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Article

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Cogent Business & Management

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Taylor & Francis Group

Suggested Citation: Chahal, Hardeep; Bala, Renu (2017) : CUSTEQUITY scale: Measurement and validation in Indian banking sector, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 4, <https://doi.org/10.1080/23311975.2017.1336152>

This Version is available at:

<https://hdl.handle.net/10419/205979>

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Received: 09 November 2016
Accepted: 25 May 2017
First Published: 31 May 2017

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MARKETING | RESEARCH ARTICLE

CUSTEQUITY scale: Measurement and validation in Indian banking sector

Hardeep Chahal^{1*} and Renu Bala¹

Abstract: *Purpose:* This paper seeks to further the understanding of the domain of the customer equity construct, in developing country context. Building on their framework, a modified and extended construct (CUSTEQUITY), using systematic scale development procedure, is established with nomological evidence of its impact in Indian banking industry. *Design/methodology/approach:* The data are collected from 550 accountholders of five major national Indian banks—State Bank of India (SBI), Punjab National Bank (PNB), Housing Development Finance Corporation (HDFC), Industrial Credit and Industrial Corporation (ICICI), and Jammu and Kashmir Bank (JKB). The respondents are contacted using purposive sampling from Jammu city of North India. Exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation model (SEM) are used to analyze the data. *Findings:* The study findings validate the extended customer equity scale comprising two additional dimensions namely relational equity and social equity, along with three established dimensions—brand equity, value equity and retention equity. Further, the nomological validity of the CUSTEQUITY scale is also established. The moderating role of age and gender in customer equity and customer loyalty relationship is also

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Hardeep Chahal is a professor at Department of Commerce, University of Jammu. Her research centers on theory development and organizational performance in the service marketing. Her specific research interest areas include brand equity, relationship marketing, service quality, customer satisfaction, customer loyalty, and other contemporary areas.

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PUBLIC INTEREST STATEMENT

The study provides an extended customer equity framework that highlights on strategic dimensions of customer equity to strengthen customer loyalty in the Indian banking sector. Specifically, this study establishes social equity and relational equity as two additional dimensions along with three well-established dimensions, namely: brand equity, value equity, and retention equity of customer equity. Besides, our study also suggests strategies for enhancing customer–brand relationship. The study results establish the influence of various marketing metrics such as service quality, retention programs, and social responsibility on customer equity in banks. Such knowledge on part of practitioners and managers is important as it reveals which metrics banks should monitor and manage with the utmost care to enhance long-term emotional connection with their customers. The suggestions given would be of value to managers across the globe for identifying key parameters, which need to be evaluated consistently and periodically to enhance customer equity and customer loyalty.

supported. Also, the role of relationship length as a nomological moderator is established. *Research limitations/implications:* The study focuses on scale development on customer equity in Indian banking sector. The scale validity and reliability across the globe need to be established to underpin customer equity framework.

Subjects: Marketing; Services Marketing; Relationship Marketing; Retail Marketing

Keywords: customer equity; value equity; retention equity; brand equity; relationship equity; social equity; customer loyalty

1. Introduction

In today's highly competitive environment, maintaining a long-term relationship with customers is becoming more and more challenging. Hence, organizations need to seek new and effective ways to protect long-term interest of the customers to preserve organizations' most valuable assets "customers" (Abratt & Russell, 1999). Customer equity is emerging as an effective strategy to build and enhance long-term customer relationship, and to sustain competitive advantage (Lemon, Rust, & Zeithaml, 2001; Marzouk, 2014; Rust, Lemon, & Zeithaml, 2004; Zhang, van Doorn, & Leeftang, 2014) for enhanced organizational performance (Gupta, Lehmann, & Stuart, 2004). Despite its origin in the year 1996, customer equity concept is not much established as till today limited literature is available. Rust et al. (2004) and Lemon et al. (2001) are the major proponents of customer equity concept, who have established value equity (VE), brand equity (BE), and retention equity as the three main dimensions of customer equity. Both the studies are predominantly more explored by marketing researchers in different settings such as banking and supermarket (Zhang et al., 2014), retail (Ramaseshan, Rabbanee, & Tan Hsin Hui, 2013), airline (Rust et al., 2004) online companies (Lemon et al., 2001), and telecommunication (Kumar, Scheer, & Steenkamp, 1995). All these studies supported the findings of the Rust et al. (2004) and Lemon et al. (2001) and confirmed that value equity, brand equity, and retention equity are the key dimensions of customer equity. However, unlike these studies, Marzouk (2014) study has used modified customer equity framework by including relationship equity dimension (trust, satisfaction, and commitment) in place of retention equity along with the other two dimensions (namely value equity and brand equity), to examine its impact on financial performance in the banking sector.

Though relationship equity and retention equity are used interchangeably in the marketing literature, however, this study argued that relationship equity and retention equity are two distinct concepts and hence need to be examined separately. Relational equity (RE) is considered as a mean to retain customers and is defined as "the degree of appropriateness of a relationship to fulfill the needs of the customers" (Hennig-Thurau & Klee, 1997). Whereas "tendency of the customers to stick with the brand, above and beyond the customer's objective and subjective assessments of the brand" (Lemon et al., 2001) is considered as a retention equity, which is named as relationship equity by Rust, Zeithaml, and Lemon (2000). Further, the emerging social responsibility perspective which is well-recognized in the literature is yet not explored in the customer equity framework.

The present study argues that customer equity framework needs to be revisited and extended on social responsibility. Now-a-days social responsibility is considered one of the most important competitive tools that marketers need to know to build and create a loyal customer base. In recent years, there has been growing pressure on every organization, especially socially responsible organizations to follow ethical systems and social standards in service quality, service delivery and in meeting customer expectations (Morimoto & Ash, 2005). Lafferty and Goldsmith (1999) remarked that social equity (SE) is an effective strategy for companies to gain competitive advantage, to ensure long-term business success and to enhance the customer-brand relationship. And Lafferty and Goldsmith (1999) further advocated that customers are more likely to purchase products/services from companies that project a positive social image. The underpinning of customer equity framework from a broader perspective (extended framework) is significant for comprehending customers' behavior.

Additionally, the scanned and reviewed literature also revealed that customer equity concept is predominantly more explored for customer loyalty creation (Ramaseshan et al., 2013; Vogel, Evanschitzky, & Ramaseshan, 2008; Zhang et al., 2014). Thus, a key challenge for researchers today is to identify and understand how managerially controlled variable (customer equity) influence customer loyalty in term of repurchase intention and positive word-of-mouth communication. So far there are few studies that have explored and established the relationship between customer equity and customer loyalty. For examples, Vogel et al. (2008) examined the impact of customer equity drivers (value equity, brand equity, and relationship equity) on loyalty intention. Recently, Zhang et al. (2014) and Ramaseshan et al. (2013) conducted studies about how value equity, brand equity, and relationship/retention equity dimensions are related to customer equity and customer loyalty. However, all these studies did not examine the overall effect of customer equity on customer loyalty.

