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Customer loyalty & face concerns

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Chapter 3

Cross-Cultural Differences in Customer Loyalty Drivers*

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3. CROSS-CULTURAL DIFFERENCES IN CUSTOMER LOYALTY DRIVERS

3.1 INTRODUCTION

Loyal customers are critical to any firm (Tsai, 2011), in that they are less expensive to serve (Shugan, 2005), tend to buy and pay more (Seiders, Voss, Grewal, & Godfrey, 2005), and spread positive word of mouth (Reichheld & Sasser, 1990). The customer equity literature (Rust, Lemon, & Zeithaml, 2004) suggests that three factors: value equity, brand equity and relationship equity, are of particular importance in building customer loyalty. Previous empirical studies report a positive relationship between the three customer equity drivers and loyalty intentions (Rust et al., 2004; Vogel, Evanschitzky, & Ramaseshan, 2008)—though only in Western countries.

The results of research into Western consumers and their loyalty do not necessarily predict the behaviour of Eastern consumers (Anderson & He, 2006). For example, in Western cultures, customers tend to focus on their personal preferences for brands (Reykowski, 1994) and pay more attention to intrinsic attributes (e.g., quality). In contrast, in Eastern cultures, customers tend to choose brands more for prestige (Wong & Ahuvia, 1998) and attend to their extrinsic attributes (Belk, 1988). When evaluating services, Western consumers tend to rely on concrete evidence (De Mooij, 1998), such as task completion, delivery efficiency and time savings; Asian customers instead pay attention to the quality of their interactions with service persons (Mattila, 1999). Alden, Steenkamp, and Batra (1999) report that people from Western cultures also prefer advertisements with individualistic appeals, symbolizing the importance of enjoyment, cost savings and individualism, but people from collective cultures generally favour advertisements with collectivistic appeals, signifying family values, tradition, and technology. More recently, Liu and McClure (2011) find that in Eastern cultures, customers have a stronger tendency to praise when they receive positive service quality but not complain, even if they receive poor service quality.

The validity of applying marketing strategies developed in Western countries to other cultures, especially non-Western ones, is therefore questionable (Clark, 1990). Cui and Liu (2001) observe that many multinational corporations (MNCs) have not reached their projected growth levels in Eastern countries, largely because their marketing strategy failed to adapt to local market conditions. Empirical evidence confirms that the best marketing strategy differs significantly across countries. For example, Brouthers, Werner, and Matulich (2000) find that a superior value product strategy (high quality/low price) performs better in Japan, a premium product strategy (high quality/high price) works better in the European Union, and an economy product strategy (low quality/low price) is most appropriate in the U.S. market. As these examples indicate, developing effective marketing strategies that are sensitive to cultural differences across countries is of considerable importance in the global marketplace (Gürhan-Canli & Maheswaran, 2000).

Yet no empirical evidence confirms whether customer equity drivers are sensitive to culture. A literature review reveals that neither customer equity nor cross-culture research can answer this question. Studies of the impact of customer equity drivers overwhelmingly take place in Western settings. Empirical studies reveal that brand equity is the strongest driver in a U.S. chain restaurant industry (Hyun, 2009). In the European retailing industry, value equity and brand equity have relatively greater impacts on loyalty intentions than relationship equity (Vogel et al., 2008). But the influence of cultural differences on perceptions of customer benefits seems largely ignored. In response, Rust et al. (2004, p. 123) encourage researchers to “empirically validate in what kind of cultures various drivers are more important or less important, and why?” We answer that call by examining whether the link of customer equity drivers and loyalty differs between Eastern (e.g., China) and Western (e.g., the Netherlands) cultures. To this end, we interviewed customers of banks and supermarkets in China and the Netherlands.

Using a sample of 1553 Chinese and 1085 Dutch consumers in the banking and supermarket industries, we find that all three customer equity drivers exert a greater impact in Western than in Eastern cultures. Furthermore, the results show that Eastern consumers in general have higher loyalty intentions than Western consumers. To the best of our knowledge, this study is the first attempt to investigate this issue; its results should help MNCs (especially those in relational or transactional industries), adjust their marketing strategy to appeal to specific target groups in different cultures and thus improve the efficiency of their marketing resources.

The rest of this article is organized as follows: We first present the theoretical background and hypotheses. Next, we present the methods and tests of the hypotheses. We conclude with a discussion of the results and their implications.

3.2 THEORETICAL BACKGROUND

3.2.1 Cultural-Driven Differences in Chinese Consumer Behaviour

The key for explaining cultural differences in behavioural sciences is to focus on cultural values (Bond & Smith, 1996). Perhaps the best known cultural framework is Hofstede's (2001) five-dimensional one: individualism versus collectivism, uncertainty avoidance, long- versus short-term orientation, power distance, and masculinity versus femininity. The first three dimensions have particular significance for consumer behaviour and therefore should be relevant for understanding cross-national variation in the importance of customer equity drivers for loyalty intentions.

Collectivism is the tendency to place group goals above individual goals (Lu, 1998). In a collectivist culture, people tend to behave according to the social norms, whereas people in individualistic cultures value independence and self-sufficiency (Markus & Kitayama, 1991). Compared with Western societies, China is a collectivist society (Hofstede, 2001). Chinese consumers are therefore more likely to be influenced by their reference groups (Li & Su, 2007)

and to favour advertisements with collectivistic appeals (Alden et al., 1999) than their Western counterparts are.

Uncertainty avoidance is defined as the degree to which people in a society tolerate ambiguity and uncertainty or feel threatened by ambiguous situations (Atuahene-Gima & Li, 2002). This concept captures cultural patterns by which people seek stability, predictability, and low stress rather than new experiences (Zhou, Su, & Bao, 2002). Chinese consumers have higher uncertainty avoidance scores than Westerners and therefore are less likely to purchase new products (Lowe & Corkindale, 1998) or less-established brands (Bao, Zhou, & Su, 2003) and more likely to rely on price as an indicator of quality (Shapiro, 1973).

