Conference paper. https://www.researchgate.net/publication/323254652_City_branding_as_a_potential_for_economic_development

Dinnie, K. (2008). Nation branding: Concepts, Issues, Practice. Butterworth Heinemann Dutton, Oxford, 201-205.

Donner, M., & Fort, F. (2018). Stakeholder value-based place brand building. Journal of Product & Brand Management, 27(7), 807-818. https://doi.org/http://dx.doi.org/10.1108/jpbm-10-2017-1652

Dorfleitner, G., Rossle, F., & Lesser, K. (2019). The financial performance of the most valuable brands: A global empirical investigation. Heliyon, 5(4), e01433. https://doi.org/http://dx.doi.org/10.1016/j.heliyon.2019.e01433

Doyle, P. (2000). Value-based marketing. Journal of Strategic Marketing, 8(4), 299-311. https://doi.org/http://dx.doi.org/10.1080/096525400446203

Doyle, P. (2001). Building value-based branding strategies. Journal of Strategic Marketing, 9(4), 255-268. https://doi.org/http://dx.doi.org/10.1080/09652540110079038

Fetscherin, M., & Dinnie, K. (2010). The determinants and measurement of a country brand: the country brand strength index. International Marketing Review, 27(4), 466-479. https://doi.org/http://dx.doi.org/10.1108/02651331011058617

Fischer, M., & Himme, A. (2017). The financial brand value chain: How brand investments contribute to the financial health of firms. International Journal of Research in Marketing, 34(1), 137-153. https://doi.org/http://dx.doi.org/10.1016/j.ijresmar.2016.05.004

Florek, M., Hereźniak, M., & Augustyn, A. (2021). Measuring the effectiveness of city brand strategy. In search for a universal evaluative framework. Cities, 110. https://doi.org/http://dx.doi.org/10.1016/j.cities.2020.103079

Ginevièius, R., & Guda čiauskas, D. (2004). Brand valuation model. Journal of Business Economics and Management, 5(3), 143– -153. https://doi.org/http://dx.doi.org/10.1080/16111699.2004.9636078

Guenther, M., & Guenther, P. (2019). The value of branding for B2B service firms—The shareholders' perspective. Industrial Marketing Management, 78, 88-101. https://doi.org/http://dx.doi.org/10.1016/j.indmarman.2017.11.013

Günther, T., & Kriegbaum-Kling, C. (2001). Brand Valuation and Control: An Empirical Study Schmalenbach Business Review, 53, 263 – 294. https://doi.org/https://doi.org/10.1007/BF03396639

Gupta, S., Gallear, D., Rudd, J., & Foroudi, P. (2020). The impact of brand value on brand competitiveness. Journal of Business Research, 112, 210-222. https://doi.org/http://dx.doi.org/10.1016/j.jbusres.2020.02.033

Haigh, D. (2000). Brand Valuation: Measuring and Leveraging your Brand. Institute of Canadian Advertising, 59. https://www.markenlexikon.com/texte/brandfinance_brand_valuation_leverage_may_2000.pdf

Haigh, D. (2003). An introduction to brand equity — How to understand and appreciate brand value and the economic impact of brand investment. Interactive Marketing, 5(1), 21–32. https://doi.org/https://doi.org/10.1057/palgrave.im.4340214

Haigh, D., & Knowles, J. (2004). How to define your brand and determine its value. MM, 22-28. https://type2consulting.com/wp-content/uploads/2017/10/T2-AMA-Define-Brand-Value.pdf

Hankinson, G. (2004). Relational network brands: Towards a conceptual model of place brands Journal of Vacation Marketing 10(2), 13. https://doi.org/https://doi.org/10.1177/135676670401000202

He, J., & Calder, B. J. (2020). The experimental evaluation of brand strength and brand value. Journal of Business Research, 115, 194-202. https://doi.org/http://dx.doi.org/10.1016/j.jbusres.2020.04.035

Hospers, G.-J. (2008). Governance in innovative cities and the importance of branding. Innovation, 10(2-3), 224-234. https://doi.org/http://dx.doi.org/10.5172/impp.453.10.2-3.224

Houghton, J. P., & Stevens, A. (2011). City branding and stakeholder engagement In In: Dinnie, K. (eds) City Branding (pp. 45-53). https://doi.org/https://doi.org/10.1057/9780230294790_6

Hsu, F. J., Wang, T. Y., & Chen, M. Y. (2013). The Impact of Brand Value on Financial Performance. Advances in Management and Applied Economics, 3(6), 1-9. https://ideas.repec.org/a/spt/admaec/v3y2013i6f3_6_9.html

Huang, J. (2015). A Review of Brand Valuation Method. Journal of Service Science and Management, 08(01), 71-76. https://doi.org/http://dx.doi.org/10.4236/jssm.2015.81008

Hull, J. C. (2022). Options, Futures, and Other Derivatives (11th ed.).