In recent years, marketing researchers have been increasingly interested in studying the effects of various demographic moderators on customer's buying behavior. Previous literature viewed that firms efforts to strengthen customer-brand relationship are influenced by various demographic variables such as customer age, gender (Homburg & Giering, 2001; Mittal & Kamakura, 2001), and relationship age (Raimondo, Nino Miceli, & Costabile, 2008; Verhoef, Franses, & Hoekstra, 2002). However, despite the growing significance of demographic characteristics in understanding customer responses, there is a lack of research on studying the role of demographic moderators namely age, gender, and relationship length in customer equity-customer relationship.

Further, the literature revealed that no study on customer equity concept is explored in Indian context (Chahal & Bala, 2014), even Marzouk (2014) and Zhang et al. (2014) remarked that customer equity framework needs to be explored in the service sector of developing countries.

Hence, our study contributes to the extant literature in three distinct ways. First, the study has extended the customer equity framework of Rust et al. (2000) and established CUSTEQUITY scale from a broader perspective using five dimensions namely value equity, brand equity, retention equity, relationship equity and social equity (new dimension). Second, the study established the nomological validity of CUSTEQUITY scale in Indian banking (service) sector of developing country. However unlike other studies such as Yoshida and Gordon (2012) and Zhang et al. (2014), the role of relationship length is established as a nomological moderator in the study framework.

2. Literature review

2.1. Customer equity

Over the past few years, customer equity has become a relevant approach to marketing strategy and marketing accountability that considered customers as the most valuable assets of the company (Villanueva, Yoo, & Hanssens, 2008). The concept of customer equity proposed by Blattberg and Deighton (1996) is defined as an optimal balance between what is spent on customer acquisition and what is spent on customer retention, which provides additional information for the evaluation of company performance. On the other hand, Rust et al. (2000) stated that customer equity is a relevant approach that replaced firm's product-centric thinking to customer-centric thinking and treats customers as the most valuable assets. In literature, term customer equity has been investigated using company-based approach and customer-based approach. From a company's perspective, researchers such as Gupta and Lehmann (2003) and Gupta et al. (2004) have used customer equity as a metric to assess the financial health of the company. And they also viewed customer equity is a good measure of market/firm value. From the view point of customer perspective, Rust, Lemon, and Zeithaml (2001) and Lemon et al. (2001) developed customer equity model that links marketing functions to customers' reactions. Rust et al. (2001) viewed that value equity, brand equity, and retention equity is the main influential criteria of customer equity. Furthermore, from customer perspectives, Rust et al. (2004) is the first study that tests the relationship between customer

equity drivers such as brand equity, value equity and retention and customer equity. This framework is also used later by Vogel et al. (2008), Marzouk (2014) and Zhang et al. (2014).

Based on extant literature, value equity, brand equity, and retention equity (loyalty programs, affinity programs, community programs, etc.), relationship equity (satisfaction, trust, and commitment) are identified as the dimensions that significantly related to customer equity in different research settings. However, as discussed previously, extended customer equity framework based on five customers-based equities namely brand equity, value equity, retention equity, relational equity, and social equity.

3. Customer equity framework

3.1. Dimensions

3.1.1. Value equity

Value equity is customer evaluation of the consumption of the products/services based on their perceptions of what is given up (money, time, and efforts) for what is received (quality, worth, and benefits) (Rust et al., 2004; Vogel et al., 2008). Several researchers, for example, Ramaseshan et al. (2013) and Yoshida and Gordon (2012) have explored three essential drivers of value equity that include quality, price, and convenience. All these three dimensions are equally significant to value equity. Quality refers to customers' perceptions about the overall excellence of the product/services (Lemon et al., 2001). Rust et al. (2004) considered it in the form of physical characteristics of the products/services, service delivery, and the service environment. The price represents the aspect of what are given up by the customers, which the firms can influence in terms of money, effort, and time (Rosenbaum & Wong, 2009). Different strategies such as low pricing, discounts and sales, and payment plans are employed by firms to compete with their competitors' prices (Lemon et al., 2001). The third sub-driver of value equity is convenience. It means those actions that help the customers to reduce their time cost, search cost, and efforts to do business with an organization (Lemon et al., 2001). It embraces characteristics such as convenient location, ease of use and availability, and so on (Rust et al., 2004).

3.1.2 Brand equity

Brand equity is a key and essential dimension of customer equity which is often explored by the researchers. The brand equity is not a new approach in marketing (Aaker, 1991; Keller, 1993) as it has been widely studied in the marketing literature (Kim & Ko, 2012) from last two decades. Brand equity is defined as the discrepancy effects of brand knowledge on customer responses to marketing brand (Keller, 2003). Brand equity is the segment of customer equity that reflects the customer's perceptions about the brand (Yoshida & Gordon, 2012). Holehonnur, Raymond, Hopkins, and Fine (2009) described brand equity as an essential component that adds value added benefits to product/services/brands. According to Aaker (1996), brand equity consists of five dimensions namely perceived quality, brand loyalty, brand awareness, brand association, and other propriety assets. A similar conceptualization was given by Keller (2003); according to him, brand equity consists of two dimensions namely brand knowledge and brand awareness. Many researchers have adopted Aaker's framework to measure brand equity from a customer's perspective (Low & Lamb, 2000; Prasad & Dev, 2000). On the other hand, Yoo and Donthu (2001) used four dimensions of brand equity such as brand awareness, brand loyalty, perceived quality, and brand association excluding proprietary assets as they consider that it has not much relevance in brand equity measurement. Whereas, in the context of customer equity, three sub-drivers namely brand awareness, brand image, and brand ethics of brand equity are widely accepted (Lemon et al., 2001; Rust et al., 2004) and empirically tested in later studies (Johnson, Garbarino, & Sivadas, 2006; Kazemi, Abadi, & Kabiry, 2013; Vogel et al., 2008). Vogel et al. (2008) stated that all these dimensions significantly reflect strength and worth of products/services/brands and contribute to customer equity.

3.1.3. Retention equity

Retention equity, the third dimensions of customer equity, is defined as the tendency of the customers to stick with the brands, above and beyond the customer's objective and subjective assessments of the brand (Lemon et al., 2001; Rust et al., 2000). Retention equity can typically be increased by the use of various customer retention programs such as loyalty programs special recognition, affinity programs, and knowledge-building programs (Rust et al., 2004). According to Rust et al. (2004), customer retention programs refer to all those marketing efforts that make allied customers more loyal (Leenheer, van Heerde, Bijmolt, & Smidts, 2007). Such programs provide an opportunity to the firms to build longer, stronger, and deeper relationships with customers. Firms provide various loyalty benefits (rebates, discount, annual gifts, card point, extraordinary, or additional services) with the intention of rewarding customers for their repurchase over time (Rust et al., 2000), affinity schemes (celebrity treatment, individual intention) to make emotional connections with their customers and knowledge building schemes such as (seminars, conference, camps) to build customer awareness (Rust et al., 2004). According to Rust et al. (2004), Lemon et al. (2001) retention equity is an essential aspect of creating and building customer equity and loyalty.