Chinese people have a stronger long-term orientation than Westerners, implying their focus on future rewards (Wang & Sun, 2010). That is, Chinese people put more value on continuity (Lowe & Corkindale, 1998) and long-term relationships. In turn, Chinese consumers tend to be more tolerant of service failures (Chan, Wan, & Sin, 2009) and more brand loyal than Western consumers (Lowe & Corkindale, 1998).

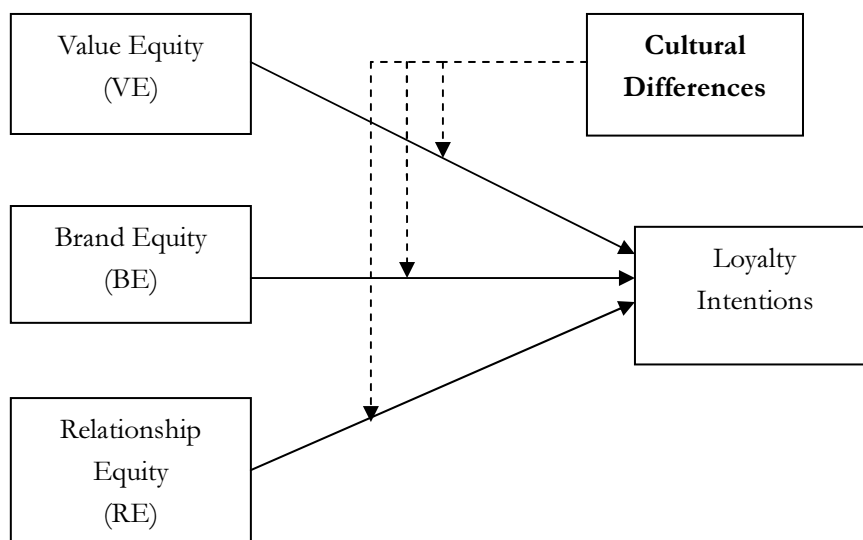
Although the Hofstedian framework has been applied frequently, some researchers (e.g., Zhang, Beatty, & Walsh, 2008) question its applicability beyond its constrained population (IBM employees) and time frame (1968–1973). Perhaps Hofstede's dimensions cannot capture the essence of Chinese culture. Therefore, to understand Eastern and Western cultural differences fully, we also consider two traditional culture-specific values (Faure & Fang, 2008), *mianzi* and *guanxi*, which are especially relevant in our research context.

Mianzi translates literally as “face” and refers to a sense of favourable social self-worth that a person wants to maintain in relational and network contexts (Goffman, 1967). The core of face are social and interpersonal (Liao & Wang, 2009), not private (Wong & Ahuvia, 1998) needs. Compared with Western societies, China is highly face conscious (Liao & Wang, 2009). Persons with high face consciousness usually care about their self-image and others' appraisals (Liao & Wang, 2009). For Chinese consumers, brand consumption is an important tool to keep, save and gain face (Liao & Wang, 2009). Empirical evidence also suggests that face positively affects consumers' brand-conscious orientations (Bao, Zu, & Su, 2003), and therefore, Chinese consumers should be more brand loyal (Kindel, 1983). The question is, however, whether this also holds with respect to the loyalty towards retailers and banks, as we investigate in this study.

Guanxi, literally translated as “relationship” refers to the social links between two persons through a particular bond (Chung, Packer, & Yau, 2010). It originates in a collectivist society, where interpersonal harmony is a highly important value (Gu, Hung, & Tse, 2008). *Guanxi* exists to some extent in every human society, but compared with the Western world, China is a strongly *guanxi*-oriented society (Huang, 2000). Extensive studies (e.g., Abramson & Ai, 1997; Gu et al., 2008) demonstrate that *guanxi* with government officials, which offers a source of social capital (Gu et al., 2008), is a key determinant of business performance in China. Studies of the influence of interpersonal *guanxi* in relationship marketing or customer–company relationships

are relatively limited. Merrilees and Miler (1999) show that the basis of Chinese relationship marketing is firmly rooted in *guanxi*, and relationship marketing elements are more important in China than in Australia. Geddie, DeFanco, and Geddie (2005) reveal that *guanxi* strengthens customer relationship management in the hospitality industry. With regard to *guanxi*'s influence on Chinese consumer behaviour, Kale and Barnes (1992) show that the Chinese attach special importance to human interactions.

Figure 3.1: Conceptual framework



3.2.2 Conceptual Framework

Figure 3.1 represents our theoretical framework. We build the customer equity model of Rust et al. (2004) in which the customer equity drivers (CED's) (value equity, brand equity and relationship equity) are determinants of customer loyalty intentions. Value equity refers to customers' objective assessments of the utility of a good/service, based on their perceptions of what they give up compared with what they receive (Rust et al., 2004). Brand equity involves customers' subjective assessment of the perceived value of the brand (Lemon, Rust, & Zeithaml, 2001). Relationship equity means the tendency of the customer to stick with the company/brand (Lemon et al., 2001). It depends on customers' relationships with sales- and servicepersons, loyalty programs, etc. Finally, loyalty intentions are customers' relative attitudes toward the brand or firm (Dick & Basu, 1994), which offer a good indicator of future sales (Vogel et al., 2008).

Previous studies report that all three customer equity drivers relate positively to loyalty intentions (e.g., Vogel et al., 2008). However, as we discussed in Section 3.2.1, prior literature also suggests that cultural differences might moderate the relationship between customer equity

drivers and loyalty intentions. Therefore, our main interest is in testing whether and how the importance of customer equity drivers varies between Eastern and Western cultures.