Janoskova, K., & Krizanova, A. (2017). Comparison of selected internationally recognized brand valuation methods. Oeconomia Copernicana, 8(1), 99-110. https://doi.org/https://doi.org/10.24136/oc.v8i1.7

Jørgensen, O. H. (2014). Developing a city brand balance sheet – Using the case of Horsens, Denmark. Place Branding and Public Diplomacy, 11(2), 148-160. https://doi.org/https://doi.org/10.1057/pb.2014.16

Kallapur, S., & Kwan, S. Y. S. (2004). The Value Relevance and Reliability of Brand Assets Recognized by U.K. Firms. Accounting Review, 79(1), 151-172. https://www.jstor.org/stable/3203316

Kapferer, J.-N. (2012). The new strategic brand management: advanced insights and strategic thinking (Vol. 5th ed). www.koganpage.co.uk

Kavaratzis, M. (2009). Cities and their brands: Lessons from corporate branding. Place Branding and Public Diplomacy, 5(1), 26-37. https://doi.org/http://dx.doi.org/10.1057/pb.2008.3

Keller, K. L. (2012). Strategic Brand Management (4th Edition ed.). www.pearson.com/uk

Keller, K. L., & Brexendorf, T. O. (2018). Measuring Brand Equity. In Handbuch Markenführung (pp. 1-32). https://doi.org/http://dx.doi.org/10.1007/978-3-658-13361-0_72-1

Kerin, R. A., & Sethuraman, R. (1998). Exploring the Brand Value-Shareholder Value Nexus for Consumer Goods Companies. Journal of the Academy of Marketing Science, 26(4). https://doi.org/https://doi.org/10.1177/0092070398264001

Kotler, P., & Gertner, D. (2002). Country as brand, product, and beyond: A place marketing and brand management perspective. Journal of Brand Management, 9(4-5), 249–261. https://doi.org/http://dx.doi.org/10.1057/palgrave.bm.2540076

Kumar, B. R., Sujit, K. S., & Kareem Abdul, W. (2019). Brand valuation – examining the role of marketing on firm financial performance. Measuring Business Excellence, 24(1), 90-113. https://doi.org/http://dx.doi.org/10.1108/mbe-01-2019-0007

Lagarden, M. (2012). Brand Valuation in Business Practice. International Transfer Pricing Journal. https://www.scribd.com/document/527407992/BrandValuationinBusinessPracticePart-1-1

Laghi, E., Di Marcantonio, M., Cillo, V., & Paoloni, N. (2020). The relational side of intellectual capital: an empirical study on brand value evaluation and financial performance. Journal of Intellectual Capital. https://doi.org/http://dx.doi.org/10.1108/jic-05-2020-0167

Lahrech, A., Alabdulwahab, S. Z., & Bouayach, S. (2020). Nation Branding and How It Is Related to Foreign Direct Investment Inflows. International Journal of Economics and Financial Issues, 10(2), 248-255. https://doi.org/http://dx.doi.org/10.32479/ijefi.9345

Lahrech, A., Juusola, K., & AlAnsaari, M. E. (2020). Toward more rigorous country brand assessments: the modified country brand strength index. International Marketing Review, 37(2), 319-344. https://doi.org/http://dx.doi.org/10.1108/imr-06-2019-0152

Lee, H. (2012). Brand valuation model: A shareholder value approach (Publication Number 10631137)

Lindemann, J. (2010). The Brand Value Chain. https://doi.org/http://dx.doi.org/10.1057/9780230275010_13

Macias, W., Rodriguez, K., Arosemena-Burbano, F., & Zhangallimbay, D. (2021). Analysis of the Ecuadorian government's proposed methodology of brand valuation: application in agricultural sector brands. Journal of Agribusiness in Developing and Emerging Economies, 13(2), 279-298. https://doi.org/10.1108/jadee-05-2021-0124

Malafeh, S., & Sharp, B. (2015). Role of royalties in sustainable geothermal energy development. Energy Policy, 85, 235-242. https://doi.org/http://dx.doi.org/10.1016/j.enpol.2015.06.023

Manthiou, A., Kang, J., & Schrier, T. (2014). A visitor-based brand equity perspective: the case of a public festival. Tourism Review, 69(4), 264-283. https://doi.org/http://dx.doi.org/10.1108/tr-04-2014-0016

Mikulić, J., Miličević, K., & Krešić, D. (2016). The relationship between brand strength and tourism intensity: empirical evidence from the EU capital cities. International Journal of Culture, Tourism and Hospitality Research, 10(1), 14-23. https://doi.org/http://dx.doi.org/10.1108/ijcthr-06-2015-0054

Mills, R. (2005). Brand Valuation (Vol. 16).