3.1.4. Relational equity

Relational equity is an important concept in the field of relationship marketing (Hennig-Thurau, 2000). Relationship equity refers to the overall assessment of the strength of customer-brand relationship (Ou, Shih, Chen, & Wang, 2011; Valta, 2013). It reveals the quality of relationship among value chain members that reflects the probability of long-term successful relationship among them. It has been pointed out that high-quality relationship is essential for such situations where customers face uncertainties/worries, lack of familiarity, and lack of sense of belongingness (Bennett & Barkensjo, 2005). Relational equity is conceptualized as a multi-dimensional construct that embraces different but related aspects of the relationship (Oly Ndubisi, Khoo-Lattimore, Yang, & Capel, 2011). The majority of the scholars such as Marzouk (2014), Rauyruen and Miller (2007) and Vesel and Zabkar (2010) have considered satisfaction, trust, and commitment as the three major dimensions of relational equity. Besides researchers such as Bennett and Barkensjo (2005) have also considered benevolence as an additional dimension of relational quality. Previous studies on customer equity such as Marzouk (2014), Ramaseshan et al. (2013), Hennig-Thurau (2000), Hennig-Thurau and Klee (1997), and Crosby, Evans, and Cowles (1990) have discussed and tested concept of relational equity quality in different research settings, using three main dimensions namely customer satisfaction, customer trust and customer commitment (Rauyruen & Miller, 2007; Vesel & Zabkar, 2010).

3.1.5. Social equity

The term social equity has received significant attention in recent years. Socially responsible organizations, one believed to follow ethical methods in their performance to satisfying their customers' expectations and needs (Carmen, 2005; Hanzae & Rahpeima, 2013; Lafferty & Goldsmith, 1999). Many studies advocated that corporate social responsibility plays a significant role in influencing customer's behavior (Creyer & Ross, 1997). Lafferty and Goldsmith (1999) in their study suggested that firms which wish to enhance the customer-brand relationship, should emphasis on corporate social responsibilities activities. It is argued that well-recognized social responsibility is essential to create strong social equity. Social equity/responsibility is defined as the evaluation of brands based on their contributions and obligations towards the society (Carmen, 2005).

The concept of corporate social equity deals with the relationships between corporate and the society and specifically consider the effects of corporate operations on society (Lee, 2008). Social equity comprises varied aspects of corporate social responsibility that include openness, fairness, and transparency in business practices that are based on ethical values and respect for all stakeholders (employees, customers communities, and environment) (Morimoto & Ash, 2005). It is designed to deliver sustainable value to society at large, as well as to shareholders.

3.2. Customer loyalty as dependent variable

Customer loyalty is an essential marketing metric for the success of the organizations. It helps organizations to face uncertainty problems in an intense competitive market robustly. Customer loyalty is customers' attachment either to a brand, store, manufacturer, service provider, or other entities based on their favorable attitudes and behavioral responses such as repeat purchase (Yoshida & Gordon, 2012). According to Oliver (1999), customer loyalty is created by developing and intensifying relationship with customers, as well as by retaining customers by providing satisfaction and increasing switching barriers. Customer loyalty is a composite construct, which has been widely explored in the literature using different approaches. For detail, please refer the following studies such as Ou et al. (2011), Deng, Lu, We, and Zhang (2010), DeWitt, Nguyen, and Marshall (2008) and Dick and Basu (1994). Researchers in different disciplines have conceptualized customer loyalty either as uni-dimensional concept (Bloemer, de Ruyter, & Peeters, 1998; Fornell, 1992; Johnson et al., 2006) or bi-dimensional or multidimensional construct (Deng et al., 2010; DeWitt et al., 2008; Dick & Basu, 1994).

In literature, two significant dimensions namely attitudinal and behavioral loyalty are predominantly more explored (Dlagic & Zabkar, 2012). The behavioral aspect of loyalty embraces customer repurchase behavior, while the attitudinal aspect of loyalty covers customer attitude, positive word of mouth, and intention to recommend.

4. Hypotheses development

4.1. Customer equity as a multidimensional construct

Value equity, brand equity, and retention equity are established as significant dimensions of customer equity (Lemon et al., 2001; Rust et al., 2004). Rust et al. (2001) made a first attempt to conceptualize customer equity from a customer perspective. Later in 2004, they empirically tested their conceptualized model in the airline industry and proved that value equity, retention equity, and brand equity are all positively and significantly related to customer equity. The same model is also used by different researchers such as Kim and Ko (2012) (luxury brands), Vogel et al. (2008) (retail market) and Zhang et al. (2014) (banking and supermarket) in developed economies to measure customer equity. All studies established that value equity, brand equity, and retention equity are significantly related to customer equity. Besides, Marzouk (2014) in his study used relational equity as a dimension of customer equity, which consists of three sub-dimensions such as satisfaction, trust, and commitment. Further, he viewed that value equity, brand equity, and relational equity (trust, satisfaction, and commitment) significantly contributes to customer equity (Marzouk, 2014). Additionally, Hanzae and Rahpeima (2013) and Lafferty and Goldsmith (1999) in their study advocated that having a social agenda is a powerful marketing tool to build and shape brand's reputation, make products/brands differentiation in the market, enhance customer brand relationship and give a company a competitive edge. Based on this backdrop the study hypothesizes that:

H1: All five customer-based equities (Value, brand, retention, relational and social) significantly contribute to customer equity.

4.2. Relationship between customer equity and customer loyalty

Marketing scholars namely Vogel et al. (2008) and Rust et al. (2004) advocated that customer equity positively influences customer attitudes in the form of satisfaction and loyalty (Ramaseshan et al. (2013). The seminal work conducted by Vogel et al. (2008) within a retailing scenario, has found the direct positive impact of customer equity and its three dimensions (value equity, brand equity, and retention equity) on loyalty intentions. They posit that if customers perceive high value, brand and retention equity, then their opinion toward a willingness to stay, repurchase probability, and

likelihood to recommend the brand would also be influenced. Recent work conducted by Zhang et al. (2014) in banking and supermarkets, also reported a positive link between customer equity drivers and loyalty intentions and state that customer equity is likely to influence customers' willingness to stay and repurchase probability. Thus, based on prior studies, the present study put forth:

H2: Customer equity has a positive and significant influence on customer loyalty.

4.3. Role of demographic moderators (age, gender, and relationship length)

Several studies demonstrated that customer satisfaction and customer loyalty relationship is moderated by various demographic variables such as age, gender (Homburg & Giering, 2001; Mittal & Kamakura, 2001), household income (Seiders, Voss, Grewal, & Godfrey, 2005), and education (Mittal & Kamakura, 2001). Researchers advocated that age had moderating effect on a customer-brand relationship (Evanschitzky & Wunderlich, 2006; Homburg & Giering, 2001) and remarked that old customers are less image-oriented and easily satisfied on quality, price, and convenience to seek new services than young customers. In the same vein, Homburg and Giering (2001) and Mittal and Kamakura (2001) found that relationship between consumer satisfaction and loyalty is stronger for men than for women. While examining the moderating effect of demographic factors namely age and gender on the relationship between customer equity drivers and loyalty intention, Yoshida and Gordon (2012) proved that the effect of customer equity drivers (value equity, brand equity, and relationship equity) on customer behavioral intention is stronger for younger and male customers rather than older and female customers. Additionally, researchers also suggested that customers' buying behavior is also influenced by relationship length (Raimondo et al., 2008; Seiders et al., 2005; Verhoef et al., 2002). Though these researchers supported the moderating role of customer relationship length in customer-brand relationship, it can also be extended to customer equity and loyalty link. Based on this backdrop, it can be expected that customer equity and customer loyalty relationship is influenced by three important demographic variables such as age, gender, and relationship length, as they have special relevance in the present research context. Thus, the study put forth the following hypotheses:

H3(a) The relationship between customer equity and customer loyalty is stronger for younger customers than older customers.