3.3 HYPOTHESES DEVELOPMENT

In general, there is hardly any empirical evidence about the importance of CED's on the loyalty to retail organisations such as banks and supermarkets in different cultures. Most relevant literature deals with the role and value of individual brands or specific products in different cultures. The same holds for the relevance and importance of customer-brand relationships. In what follows, we specify expectations and also competing hypotheses, which indicates the explorative nature of this study.

3.3.1 Value Equity and Culture

Value represents a trade-off of the salient give and get components (Zeithaml, 1988). The price-quality ratio is the core of value equity. De Mooij and Hofstede (2011) propose that, in general, Western consumers adopt a rational decision-making style and thus are more price and quality conscious. Empirical evidence indeed finds that consumers in Germany report a high impact of price-quality ratio of service on loyalty (Gerpott, Rams, & Schindler, 2001). Lee and Ulgado (1997) find low price and consistent quality affect U.S. consumer loyalty. Brady, Robertson, and Cronin (2001) also suggest that Western consumers pay more attention to what they receive and what they give up. As for Chinese consumers, Bao et al. (2003) find that Chinese consumers possess a lower price consciousness and value-for-money orientation than U.S. consumers, perhaps because they focus on other issues, such as concern for face or relationships. These social needs may cause Chinese consumers to pay less attention to intrinsic attributes, such as price and quality. Another explanation might be that Chinese consumers, due to the influence of collectivistic culture, are more likely to be affected by group members and are more concerned with others' opinion (Hofstede, 2001). Thus Chinese consumers' evaluations for value equity might be less objective than Western consumers, which might weaken the link between value equity and loyalty intentions. Therefore, we expect that due to the influence of face concerns, collectivistic culture and different decision-making styles, value equity should have less impact on loyalty in China than in Western cultures.

H1: The positive effect of value equity on loyalty intentions is weaker in Eastern than in Western societies.

3.3.2 Brand Equity and Culture

Previous literature on the one hand reveals that brands are especially important in China (Henderson, Cote, Leong, & Schmitt, 2003), because brand consumption enables Chinese consumers to keep, save and gain face (Liao & Wang, 2009). Unlike in Western cultures, brand consumption does not merely meet material needs but also fulfils social needs, the desire for favourable social self-worth and the preference to be respected by others (Ting-Toomey &

Kurogi, 1998). Moreover, Chinese consumers might prefer to consume branded products because of their high uncertainty avoidance, especially in the face of widespread counterfeit products (Fan & Xiao, 1998). Empirical evidence is indeed provided that brands are more important in collectivist than in individualistic societies, especially for visible categories (Kim et al., 2004; Zhang, van Doorn, & Leeflang, 2012). Even for services, Wang, Lo, Chi, and Yang (2004) find that brand loyalty is the most significant influence in the securities service industry of China. Yet, these results are obtained investigating individual brands of goods/services, not retailers.

There is, however, on the other hand also research that demonstrates that consumers from more individualistic cultures have a higher tendency to stick to well-known brand names (Sun, Horn, & Merritt, 2004). Individualism has also been found to be positively associated with brand loyalty (Lam, 2007). From a theoretical perspective, it is suggested that brands are used for social recognition in individualistic cultures (Manrai, Lascu, Manrai, & Babb, 2001). Hence, we propose the following two competing hypotheses regarding the effect of brand equity on loyalty intentions:

H2a(b): The positive effect of brand equity on loyalty intentions is stronger (weaker) in Eastern than in Western societies.

3.3.3 Relationship Equity and Culture

Chinese culture can be characterized as *guanxi*- or relationship-oriented (Huang, 2000). Relationships (*guanxi*) are universal and play crucial, widely accepted roles in people's daily lives (Luo, 2007). Many studies (e.g., Abramson & Ai, 1994; Gu et al., 2008) specify that relationships (*guanxi*) are necessary in business-to-business contexts. Yet *guanxi* may be relevant for service relationships between a company and a customer as well because in business-to-consumer settings, like in retailing, the customer-company relationship also involves an interpersonal level. In particular, consumers from Asian countries should appreciate the quality of their interactions with employees. For instance, Low, Lee, and Cheng (2012) find that Taiwanese consumers, especially females, bring this idea into shopping by establishing and cultivating personal relationships with service persons so that they may become one of in-group members and get preferential treatments (e.g., discount, lower prices, free gifts or services). Tai (2008) find that Chinese consumers prefer closer relationships with salespersons and are more likely to shop at stores where the salespeople know their names. In addition, Chinese consumers are high risk aversion, which indicates that when facing risk-taking decision such as brand switching, their perceived risk is higher than that of Western consumers (Erdem, Zhao, & Valenzuel, 2004), and therefore the relationship between Chinese consumers and a brand should be stickier than that of Western consumers. Indeed, many researchers argue that cultures with high uncertainty avoidance (e.g., China) resist change and thus are not likely to terminate valued relationships (e.g., Kale & Barnes, 1992). Also, other studies confirm the relevance of relations in cultures which

are collectivistic (De Mooij & Hofstede, 2011), with a high uncertainty avoidance (Money, Gilly, & Graham, 1998) and a long-term orientation (Lowe & Corkindale, 1998). Hence we expect that relationship equity should have a stronger impact on loyalty intentions in China than in Western cultures.

H3: The positive effect of relationship equity on loyalty intentions is stronger in Eastern than in Western societies.

3.4 RESEARCH METHOD

3.4.1 Survey Design

To test our hypotheses, we collected data from two countries: China and the Netherlands. The Netherlands offers a credible representative of Western culture, with its characteristics such as high individualism, medium risk aversion, less face consciousness, and less *guanxi* orientation (e.g., Hofstede, 1980, 2001). We interviewed customers of banks and supermarkets, which are both typical, high customer contact services (Parasuraman, Zeithaml, & Berry, 1985) but also represent two different service sectors (relation-oriented versus transaction-based) (Paulin, Ferguson, & Payaud, 2000; Rafaeli, 1989).