Mohanty, P., & Stephen, T. (2017). The Challenges at JSW Steel: Brand Valuation and Corporate Governance Issues. Asian Case Research Journal, 21(01), 231-251. https://doi.org/http://dx.doi.org/10.1142/s0218927517500080

Moilanen, T., & Rainisto, S. (2009). City and Destination Branding. In How to Brand Nations, Cities, and Destinations (pp. 77-146). https://doi.org/http://dx.doi.org/10.1057/9780230584594_4 (Palgrave Macmillan, London)

Narayan, G. (2012). Brand Valuation: A Strategic Tool for Business. The IUP Journal of Brand Management, IX(3), 1-10. https://www.proquest.com/openview/fa9e95df7f3a3f07766c92d5eeaf050a/1?pq-origsite=gscholar&cbl=2029986

Paliaga, M., Franjić, Z., & Strunje, Ž. (2010). Methodology of Valuation of Cities' Brands. Economic Research-Ekonomska Istraživanja, 23(2), 102-111. https://doi.org/http://dx.doi.org/10.1080/1331677x.2010.11517415

Penrose, N., & Moorhouse, M. (1989). The Valuation of Brands. Marketing Intelligence & Planning, 7(11/12), 30-33. https://doi.org/http://dx.doi.org/10.1108/EUM0000000001067

Petrick, J. F. (2004). Are loyal visitors desired visitors? Tourism Management, 25(4), 463-470. https://doi.org/http://dx.doi.org/10.1016/s0261-5177(03)00116-x

Raggio, R. D., & Leone, R. P. (2007). The theoretical separation of brand equity and brand value: Managerial implications for strategic planning. Journal of Brand Management, 14(5), 380-395. https://doi.org/http://dx.doi.org/10.1057/palgrave.bm.2550078

Rubio, G., Manuel, C. M., & Pérez-Hernández, F. (2016). Valuing brands under royalty relief methodology according to international accounting and valuation standards. European Journal of Management and Business Economics, 25(2), 76-87. https://doi.org/http://dx.doi.org/10.1016/j.redeen.2016.03.001

Salinas, G. (2009). The international brand valuation manual: A complete overview and analysis of brand valuation techniques and methodologies and their applications. Wiley.

Salinas, G., & Ambler, T. (2009). A taxonomy of brand valuation practice: Methodologies and purposes. Journal of Brand Management, 17(1), 39-61. https://doi.org/http://dx.doi.org/10.1057/bm.2009.14

Sattler, H., Högl, S., & Hupp, O. (2002). Evaluation of the Financial Value of Brands. Marketing and Retailing.

Schade, M., Piehler, R., Müller, A., & Burmann, C. (2018). How cities can attract highly skilled workers as residents: the impact of city brand benefits. Journal of Product & Brand Management, 27(7), 847-857. https://doi.org/http://dx.doi.org/10.1108/jpbm-10-2017-1605

Seetharaman, A., Azlan Bin Mohd Nadzir, Z., & Gunalan, S. (2001). A conceptual study on brand valuation. Journal of Product & Brand Management, 10(4), 243-256. https://doi.org/http://dx.doi.org/10.1108/eum0000000005674

Sinclair, R. (2004). A brand valuation methodology for nations. Place Branding, 1(1), 74–79. https://doi.org/https://doi.org/10.1057/palgrave.pb.5990006

Sinclair, R. (2011). A rationale and proposed set of principles for brand valuation. https://themasb.org/wp-content/uploads/2011/12/BV.rationale.principles.pdf

Smith, G. V., & Parr, R. L. (2018). Intellectual Property: Valuation, Exploitation, and Infringement Damages (Vol. 5th edition). Wiley.

Srinivasan, S., Hsu, L., & Fournier, S. (2012). Branding and firm value. Handbook of marketing and finance, 155–203. https://doi.org/http://dx.doi.org/10.4337/9781849802727.00016

Temporal, P. (2015). Branding For The Public Sector: Creating, Building And Managing Brands People Will Value Wiley. www.wiley.com

Turok, I. (2009). The Distinctive City: Pitfalls in the Pursuit of Differential Advantage. Environment and Planning A: Economy and Space, 41(1), 13-30. https://doi.org/http://dx.doi.org/10.1068/a37379

Virgo, B., & de Chernatony, L. (2006). Delphic brand visioning to align stakeholder buy-in to the City of Birmingham brand. Journal of Brand Management, 13(6), 13. https://doi.org/https://doi.org/10.1057/palgrave.bm.2540280

Virvilaite, R., & Jucaityte, I. (2008). Brand Valuation: Viewpoint of Customer and Company. Economics of Engineering Decisions 1(56), 111-119. .

Wang, X., & Zhang, Q. (2018). Does online service failure matter to offline customer loyalty in the integrated multi-channel context? The moderating effect of brand strength. Journal of Service Theory and Practice, 28(6), 774-806. https://doi.org/http://dx.doi.org/10.1108/jstp-01-2018-0013

Wasserman, B. (2015). Valuation of Intangible Assets: Should Brand Equity Be Accounted for on the Balance Sheet? (Publication Number 411) https://opencommons.uconn.edu/srhonors_theses/411

Wymer, W., & Casidy, R. (2019). Exploring brand strength's nomological net and its dimensional dynamics. Journal of Retailing and Consumer Services, 49, 11-22. https://doi.org/http://dx.doi.org/10.1016/j.jretconser.2019.03.003

Yazdanparast, A., & Bayar, O. (2021). Olympic Sponsorships and Brand Value: An Empirical Analysis. Journal of Advertising, 50(2), 139-159. https://doi.org/10.1080/00913367.2020.1856737