H3(b) The relationship between customer equity and customer loyalty is stronger for male customers than female customers.

H3(c) The relationship between customer equity and customer loyalty is stronger for long relationship length than short relationship length.

5. Research methodology

5.1. Research context

Indian banking sector is selected to test the conceptual framework of the study. Today, banking business environment is more competitive and is looking for such opportunities that enhance firms' value (Chahal & Bala, 2014). Banking represents a successful sector of business and hence, making it viable for the study of customer equity performance (Marzouk, 2014). Given the nature of the industry, the present study constructed sampling frame based on multiple steps. Among public (21) and private (7) commercial banks operating in Jammu city, Jammu and Kashmir, North India, five banks (SBI, ICICI, HDFC, PNB and JKB) based on their share volume and share value traded along last five years (2010–2011 to 2014–2015) were selected to test the research hypotheses. Following this, about 550 questionnaires were distributed to the account holders of the five selected banks in

Jammu city. A purposive sampling plan was used to select the participants. To increase the objectivity in the selection of customers, customers having at least five years of experience in using and availing bank services were approached. Further, three to five attempts were made to collect the completed questionnaires. Out of 550 questionnaires distributed to respondents, only 490 questionnaires were returned. The effective response rate came to be 89%. Further 16 respondents with extreme responses (outliers) were deleted. Thus, the final usable sample size was reduced to 474 respondents. Of the total sample, the majority are males (68.4%), young aged between 30–40 years (67.5%), married and postgraduates (52%) with 5–15 years of experience (71.5%). Further, the majority of them are belonged to Jammu and Kashmir Bank (52%) and falling in rupees 20,000 to rupees 40,000 income group (56%).

5.2. Generation of scale items

CUSTEQUITY scale is measured using five sub-scales namely value equity, brand equity retention equity, relational equity, and social equity. Value equity is measured using a scale developed by Marzouk (2014) and Yoshida and Gordon (2012). The items of brand equity dimensions namely brand awareness, brand ethics, and brand image are extracted from the studies Marzouk (2014) and Johnson et al. (2006). Retention equity is assessed using items related to loyalty programs, knowledge building programs, and affinity programs based on the work of Rust et al. (2004) and Lemon et al. (2001). Relational equity is measured using a scale of Chenet, Dagger, and O'Sullivan (2010) and Marzouk (2014). Social equity that comprises the aspects of social responsibility is measured using the scale of Hanzae and Rahpeima (2013). By suggestions of experts, few items about customer equity and customer loyalty scale are modified. Finally, after discussions with experts, the refined questionnaire is prepared. After modifying the scale items, pre-testing was conducted on 120 bank customers to finalize the scale items and also to assess the construct validity. Later, final survey was conducted during January 2015 to April 2015.

6. Empirical results

6.1. Scale validation

6.1.1. First stage: Assessment and purification of customer equity scale: Exploratory factor analysis

Exploratory factor analysis (EFA) is a multivariate statistical technique which is employed for data reduction and purification (Hair, Black, Babin, & Anderson, 2009; Malhotra & Dash, 2010). Firstly, the appropriateness of EFA is verified through KMO (Kaiser-Meyer-Olkin) greater than 0.5 and significant Bartlett test of sphericity (BTS), measures of sampling adequacy test (Hair et al., 2009). At the same time, Eigenvalue equal to or greater than one criterion is used to determine the number of factors to be retained and total variance explained by each factor. Simultaneously, Principal component analysis (PCA) approach is applied to takes into account the total variance (Hair et al., 2009; Malhotra & Dash, 2010). Subsequently, items with communalities and factor loadings less than 0.5 are deleted simultaneously until clean factors emerge. The number of items retained in five sub-scales of customer equity namely brand equity = 11, value equity = 11, retention equity = 11, relational equity 17, and social equity = 9. The detailed factor-wise EFA results of customer equity subscales namely brand equity, value equity, retention equity, relational equity, and social equity are mentioned in Table 1.

6.1.2. Second stage: Assessment and purification of customer equity scale: Item analysis

After EFA, item analysis is applied on the scales to check the consistency of the data. The Cronbach alpha values of all sub-scales of customer equity namely brand equity (0.831), value equity(0.929), retention equity (0.750), relational quality (0.948) and social equity (0.801) are above the critical value of 0.70 (Hair et al., 2009) (Table 1). Moreover, squared multiple correlations (SMC) and corrected item to total correlation (CITC) values of all scale items above 0.30 indicating the consistency of data.

Table 1. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) results

Factors	Items	EFA			CFA	
		FL	CV	TVE%	SRW	Critical ratio
Customer equity scale (CE)						
Brand equity (BE) KMO = 0.808, BTS = 3019.659/55 = 0.000, Alpha = 0.831, CR = 0.963						
Brand awareness	BE1-Attention to bank adverts	0.879	0.796	26.790	0.781	19.668
	BE4-Attention to bank information	0.847	0.727		0.896	25.375
	BE3-Recall symbol or logo	0.825	0.715		0.850	-
	BE2-Recognizing bank characteristics	0.821	0.717		0.790	19.929
Brand ethics	BE8-Ethical standards	0.846	0.740	25.589	0.774	19.971
	BE10-Well-known corporate citizen	0.841	0.722		0.810	19.664
	BE9-Transparent actions	0.805	0.715		0.794	-
	BE11-Known for legal and ethical conducts	0.791	0.717		0.866	21.345
Brand image	BE5-Positive image	0.929	0.880	23.261	0.878	23.412
	BE7-Unique image	0.918	0.882		0.760	15.476
	BE6-Attractive image	0.893	0.796		0.901	-
Value equity (VE) KMO = 0.896, BTS = 4202.025/66 = 0.000, Alpha = 0.929, CR = 0.958						
Convenience	VE9-Convenient branches locations	0.865	0.810	30.204	0.734	16.868
	VE8-Suitable working hours	0.812	0.771		0.709	17.805
	VE12-Easily accessible staff	0.798	0.749		0.777	22.448
	VE10-Availability of 24 hour service	0.746	0.732		0.798	-
	VE-11-Large ATM network	0.624	0.691		0.839	19.007
Quality	VE1-Excellent services quality	0.836	0.787	29.006	0.801	15.409
	VE4-Perform services correctly	0.813	0.770		0.815	23.232
	VE3-Performs services exactly as promised	0.806	0.727		0.758	-
	VE2-Up-to-date facilities	0.806	0.755		0.788	14.886
Price	VE7-Competitive service charges	0.906	0.833	16.525	0.568	18.087
	VE6-Competitive prices	0.712	0.755		0.841	11.735
	VE5-Offer good value for money	0.564	0.688		0.836	-
Retention equity (RE) KMO = 0.756, BTS = 3833.26/55 = 0.000, Alpha = 0.750, CR = 0.966						
Knowledge building programs (KBPs)	RE5-Informed customers about their investment	0.945	0.898	29.316	0.874	25.644
	RE4-Explain services meaningfully	0.922	0.854		0.928	28.677
	RE2-Keep customers up to date	0.868	0.761		864	25.722
	RE6-Organize awareness camps	0.848	0.719		0.853	-

(Continued)