A self-administered questionnaire including measures of customer equity drivers and loyalty intentions, as well as demographic items such as gender, age, income, and control constructs such as relationship length and switching costs, was designed on the basis of scales in previous marketing literature. The original questionnaire was in English, but bilingual native speakers translated it into Chinese and Dutch, then back-translated it into English. Any discrepancies in the translation equivalence were carefully inspected. To ensure conceptual equivalence, panel discussions with researchers in both countries were organized to determine the meaning of the concepts. We pre-tested both questionnaires to check for the comprehensibility of the instructions, construct, wording, and questionnaire layout in both countries.

3.4.2 Sampling and Data Collection

In the Netherlands, the data were collected in 2010 by a Dutch market research agency (DCPI 2010: Dutch Customer Performance Index; see also Ou, de Vries, Wiesel, & Verhoef, 2014). Respondents were chosen randomly and rated multiple instances of a phenomenon (i.e., relationships with different firms; Rindfleisch, Malter, Ganesan, & Moorman, 2008) in each industry. The advantage of this method is its ability to generate more responses with a limited number of respondents. For each industry, a list of firms (3–10) was provided to respondents, who then chose the firms she or he currently was a customer of, then answered the same questions about all those firms. For these data, the assumption of independence of

customer–firm observations thus is violated.⁵ A total of 1085 usable observations were collected with this online survey (banking 432; supermarket 653).

In China, we instead conducted a store-intercept survey in November 2009 in Beijing. As the capital city, Beijing attracts many immigrants originally from different parts of China. Our results should therefore be good indicators of Chinese consumer behaviours. Intercept surveys also offer a practical, rapid way to collect data in China (Rosen, 1987), so many previous marketing studies have adopted them (e.g., Zhang, 1996). For this data collection, 48 trained interviewers randomly approached customers in or near banks and supermarkets and asked them to participate in the survey. Each respondent received a small incentive after they had completed the questionnaire. The interviewers conducted the survey in five of the eight districts in which major banks and supermarkets are located. These five districts account for over 70 percent of the population in the urban area of Beijing. A total of 1553 usable questionnaires were collected (bank customers 688; supermarket customers 865).

Table 3.1: Socio-demographic traits of the two data sets

	Banks		Supermarkets	
	The Netherlands	China	The Netherlands	China
Gender				
Male	50.5	60.9	40.9	41.7
Female	49.5	39.1	59.1	58.3
Age				
18–29	21.5	53.4	21.6	50.3
30–39	44	37.3	42.1	35.8
40–49	34.5	9.3	36.3	13.9
Income				
Low	23.4	68.5	37.2	82.5
Medium	54.6	22.4	53.9	13.6
High	22	9.2	8.9	3.8
Sample size	432	688	653	865

Table 3.1 presents the demographic characteristics of the two data sets, which are quite dissimilar. Different sampling procedures (offline, convenience sampling for China; online, stratified sampling for the Netherlands) as well as different national population structures (China has a younger population than the Netherlands) might be responsible for this gap, but to address the problem, we applied weighting adjustments.

⁵ This problem was addressed by estimating a hierarchical linear regression model.

3.4.3 Measures

Table 3.2 shows our measures, some descriptive statistics and the Cronbach's alpha values for the constructs. The Cronbach's reliability coefficient alphas for the Netherlands sample fall between 0.72 and 0.8 and consistently exceed the threshold of 0.7 (Hair et al., 2006). Those for the Chinese sample are between 0.66 and 0.82. However, Peterson (1994) suggests that a value of 0.6 implies a criterion-in-use, so all the factors in this study are sufficiently reliable.

3.4.4 Measurement Invariance Test

Measurement invariance refers to “whether or not, under different conditions of observing and studying phenomena, measurement operations yield measures of the same attribute” (Horn & McArdle, 1992, p. 117). Without measurement equivalence assessments, conclusions based on measurement instruments can be non-meaningful (Steenkamp & Baumgartner, 1998). For example, if we find a difference in the impact of relationship equity between Dutch and Chinese consumers but do not assess measurement invariance, we cannot determine if we uncovered a cross-cultural difference or a difference due to response biases and/or different scalar metrics of the construct. For this research, which compares the regression coefficients of value, brand and relationship equity between China and the Netherlands, we should establish configural, metric and factor invariance (see De Jong, Steenkamp, & Fox, 2007). Configural invariance implies that the basic meaning and structure of a construct is cross-nationally invariant; metric invariance also assumes equal scale intervals. Factor invariance signifies that the factors have comparable variation between the different samples. We follow Wang and Waller's (2006) procedure using a multiple-group confirmatory factor analysis (MGCFA) model in AMOS 17.0 software. The configural (M1), metric (M2), and factor (M3) invariance are estimated in a nested form; the configural invariance model serves as the baseline. The change in chi-square per change in degrees of freedom indicates whether the fits of the models differ significantly.