Table 1. (Continued)

Factors	Items	EFA			CFA	
		FL	CV	TVE%	SRW	Critical ratio
Affinity programs (APs)	RE7-Treats customer as a valuable asset	0.927	0.863	28.192	0.949	16.787
	RE9-Offers personalized services	0.909	0.827		0.708	33.089
	RE8-Interacts with smile	0.892	0.802		0.939	30.087
	RE10-Celebrity treatment	0.777	0.605		0.903	–
Loyalty programs (LPs)	RE1-Special offers	0.926	0.859	21.299	0.724	9.529
	RE3-Rewards	0.898	0.807		0.736	9.689
	RE2-Additional incentives	0.675	0.675		0.615	–
Relational equity (RLE) KMO = 0.948, BTS = 10354.130/55 = 0.000, Alpha = 0.948, CR = 0.984						
Customer satisfaction	RLE1-Enjoy bank relationship	0.900	0.938	33.182	0.934	55.376
	RLE3-Delighted with bank performance	0.878	0.912		0.917	–
	RLE4-Exceed expectations	0.868	0.881		0.911	38.711
	RLE2-Delighted with visits	0.866	0.907		0.935	47.282
	RLE5-Satisfactory treatment	0.845	0.901		0.961	39.504
	RLE7-Satisfactory solving problems	0.673	0.765		0.815	25.357
	RLE6-Satisfactory services management	0.668	0.742		0.797	24.286
Customer commitment	RLE15-Feel emotionally attached	0.837	0.829	28.207	Delete	Delete
	RLE17-Feel pleasure being a customer	0.831	0.809		0.826	–
	REL16-Committed to continue	0.817	0.783		0.794	26.980
	RLE13-Proud to be customer	0.798	0.804		0.860	19.682
	RE14-Sense of belonging-ness	0.774	0.793		0.890	20.578
	RE12-Feel guilt if leave	0.591	0.537		Delete	Delete
Customer trust	RLE9-Safe and secure transactions	0.789	0.865	20.979	0.893	27.989
	RLE11-Trustable procedural system	0.789	0.863		0.891	27.889
	RLE10-Honest and truth full employees	0.788	0.852		0.902	29.177
	RLE8-Reliable promises	0.749	0.824		0.888	–
Social equity (SE) KMO = 0.793, BTS = 1420.321/36 = 0.000, Alpha = 0.801, CR = 0.938						
Responsibility towards customers	SE1-Considers customer satisfaction/benefits	0.860	0.793	26.037	0.866	–
	SE2-Respect customers rights	0.851	0.753		0.752	17.327
	SE3-Concerned about customers well being	0.788	0.707		0.773	17.233

(Continued)

Table 1. (Continued)

Factors	Items	EFA			CFA	
		FL	CV	TVE%	SRW	Critical ratio
Responsibility towards society	SE4-Cooperates other entities in social projects	0.831	0.705	22.317	0.671	–
	SE5-Supports social welfare programs	0.752	0.701		0.825	12.347
	SE6-Create employment opportunities	0.711	0.606		0.671	10.983
Responsibility towards law & environment	SE7-Corporate governance compliance	0.775	0.665	20.519	0.592	–
	SE9-Organize environment protection programs	0.773	0.655		0.677	9.074
	SE8-Implement eco-friendly activities	0.751	0.620		0.680	8.915
Customer loyalty scale (CL) KMO = 0.804, BTS = 1972.018/66 = 0.000, Alpha = 0.802, CR = 0.984						
Repurchase intention	CL1-Strong preference	0.788	0.668	21.716	0.657	14.006
	CL2-Not switching to other banks	0.780	0.644		0.779	11.097
	CL3-Continuing visiting in near future	0.780	0.630		0.735	11.237
	CL4-Loyal patron	0.778	0.648		0.616	–
Positive-word of mouth	CL9-Say positive things to others	0.815	0.674	21.229	0.570	10.844
	CL11-Point out positive messages	0.796	0.667		0.671	11.318
	CL12-Not hesitate to refer acquaintance	0.740	0.615		0.660	–
	CL10-Positive attitude and feeling	0.734	0.613		0.807	11.378
Recommend to others	CL7-Recommend to anyone who seeks advice	0.816	0.689	20.550	0.754	–
	CL8-Encourage friends and relatives to visits	0.807	0.696		0.789	13.536
	CL5-Continuing patronize	0.769	0.597		0.671	13.054
	CL6-Concerned about bank prosperity	0.654	0.526		0.524	10.055

Notes: FL = factor loading, CV = communalities value, KMO = Kaiser-Meyer-Olkin, BTS = Bartlett test of sphericity, CR = Composite reliability, TVE = Total variance explained, SRW = Standard regression weights, χ^2/df = Chi-Square divided by degree of freedom, GFI = goodness-of-fit index, NFI = normed fit index, RFI = Relative fit index and CFI = Comparative fit index, RMSEA = root mean square error of approximation.

6.1.3. Third stage: Assessment, purification of customer equity scale: Confirmatory factor analysis (CFA)

After item analysis, CFA is run on five sub-scales of customer equity namely brand equity, value equity, retention equity, relational equity, and social equity individually and later on overall customer equity scale.

6.1.3.1. First step: Fitness indices of the measurement model. Initially, CFA is applied to confirm the reliability validity and model fitness of five second-order sub-scales of customer equity. Items with standardized regression weights (SRW) greater than and equal to 0.50 and critical ratio values greater than and equal to 1.96 are retained (Hair et al., 2009). Following this step, 11 items are retained for brand equity, value equity and retention equity each, 15 items retained for relational equity and nine items for social equity. The model fitness of all five dimensions of customer equity namely brand equity, value equity, retention equity, relational equity, and social equity are found to be robust fit as all the fit indices such as chi-square divided by degree of freedom (χ^2/df) less than 5, goodness-of-fit index (GFI) greater than 0.90, normed fit index (NFI) greater than 0.90, relative fit index (RFI) greater than 0.90 and comparative fit index (CFI) greater than 0.90, and root mean square error of approximation (RMSEA) less than 0.80, are above the usual mark as suggested by (Hair et al., 2009).

After confirming reliability and validity of all sub-scales of customer equity, CFA is run on a third-order customer equity model comprising 57 items spread across five dimensions namely brand equity, value equity, retention equity, relational equity, and social equity. Numbers of runs were conducted till clean and clear factors representing the five dimensions are emerged. In total, nine items are deleted as their SRW values are below 0.50. However, precaution is taken before deleting these items to retain the content validity. The SRW values of all the retained 48 items of CUSEQUITY scale are ranged from 0.50–0.960, and critical ratios values are above 7.818. The fitness of the overall customer equity model is satisfactorily fit with χ^2/df (2.218) GFI (0.838), NFI (0.885), CFI (0.933), and RMSEA (0.051) (Figure 1). The fitness of the entire measurement models is mentioned in Table 2.

6.1.3.2. Second step: Composite reliability. Composite reliability of customer equity subscales namely brand equity (0.968), retention equity (0.962), value equity (0.961), relational equity (0.957), and social equity (0.951) are found to be greater than 0.70. Moreover, the composite reliability of overall CUSTEQUITY scale (0.949) is greater than 0.70 (Hair et al., 2009) indicate the good internal consistency of the data (Table 3).