Table 3.2: Measures and Descriptive Statistics

Measurement variables	Source	Cronbach's α : China		Cronbach's α : Netherlands		Mean (SD): China		Mean (SD): Netherlands	
		Bank	Supermarket	Bank	Supermarket	Bank	Supermarket	Bank	Supermarket
Independent variables: <i>Value Equity</i> ([1] very strongly disagree, [7] very strongly agree)									
VE1: The price-quality ratio of the product/service the company is offering is good.						5.00(1.39)	4.35(1.24)	4.55(1.34)	5.08(1.38)
VE2: I can buy this product/service at places that are convenient for me.	Rust et al. (2004); Verhoef, Langerak, & Donkers (2007)	.712	.659	.746	.776	5.08(1.93)	4.85(1.54)	4.77(1.32)	5.42(1.46)
VE3: I can make use of the product/service of this company at any time and place I want.						4.93(1.74)	4.46(1.64)	4.98(1.49)	5.43(1.51)
<i>Brand Equity</i> ([1] very strongly disagree, [7] very strongly agree)									
BE1: This company has a strong brand.		.819	.77	.717	.763	5.68(1.55)	4.62(1.32)	5.3(1.39)	5.14(1.37)
BE2: This company has an innovative brand.	Verhoef et al. (2007); Mizik & Jacobson (2008)	(Pearson correlation: .694)	(Pearson correlation: .626)	(Pearson correlation: .562)	(Pearson correlation: .619)	4.98(1.56)	4.23(1.29)	4.36(1.25)	4.55(1.29)
<i>Relationship equity</i> ([1] very strongly disagree, [7] very strongly agree)									
RE1: I have a confidential relationship with the company.						3.28(1.71)	3.19(1.60)	3.68(1.47)	4.26(1.44)
RE2: I attach much value to the company.	Bügel, Verhoef, & Buunk (2011)	.798	.795	.886	.825	3.42(1.80)	3.21(1.67)	4.58(1.49)	4.82(1.41)
RE3: I am very enthusiastic about the company.						3.94(1.86)	3.98(1.63)	4.16(1.62)	4.14(1.55)
Control variable: <i>Relationship length</i> : How long have you been a customer of this company?									
[1]. Less than 1 year; [2]. 1-2; [3]. 2-3; [4]. 3-5; [5]. 5-10; [6]. > 10	Bolton (1998)	-	-	-	-	3.32(1.61)	3.17(1.43)	5.24(1.39)	4.61(1.58)
<i>Switching costs</i> : It costs a lot of effort to switch to another company. ([1] very strongly disagree, [7] very strongly agree)	De Matos, Rossi, Veiga, & Vieira (2009)	-	-	-	-	4.16(1.81)	4.11(1.63)	3.88(1.80)	3.51(1.70)
Dependent variable: <i>Loyalty Intentions</i> : Imagine you should buy this product again, how big is the chance that you will buy from the following companies? Please divide 100 percent over the companies. (<i>Company A is used for calculating means</i>)									
Company A ___%; Company B ___%; Company C ___%; Other company ___%.	Gupta & Zeithaml (2006)	-	-	-	-	43%(24%)	41%(24%)	41%(30%)	31%(25%)

We first consider data from the bank sample. The fit of the configural invariance model (M1) is good (root mean square error of approximation [RMSEA] = .050, confirmatory fit index [CFI] = 0.961, Tucker-Lewis index [TLI] = 0.935 for bank customers), so our model is an appropriate representation of the data across both Chinese and Dutch groups (see Siedlecki, Manly, Brickman, & Schupf, 2010). We tested for full metric invariance by constraining all factor loadings to be equal across the Chinese and Dutch samples. As we show in Table 3.3 (M2), the change in chi-square per change in degrees of freedom was significant; the fully metric invariance model fits significantly worse than the configural invariance model. Because the chi-square statistic is affected by sample size (Siedlecki et al., 2010), Cheung, Gordon, and Rensvold (2002) consider Δ CFI a particularly robust statistic for testing multi-group invariance constraints. They define a value of Δ CFI smaller than or equal to $-.01$ as a threshold. According to this rule, with a Δ CFI of $-.02$, we fail to establish full metric invariance for our data. Although full metric invariance is desirable, it is regarded as practically impossible and scientifically unrealistic (Steenkamp & Baumgartner, 1998). Thus, as a pragmatic compromise, researchers recommend partial invariance, in which most of parameters are constrained to be equal, whereas a few of the parameters are allowed to vary (Byrne, Shavelson, & Muthen, 1989). Under the concept of partial invariance, constructs and coefficients can be compared and interpreted meaningfully across groups even if some parameters are not invariant (Vandenberg & Lance, 2000; Yoo, 2002).

Table 3.3: Measurement invariance test results

Model specification	χ^2	<i>df</i>	Models compared	$\Delta\chi^2$	<i>p</i> -Value	RMSEA	TLI	CFI	Δ CFI
Banks									
M1: Configural invariance	130.218	34	N.A.	N.A.	N.A.	.050	.935	.961	N.A.
M2: Metric invariance	181.855	39	M2 vs.M1	51.64	.001	.057	.916	.941	.02
M3: Partial metric invariance	158.198	38	M3 vs.M1	27.89	.001	.053	.927	.951	.01
M4: Factor invariance	182.730	41	M4 vs. M3	24.54	.001	.056	.921	.942	.01
M5: Partial factor invariance	161.106	40	M5 vs. M3	2.91	.235	.052	.930	.950	.001
Supermarkets									
M1: Configural invariance	259.012	34	N.A.	N.A.	N.A.	.066	.901	.940	N.A.
M2: Full metric invariance	268.435	39	M2 vs.M1	9.42	.093	.062	.912	.939	.001
M4: Factor invariance	276.303	46	M4 vs. M2	7.86	.344	.061	.917	.938	.001

Notes: RMSEA = root mean square error of approximation; CFI = comparative-fit index; TLI = Tucker-Lewis index.

Therefore, we assess partial metric invariance. An examination of the modification indices revealed that the significant increase in chi-square in the bank sample was due to a lack of invariance of one factor loading (VE1: “The price-quality ratio of the product/service the bank is offering is good.”). To test for partial metric invariance (M3), we relaxed the constraint on this factor loading. The comparison of M3 with the baseline model revealed that the change in chi-square still was significant ($\Delta\chi^2(4) = 27.98$, $p < 0.001$), whereas the RMSEA and TLI improved, and the deterioration of Δ CFI was below the .01 threshold. Thus, partial metric

invariance for the bank questionnaire can be assumed (see Bai, Wu, Zheng, & Ren, 2011; De Jong et al., 2007). Finally, we test the factor invariance model. As the results in Table 3.3 reveal, full factor invariance cannot be assumed ($\Delta\chi^2(3) = 24.54, p < .001$). When we relax the constraints on VE1, we obtain a satisfactory model ($\Delta\chi^2(2) = 2.908, p > .05$) and thus can assume partial factor invariance.