6.1.3.3. Third step: Assessment of construct validity using convergent and discriminant validity. To test the validity of the scale, convergent and discriminant validity are assessed as a part of construct validity. The study results revealed existence of convergent validity as SRW of all the items of CUSTEQUITY scale are above 0.50 (Figure 1) and AVE (average variance extracted) of all the dimensions of customer equity namely brand equity (0.701), value equity (0.662) retention equity (0.613), relational equity (0.795), and social equity (0.603) are above the usual benchmark of 0.50 (Hair et al., 2009) (Table 3).

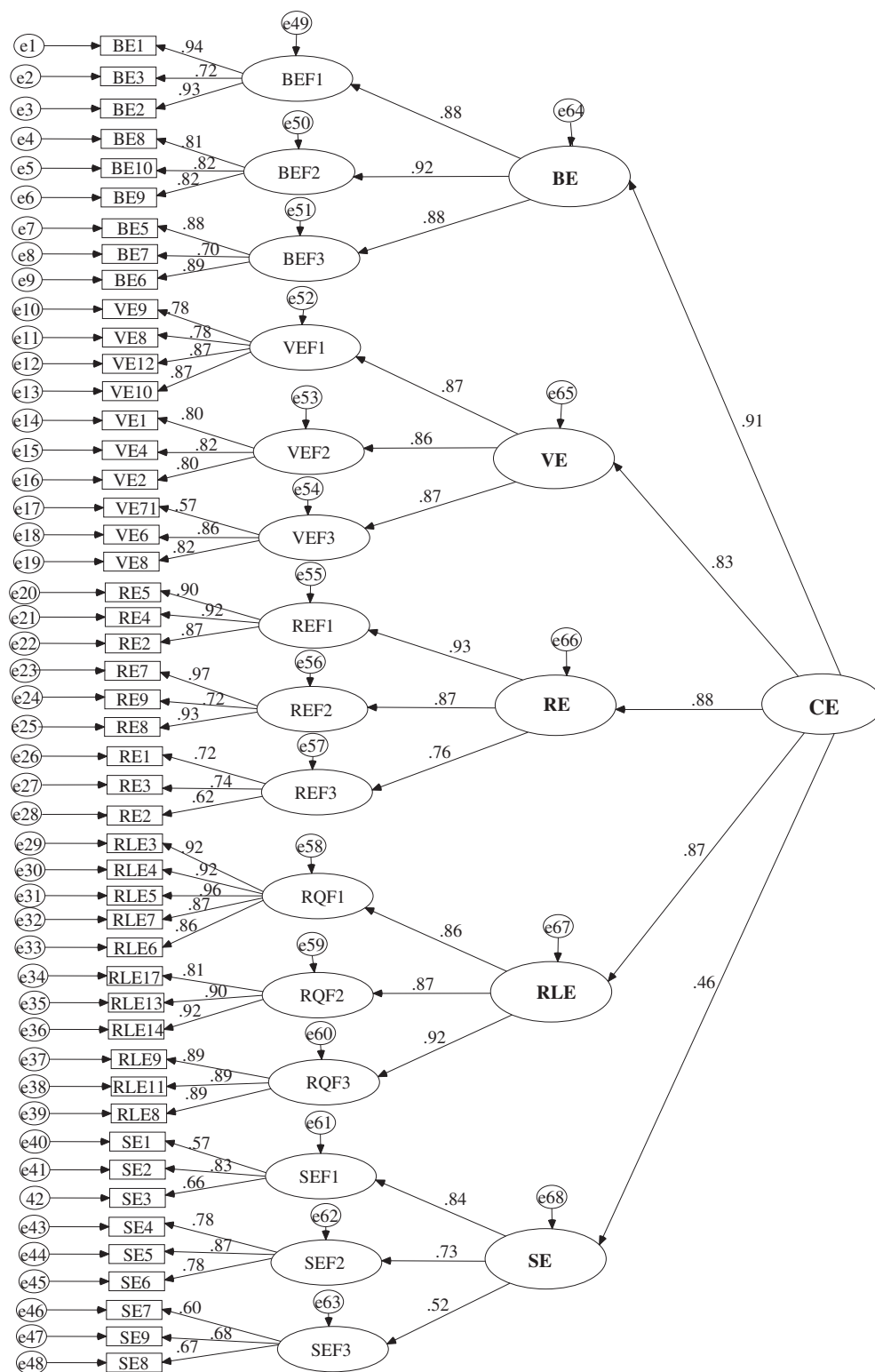
Additionally, discriminant validity is also examined by comparing average variance extracted of all five dimensions of customer equity with the squared correlation between constructs (Fornell & Larcker, 1981). Table 3 shows that discriminant validity gets established as AVE of all study scales is higher than squared correlation estimates and thereby proving that all the scales are distinct from each other.

6.1.4. Fourth stage: Nomological validity of customer equity scale using customer loyalty as dependent variable

The nomological validity of the customer equity scale on customer loyalty is also examined. Customer loyalty, a dependent variable is measured with the help of scale developed by Zeithaml, Berry, and Parasuraman (1996), including items related to attitudinal and behavioral loyalty. In the context of this study, customer loyalty is established as a multi-dimensional construct comprising three dimensions namely “Repurchase intention,” “Positive word of mouth,” and “Intention-to-recommend”. The EFA and CFA results of customer loyalty scale are mentioned in Table 1.

Figure 1. Overall third-order customer equity model.

Notes: BEF1 = brand awareness, BEF2 = brand ethics, BEF3 = brand image, VEF1 = convenience, VEF2 = quality, VEF3 = price, REF1 = knowledge-base programs, REF2 = affinity programs, REF3 = loyalty programs, RQF1 = customer satisfaction, RQF2 = customer commitment, RQF3 = Customer Trust, SEF1 = responsibility towards customers, SEF2 = responsibility towards society, SEF3 = responsibility towards law and environment, BE = brand equity, RE = retention equity, VE = value equity, RLE = relational equity, CE = Customer equity, e1, e2, e3 ... are the error terms.



Fit Indices: $\chi^2/df = 2.218$) GFI = .838, NFI = .885, CFI = .933 and RMSEA .051

Table 2. Measurement model fit indices

Measures	χ^2/df	GFI	NFI	CFI	RMSEA
Third-order model: Customer equity	2.218	0.838	0.885	0.933	0.051
Second-order model: Brand equity	3.398	0.960	0.974	0.981	0.071
Second-order model: Value equity	3.432	0.947	0.964	0.974	0.076
Second-order model: Retention equity	2.631	0.961	0.979	0.987	0.059
Second-order model: Relational equity	2.571	0.950	0.980	0.988	0.057
Second-order model: Social equity	3.738	0.960	0.937	0.953	0.076
Second-order model: Customer loyalty	2.853	0.955	0.931	0.954	0.063

Table 3. Convergent and discriminant validity

Measures	Brand equity	Value equity	Retention equity	Relational equity	Social equity	Customer loyalty
Brand equity	0.708					
Value equity	(0.480)	0.662				
Retention equity	(0.633)	(0.417)	0.728			
Relational equity	(0.656)	(0.463)	(0.525)	0.795	0.630	
Social equity	(0.091)	(0.099)	(0.078)	(0.115)		
Customer loyalty	(0.126)	(0.101)	(0.109)	(0.133)	(0.070)	0.794

Note: The values in bold represents AVE and values in brackets represent Squared Correlation.