To examine the configural, metric and factor invariance of the supermarket sample, we used similar procedures. According to the results in Table 3.3, configural invariance (RMSEA = .066, CFI = 0.940, TLI = 0.901), fully metric variance ($\Delta\chi^2(5) = 9.423, p > .05$), and fully factor variance invariance ($\Delta\chi^2(7) = 7.868, p > .05$) can be assumed across the Dutch and Chinese samples. Thus, our measures are cross-nationally invariant, and their regression coefficients can be compared meaningfully.

3.4.5 Common Method Bias

Common method bias may be a potential problem when both dependent and independent variables are generated from the same respondents at the same time (Buck et al., 2010). Cross-sectional studies of attitude-behaviour relationships are vulnerable to the inflation of correlations by common method variance (CMV) (Buck et al., 2010; Lindell & Whitney, 2001). We took a number of steps to address CMV. First, we performed Harman's (1967) single-factor test. If CMV exists, a single factor accounting for a majority (>50%) of the covariance between the variables would emerge. Unrotated confirmative factor analysis shows that one factor explains 31% of the variance in the banking data and 28% of the variance in the supermarket data, indicating that the findings are not subject to a bias caused by CMV. We also apply the Marker Variable (MV)-approach to determine CMV (Lindell & Whitney, 2001). We find the following CMV's: Chinese banking data: 25%; Dutch banking data: 6.25%; Chinese supermarket data: 21.26% and for the Dutch supermarket data set, we find a CMV of 2.25%. According to Williams et al. (1989), a CMV of less than 25% should not be a pervasive problem. Hence we conclude that our results are not affected by a possible bias caused by CMV.

3.4.6 Method

As stated earlier in Section 3.4.2, there are some demographic differences of respondents in the two samples; we hence performed a weighting adjustment (Loosveldt & Sonck, 2008) to address it. We reweighted the Chinese sample using the Dutch sample demographics as a reference, because the Dutch sample was obtained using a stratified sampling procedure that was more representative of the general population. We computed the ratios of the respective Dutch and Chinese percentages for the combined characteristics of gender (2 classes), age (3 levels) and income (3 levels). With this weighting procedure, we removed the differences in age, gender, and income between the Chinese and Dutch data sets (banking: gender $\chi^2 = .005 (p < .944)$, age $\chi^2 = .120 (p < .942)$, income $\chi^2 = .129 (p < .938)$; supermarket: gender $\chi^2 = .007 (p < .934)$, age $\chi^2 = .014 (p < .933)$, income $\chi^2 = .060 (p < .971)$). The Chinese sample was then reweighted to the Dutch sample size to avoid differences due to the sample size variation between countries.

Next, we estimated a regression model⁶ to test the hypotheses. We performed a natural logarithm transformation on the dependent variable, loyalty intentions, to approximate a normal distribution of the disturbances. The factor scores of value equity, brand equity and relationship equity served as the independent variables. We also controlled for relationship length and switching costs. To compare the regression coefficients between countries, we pooled the Chinese and Dutch data sets, estimated separate parameters for China and the Netherlands and control for fixed effects by using an additional intercept. Following previous studies, we used a t-test statistic to assess differences in the impact of each significant factor between samples (Johnston & Dinardo, 1997).

$$\begin{aligned} \ln \text{loyalty} = & \beta_0 + \beta_1 \cdot \text{China} + \beta_{2_{cn}} \cdot \text{value_eq} \cdot \text{China} + \beta_{2_{nl}} \cdot \text{value_eq} \cdot \text{Netherlands} \\ & + \beta_{3_{cn}} \cdot \text{brand_eq} \cdot \text{China} + \beta_{3_{nl}} \cdot \text{brand_eq} \cdot \text{Netherlands} + \beta_{4_{cn}} \cdot \text{relationship_eq} \cdot \text{China} \\ & + \beta_{4_{nl}} \cdot \text{relationship_eq} \cdot \text{Netherlands} + \beta_{5_{cn}} \cdot \text{length} \cdot \text{China} + \beta_{5_{nl}} \cdot \text{length} \cdot \text{Netherlands} \\ & + \beta_{6_{cn}} \cdot \text{switch} \cdot \text{China} + \beta_{6_{nl}} \cdot \text{switch} \cdot \text{Netherlands} + \varepsilon \end{aligned} \quad (1)$$

where

$\ln \text{loyalty}$ = natural logarithm of loyalty intentions;

China = dummy variable, equal to 1 if data are from Chinese sample, and 0 otherwise;

Netherlands = dummy variable, equal to 1 if data are from Dutch sample, and 0 otherwise;

value_eq = value equity;

brand_eq = brand equity;

relationship_eq = relationship equity;

length = relationship length;

switch = switching costs; and

ε is a disturbance term,

where all variables are defined in detail in Table 2 and are measured at the individual level. To account for the dependence of some observations given that the Dutch respondents answered questions for several companies, we also estimated a hierarchical linear regression model (HLM). We furthermore estimated a model accounting for cross-firm differences.⁷ The results of both models are comparable with the results which are obtained by estimating Equation (1).

3.5 RESULTS AND GENERAL DISCUSSION

3.5.1 Results

Table 3.4 displays our results. The R-square values of .207 for the banking industry and .240 for the supermarket industry suggest that our model can explain a substantial part of the variance in customer loyalty intentions.

⁶ The conclusions based on the estimates using the weighted data do not differ from that of the unweighted data. Detailed estimation results are available on request.

⁷ These estimation results are also available on request.