Table 4. Hypotheses results (direct effect)

Parameters	SRW (θ)	p-value	Hypotheses	Conclusion
Brand equity → Customer equity	0.904	***	H1	Supported
Value equity → Customer equity	0.859	***		
Retention equity → Customer equity	0.912	***		
Relational equity → Customer equity	0.969	***		
Social equity → Customer equity	0.479	***		
Customer equity → Customer loyalty	0.613	***	H2	Supported

** $p < 0.01$.

*** $p < 0.001$.

The SEM results revealed the positive significant relationship between customer equity and customer loyalty. The fitness of the customer equity and customer loyalty model is also recorded well with $\chi^2/df = 2.687$, GFI = 0.896, NFI = 0.900, CFI = 0.938, and RMSEA = 0.042. The positive regression weights (0.611) and the significant critical ratio (9.441) above 1.96 of all the relationship confirmed the nomological validity of CUSTEQUITY scale (Table 4).

6.1.5. Fifth Stage: Common method bias using EFA and CFA

Common method bias may be a potential problem when both dependent and independent variables are generated from the same respondents at the same time. The present used two approaches to address common method variance (CMV). First, the study performed Harman's single-factor test using EFA. According to this approach, CMV exists when a single factor accounts for a majority (>50%) of the covariance between the variables (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The application of un-rotated exploratory factor analysis shows that single factor explains 20.237% of

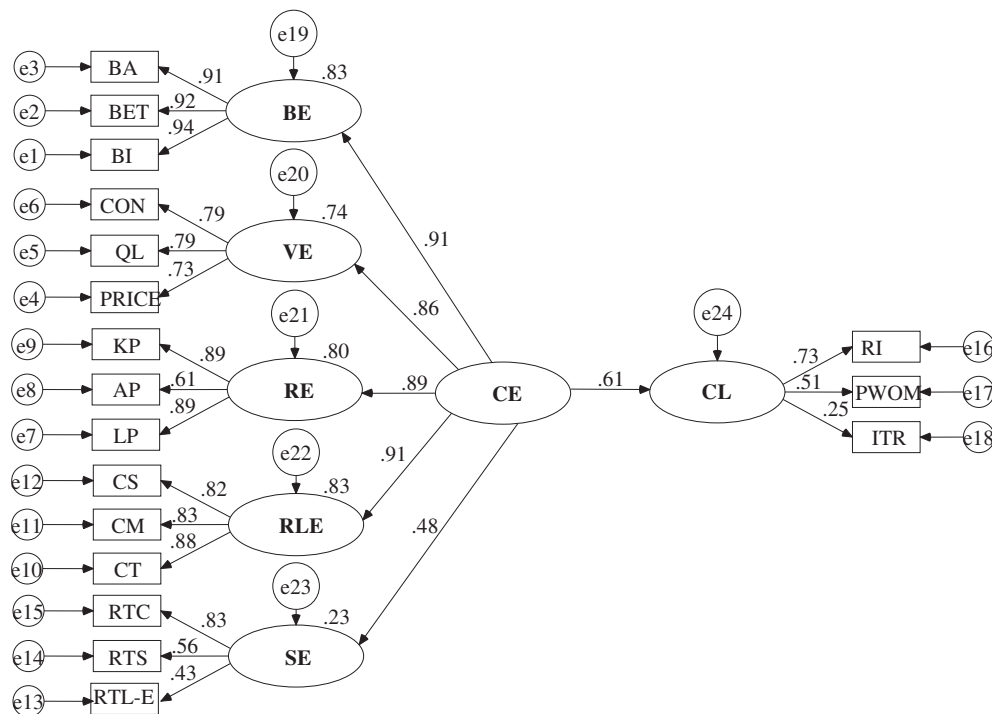
the variance in the data, indicating that results are not subject to biases. As an alternative to EFA, the study also used CFA in implementing Harmon's single-factor test. In this approach, the fitness of the CFA model fitness is examined by linking all manifest variables with the latent construct. The worse fitness of first order CFA model ($\chi^2/df = 7.663$, GFI = 0.790, NFI = 0.809, RFI = .784, CFI = 0.829, RMSEA = 0.119), confirmed that common method variance does not have a substantial influence on findings (Malhotra, Kim, & Patil, 2006).

6.1.6. Sixth Stage: Hypotheses testing using structural equation modeling (SEM)

After establishing measurement models, SEM is used to test research hypotheses (Figure 2). The overall fitness of the structural model is found to be significant with χ^2/df (3.421) GFI (0.909), NFI (0.917), RFI (0.0903), CFI (0.940), and RMSEA (0.072) also met or exceeded the threshold criteria. The results show that all five dimensions of customer equity namely brand equity (SRW = 0.909, $p = 0.000$), value equity (SRW = 0.863, $p = 0.000$), retention equity (SRW = 0.894, $p = 0.000$), relational equity (SRW = 0.910, $p = 0.000$), and social equity (SRW = 0.481, $p = 0.000$) positively and significantly contribute to customer equity (Table 3). Hence, hypothesis 1 accepted, which prove that customer equity is a multi-dimensional construct comprising five dimensions namely, brand equity, value equity, retention equity, relational equity, and social equity. Further, results also revealed that relational equity, retention equity, and brand equity have a greater influence on customer equity followed by value equity and social equity. The relationship between customer equity and customer loyalty also came to be significant (SRW = 0.613, $p < 0.001$) indicating the importance of customer equity in creating and building a loyal customer base in Indian banking context. As a result, the study confirms the acceptance of hypothesis 2 which states that customer equity has a positive significant impact on customer loyalty.

Figure 2. Structural equation model.

Notes: BA = brand awareness, BET = brand ethics, BI = brand image, CON = convenience, QL = quality, PR = price, KP = knowledge-base programs, AP = affinity programs, LP = loyalty program, CS = customer satisfaction, CM = customer commitment, CT = customer trust, RTC = responsibility towards customers, RTS = responsibility towards society, RTL-E = responsibility towards law and environment, CE = customer equity, BE = brand equity, RE = retention equity, VE = value equity, RLE = relational equity, CL = customer loyalty, RI = repurchase intention, PWOM = positive word of mouth, RTO = recommend to others, e1, e2, e3 ... are the error term.



Fit Indices: $\chi^2/df = 3.421$, GFI = .909, NFI = .917, RFI = .0903, CFI = .940, and RMSEA .072

6.2. Moderating effects

A multi-group SEM analyses are used for testing moderating effects in the customer equity and customer loyalty relationship (Palmatier, Scheer, & Steenkamp, 2007). To test the moderating effects of gender, age, and relationship length, a median split is used for dividing the sample into two groups. A dichotomous variable such as gender (male/female) is divided into two groups of male and female customers. Similarly, two groups—younger and older are created using the median age of the respondents (40 years). Additionally, to test the moderating effect of relationship length (categorical variable) a median score of average relationship length (1.30) is used to classify the data into short and long relationship groups. A median score of average relationship length represents customers with more than 11.5 years of relationship with banks. Following this step, constrained model and unconstrained model are developed for all the three moderating variables to test whether there is any significant difference between the two models. The significant difference between chi-square values of constrained model and unconstrained model establishes moderation effect.

As expected, the study results provide support for moderating effects of age, gender, and relationship length on customer equity and customer loyalty relationship (Table 5). The results show that the impact of customer equity on customer loyalty is stronger for younger consumers ($SRW = 0.668$, $p < 0.01$) than for older consumers ($SRW = 0.481$, $p < 0.01$). Similarly, the impact of customer equity on customer loyalty is stronger and significant for respondents belonging to long relationship length group ($SRW = 0.742$, $p < 0.01$) in comparison to short relationship length group ($SRW = 0.541$, $p < 0.01$). Although, the moderating effect of gender on customer equity and customer loyalty relationship is found significant (Table 5), however, hypothesis 3(b) is not supported, as the results reveal that the impact of customer equity on customer loyalty is stronger for female customers ($SRW = 0.764$, $p < 0.01$) than for male customers ($SRW = 0.543$, $p < 0.01$).

Table 5. Moderating effect of age, gender, and relationship length on customer equity and customer loyalty relationship

Moderators	β -value	Constrained model		Un-constrained model		$\Delta \chi^2 (\Delta df)$	Results	Model fitness
		χ^2	df	χ^2	df			
Age								
Younger	(0.668)**	259.005	40	100.671	38	158.334** (2)	H3(a) Supported	χ^2/df = 2.649, GFI = 0.948, NFI = 0.942, CFI = 0.963, RMSEA = 0.059
Older	(0.481)**							
Gender								
Male	(0.541)**	283.250	40	127.729	38	155.521** (2)	H3(b) Not supproted	χ^2/df = 3.369, GFI = 0.937, NFI = 0.930, CFI = 0.940, RMSEA = 0.071
Female	(0.742)**							
Relationship length								
Short	(0.543)**	293.739	40	128.911	38	164.828** (2)	H3(c) Supported	χ^2/df = 3.392, GFI = 0.933, NFI = 0.946, CFI = 0.946, RMSEA = 0.071
Long	(0.746)**							

** $p < 0.01$.

7. Discussion and conclusion

To contribute to the extant literature, the present study validates the dimensionality of modified CUSTEQUITY scale in Indian banking context and measures its impact on customer loyalty to establish the nomological validity of CUSTEQUITY scale. Customer equity is established as multi-dimensional construct comprising, brand equity (brand awareness, brand ethics and brand image), value equity (convenience, quality, and price) and relational equity (satisfaction, commitment and trust), retention equity (knowledge-base programs, affinity programs, and loyalty programs), and social equity (responsibility towards customers, responsibility towards society, and responsibility towards law and environment) in Indian banking sector. The results indicate the expected dimensionality of the developed scale and reveal that all the dimensions namely brand equity, value equity, retention equity, relational equity, and social equity are significantly related to customer equity. Among these dimensions, relational equity, retention equity, and brand equity have a strong and significant influence on customer equity followed by value equity and social equity. Moreover, the positive significant impact of social equity on customer equity in Indian banking sector proved social equity, as an effective strategy to create win-win situations for organizations, customers, and society, to prognostic positive social image and to enhance the customer-brand relationship.

Additionally, the positive significant relationship between extended and modified customer equity and customer loyalty (dependent variable), establishes the nomological validity of CUSTEQUITY scale. This finding is consistent with the results of previous studies such as Zhang et al. (2014) that viewed customer equity as a key strategy for creating customer loyalty in Indian banking context.

Besides, the study also examined the moderating effect of demographic variables (age, gender, and relationship length) in the relationship between customer equity and customer loyalty, using multi-group SEM method. The results found that the influence of customer equity on customer loyalty is stronger for younger customers than for older customers. These results are consistent with the results of previous studies such as Yoshida and Gordon (2012), Homburg and Giering (2001) and are more influenced by brand image (Sethuraman & Cole, 1999) and relationship-building processes (Yoshida & Gordon, 2012). Relationship length is established as nomological moderator as customer equity and customer loyalty relationship is more robust for such customers who are strongly associated with the banks for a long time (Rust et al., 2004; Verhoef et al., 2002) However unlike the previous studies such as Yoshida and Gordon (2012) and Homburg and Giering (2001), the present study results revealed that female customers have stronger effect on customer equity and customer loyalty relationship than male customers. The results depict that female customer are more loyal and committed with their banks and risk averse to switch to other banks. Moreover, they exhibit more intention to recommend their respective brands to others.

7.1. Implications

This study has various implications, which are important for practitioners as well as academicians. It is suggested that managers should adopt and measure customer equity management periodically to know the worth of the customers, to understand customers' needs and to enhance customer-brand relationship. Further, they should focus on relevant/effective marketing strategies such as perceived value, brand awareness, service quality, brand ethics, and loyalty programs which have a strong influence on the mind of the customers. The present study confirmed social equity and relational equity as the essential dimensions of customer equity along with other three dimensions namely brand equity, value equity, and retention equity. The study results revealed that banks need to take more ethical responsibility that embraces standards, norms, and expectations related to stakeholders (customers, employees, shareholders, and the community). Further, customers are seen willing to pay a higher price for products with such ethical companies which create trustworthiness among them, especially younger and female customers. Moreover, the study suggested that banks should organize social responsibility activities such as social welfare programs, environment protection programs, skill development programs, and customer awareness programs to create and build good image and reputation; and enhance their long-term competitive position in the market. Also, these programs are also essential to increase customer satisfaction and customer loyalty. In

other words, engaging in altruistic activities will create a win-win situation for both corporate sector and society.

Further, it is also suggested that banks should design and develop customer-based marketing strategies such as community programs, knowledge-base programs, loyalty programs, and affinity programs to increase brand awareness and enhance loyal customer base. The study suggested that banking industry should stress on latest relational practices such as loyalty points, gifts, additional benefits, discounts, rebates, rewards celebrity treatment, interact with a smile, personal attention, seminars, conference, workshops, camps, etc. to enhance the long-term successful relationship with their customers.

8. Limitations and future research

The present study has several limitations that may influence its results. First, the dimensionality of CUSTEQUITY scale is confined to the banking sector in general. However, the study can be extended to other service sectors such as telecommunications, insurances, hospitality, retail, and supermarket in future to confirm the robustness of its findings. Besides, a comparative study between private and public sectors is also required to analyse which sector-public or private creates more valuable and competitive resources for their customers.

Second, the present study examined the overall impact of extended and modified CUSTEQUITY scale on customer loyalty. It may be more representative and beneficial to examine the dimensions-wise effect of customer equity on customer loyalty in further research. Zhang et al.(2014) and Yoshida and Gordon (2012) suggested that customer equity drivers namely brand equity and relational equity also play an important role in building and creating customer loyalty because these customer-based metrics are essential to enhance firms' reputation and image. Further, the study is limited to test the moderating effect of demographic variables such as age, gender, and relationship length. The impact of other demographic variables (income and education), and relational characteristics (relational benefits and interaction frequency) should be included in the further research. Lastly, the study results revealed that younger and female customers are more influenced by brand image, and relationship building process, retention programs and social programs in Indian banking. Future research is required to confirm these findings.

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Citation information

Cite this article as: CUSTEQUITY scale: Measurement and validation in Indian banking sector, Hardeep Chahal & Renu Bala, *Cogent Business & Management* (2017), 4: 1336152.

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