Table 3.4: Regression analysis of the impact of customer equity drivers on loyalty intentions (standardized coefficients)

	Banking			Supermarket		
	Parameter	Std. Error	t-value	Parameter	Std. Error	t-value
Constant	-2.130***	.110	-19.396	-2.353***	.118	-20.001
China	.178***	.167	5.412	.222***	.094	9.022
Value Equity						
China	.049*	.121	1.452	.054**	.062	2.025
Netherlands	.172***	.110	5.600	.301***	.066	12.267
Brand Equity						
China	.073**	.096	2.284	.059**	.070	2.116
Netherlands	.206***	.111	6.673	.083***	.066	3.345
Relationship Equity						
China	.075**	.111	2.388	.097***	.069	3.799
Netherlands	.285***	.112	9.151	.201***	.067	8.046
Relationship Length						
China	.043	.072	1.219	.037	.050	1.428
Netherlands	-.026	.079	-.828	.103***	.043	4.108
Switching costs						
China	-.038	.063	-1.197	.051*	.047	1.885
Netherlands	.041	.062	1.295	.011	.039	.436
R ²	.207			.240		
Adjusted R ²	.197			.234		
F-value	24.093			36.750		

*** $p < .01$; ** $p < .05$; * $p < .1$

In support of H1, value equity exerted a greater impact in Western cultures than in China, for both bank customers (Dutch $\beta = .172$, Chinese $\beta = .049$, significant difference at $p < .01$) and supermarket customers (Dutch $\beta = .301$, Chinese $\beta = .054$, $p < .01$). This finding is consistent with previous marketing literature that proposes that Western consumers have a higher value-for-money orientation (Bao et al., 2003) and a stronger belief in price-quality schema (Zhou et al., 2002) than Chinese consumers.

For both bank and supermarket customers, brand equity had a stronger effect on loyalty intentions in the Dutch than in the Chinese sample (Dutch $\beta = .206$ and $\beta = .083$; Chinese $\beta = .073$ and $\beta = .059$; $p < .01$), so we accept H2b. This finding contradicts findings by Henderson et al. (2003) and Liao and Wang (2009), which suggested that Eastern consumers, due to the importance of face (i.e., desire to express social self-worth), would be more brand oriented than Western consumers. We believe that this reasoning holds for brands of goods and services in more visible consumption settings (Li & Su, 2007; Liao & Wang, 2009; Lowe & Corkindale, 1998). Yet in a retail setting, branding seems to be less important for the loyalty of Chinese consumers.

Furthermore, for both the bank and supermarket customers, relationship equity had a stronger effect in the Dutch than the Chinese sample (Dutch $\beta = .285$ and $\beta = .201$, Chinese β

= .075 and $\beta = .097$, $p < .01$), such that we cannot support H3. As a possible explanation, we note that the customer-focused concept originated in Western cultures, where customer relationship management (CRM) is more established. In China, although market power is growing with the transition from a centrally planned economy to a market economy, the market infrastructure has not yet been well developed and the application of customer value knowledge and CRM is therefore rather limited (Wang et al., 2004).

Thus we find that all three customer equity drivers have a stronger effect on Western (i.e., Dutch) consumers' than on Chinese consumers' loyalty of retailers. A possible reason is that Western markets appear more efficient (Zhou et al., 2002), and Western retailers use more intensive marketing campaigns to attract consumers. In contrast, market competition in China, using marketing instruments such as advertising and sales promotions, is relatively low, as also detected by Liu (2002) who finds that the advertising industry in China is still less developed than Western countries. We discuss the reasons in more details in Section 3.5.2. Also, because the three customer equity drivers are regarded as three strategic marketing investment categories (Rust et al., 2004), these findings might imply that Chinese consumers are less responsive to marketing efforts than Western ones.

In addition, Chinese consumers on average expressed higher loyalty intentions than the Dutch consumers, according to the significant intercepts in the Chinese sample ($\beta = .178$ and $\beta = .222$, $p < .01$). This outcome is in line with some previous findings (e.g., Kale & Barnes, 1992), which indicated that cultures with high uncertainty avoidance resist change and are not likely to terminate valued relationships. It is also in agreement with the claim that Chinese consumers, influenced by their long-term orientation, tend to be more brand loyal than Western consumers (Lowe & Corkindale, 1998).

3.5.2 General Discussion

Borrowing from various culture theories (e.g., Hofstede's cultural framework), this study predicts that the positive effect of some customer equity drivers (e.g., relationship equity) is stronger in Eastern (China) than in Western (the Netherlands) societies. However, the empirical results show that all three drivers (i.e., value equity, brand equity, and relationship equity) are more important in the Netherlands. We doubt these results are due to systematic differences, such as poorer market efficiency (i.e., less fair pricing system, low level of brand trust, weak CRM) in China. Instead, we offer several more likely explanations.

Why are value, brand, and relationship equity less important in China?

The price–quality ratio is the core of value equity. China's relatively unfair pricing system reduces the importance of value equity for determining loyalty intentions. The lack of intensive competition and incomplete regulation have led to a relatively less fair pricing system in China, compared with the markets in many developed countries (Zhou & Nakamoto, 2001). Some name brand products continue to be overpriced; some general products appear underpriced, due to poor marketing (Fan & Xiao, 1998). In addition, weak regulation allows massive amounts of fake products into the market, which are priced much higher than their actual value (Ho & Sin, 1988). In Hainan Sanya, a popular coastal tourist site, a crystal trinket might be bought wholesale for 713 RMB but sold for 13,950 RMB, or 19 times the cost. A bracelet costs at 5 RMB but sells for 470 RMB, or 94 times the cost (Sina News, 2013). Because low-quality, high-priced products

exist (Zhou & Nakamoto, 2001), and product quality information is difficult to assess (Lichtenstein & Burton, 1989; Sheth, 2011), Chinese consumers might perceive the market as less efficient and doubt the usefulness of value equity as a credible indicator for their loyalty intentions.

This study measures brand equity with two items: “This company has a strong/innovative brand.” However, simply having a strong brand does not necessarily mean Chinese consumers trust that brand, which is an important prerequisite of loyalty (Erdem & Swait, 2004). Sanlu was one of the country’s largest milk brands, but its milk contained the toxic chemical melamine and sickened approximately 300,000 children, at least 6 of whom died (BBC News, 2009). Gree Group, one of the most famous home appliance companies, misled consumers by claiming in advertising that it had the largest market share (Sohu News, 2009). Brand scandals, deceptive advertising, and unethical business practices have prompted a brand trust crisis, even for strong brands. That is, because China’s market environment is less mature, a strong brand might not lead to high loyalty intentions among Chinese consumers, whose trust even in strong brands is quite low.

Chinese consumers also emphasize *guanxi*, but CRM is relatively newly established, and its application is therefore rather limited in China (Wang et al., 2004). For most Chinese companies, customer service still represents a cost, and their CRM practices generally are not very effective. In the supermarket industry for example, a growing number of large chain stores have launched loyalty programs, a typical CRM tool. Yet the programs appear unattractive to Chinese consumers, with minimal influence on where they shop or their purchase decisions (Mai & Zhao, 2004). The widely reported positive impact of relationship equity on loyalty intentions thus may be mitigated among Chinese consumers, reflecting the poor applications of CRM practices in China.

In summary, low-quality, high-priced products persist on Chinese markets, because of the unfair price system and insufficient competition (Lichtenstein & Burton, 1989). In the Netherlands in contrast, consumers can rely on credible price cues to indicate product quality and thereby reduce their information search costs and facilitate decision making (Zhou et al., 2002). In China, consumers gradually learn about market inefficiency through their experience with unethical business practices (Ho, 2001), which lowers their brand trust, even toward well-known, large brands. In the Netherlands, intense market competition provides consumers with abundant, comparable goods, as well as detailed product information from objective sources such as *Consumer Reports* (Ho, 2001). In China, consumer-centric concepts have only recently begun to spread, during its transition from a planned central economy to a market economy (Batra, 1997). In contrast, CRM originated in Western cultures such as the Netherlands, so companies have accumulated much more experience with attracting and retaining customers (Wang et al., 2004). Overall then, the Chinese market, which is an emerging economy, is not as efficient (i.e., less fair pricing system, low level of brand trust, weak CRM) as the Dutch market, which largely explains why value, brand, and relationship equity are all more important in the Netherlands than in China. Reflecting their market environment, Chinese consumers’ loyalty intentions are driven not mainly by value, brand, or relationship equity but rather by culture, habit, or inertia. After choosing a brand, Chinese consumers tend to stick with it, rather than incur the risk associated with switching to another brand in an uncertain market environment.

This distinction also helps explain our finding that Chinese consumers exhibit higher loyalty intentions.

3.6 CONCLUSIONS AND IMPLICATIONS

We investigated the impact of the customer equity drivers (value equity, brand equity and relationship equity) on Dutch and Chinese consumers' loyalty to retailers. In line with our expectations, value equity is more important for Dutch consumers' loyalty, probably due to their higher value-for-money orientation (Bao et al., 2003). The much-cited importance of brands in the Chinese culture (Henderson et al., 2003) does according to our study not hold for the retail sector, since we find a stronger impact of brand equity on Dutch consumers' loyalty. Also relationship equity has a stronger impact on Dutch consumers' loyalty, possible due to the underdevelopment of the CRM concept in China (Wang et al., 2004).

Our study offers some important implications for managers. With the rapid economic growth in China, not only have many MNCs entered the Chinese market, but local Chinese companies are expanding into international markets as well. For example, the China bank ICBC opened an office in Amsterdam and took over a U.S. retail bank in January 2011. The results of this study are highly relevant for MNC managers who must make strategic marketing investment decisions for different cultures. Our finding—all three customer equity drivers have a greater impact in Western countries than in China, and Chinese consumers tend to have higher loyalty intentions than Western consumers—suggest that MNCs' marketing budgets should include the costs for different appeals in Western and Eastern markets.

In Eastern cultures such as China, it is more efficient for MNC managers to focus their marketing efforts on customer acquisition rather than on customer retention. After they have successfully attracted a Chinese customer, she or he already will tend to have relatively higher loyalty intentions than Western consumers and is not likely to end the relationship. In Western cultures such as the Netherlands, MNCs instead should be customer focused and implement active relationship marketing strategies. Western consumers are more difficult to satisfy (Zhang et al., 2008), have lower loyalty intentions, and are more responsive to marketing efforts. Our suggestion is in line with Sheth (2011) who proposes that in emerging markets, market creation and market development is more necessary than market orientation, and converting nonusers to first-time users results in better financial performance than satisfying existing users.

We caution against overgeneralizing these results though; further research also should work to overcome its limitations. First, the demographic characteristics of respondents are not similar in the Dutch and the Chinese samples, due to the unique national demographic structures and divergent survey modes. Although we undertook a weighting adjustment to remove the demographic differences, mode effects due to the systematic differences in data collected face-to-face and in an online survey should be expected (Loosveldt & Sonck, 2008). Second, our study is restricted to two kinds of retailers (supermarkets and banking) in which the impact of brands may be less salient. Additional research should collect data about Eastern and Western consumers' consumption in more visible categories. Third, due to data constraints, the Dutch data set served as the representative of Western culture. Therefore, caution must be exercised in generalizing our findings to other Western countries, considering the potential for intra-Western cultural variation. Ongoing research should verify and extend our model with different Western

countries, such as the U.S. or other European nations, to determine whether the cultural differences are stable. Finally, many papers and books have been published about the Chinese consumer and consumer markets in China. These studies show diverging views and results. Yet, the outcomes of our study contribute to the recorded observations of differences between Western and Chinese consumer behaviour.

