The influence of image and consumer factors on store brand choice in the Brazilian market: Evidence from two retail chains

Dr. Mbaye Fall Diallo (corresponding author),

Assistant professor at University of Lille 2 (Institute of Retail Marketing and Management) and a researcher at the LSMRC Lab (Univ Lille Nord de France-Skema Business School)

Tel: 00 336 30 69 85 87

Email: mbayefall.diallo@univ-lille2.fr

Address: IMMD 6 rue de l'Hôtel de ville 59051 Roubaix – France

Dr. Steve Burt,

Professor of Retail Marketing, Institute for Retail Studies, University of Stirling

E-mail: s.l.burt@stir.ac.uk

Address: Stirling FK9 4LA, Scotland

Dr. Leigh Sparks

Professor of Retail Studies, Institute for Retail Studies, University of Stirling

E-mail: leigh.sparks@stir.ac.uk

Address: Stirling FK9 4LA, Scotland

Acknowledgement

The authors are grateful to the French and the Brazilian government joint CAPES-COFECUB research program for financial support provided for the empirical research.

The influence of image and consumer factors on store brand choice in the Brazilian market: Evidence from two retail chains

Abstract

Purpose – Store brands (SBs) are increasingly offered by retailers in emerging markets. What is less clear, however, is how emerging market consumers make their choices between the SBs on offer from different retail chains. The objective of this paper is to investigate the role of image and consumer factors in influencing SB choice between two retail chains (Carrefour and Extra) in a Latin American market, Brazil.

Design/methodology/approach – A mall-intercept survey conducted by a Brazilian market research company generated 600 usable questionnaires collected in two retail chains. Structural equation modeling was used to test a series of proposed hypotheses.

Findings – The results revealed that SB attitude, SB price-image, store image perceptions, SB perceived value and SB purchase intention have significant and positive direct or indirect effects on SB choice overall, and for each retail chain. However, for price related constructs, the relationships are stronger for the Extra chain compared to the Carrefour chain. Our results show that the Brazilian market presents some departures from both developed and other emerging countries.

Research limitations/implications – Respondents were consumers in only one Latin American market (Brazil) and shoppers of only two retail chains. Caution should therefore be exercised when generalising the results to other markets in Latin America.

Practical implications – Understanding which factors influence consumer choice of SBs in an emerging market while taking into account the presence of different operators allows retailers to launch new SB programs and implement the appropriate strategies to increase SB sales in this market.

Originality/value – The main contribution of this research lies in clarifying consumer behaviour toward SBs in a Latin American emerging market. It fills a major gap in the marketing literature and research in stressing the need to rethink the application of conventional business models to Latin America.

Key words Store brand choice, Store image perceptions, SB price-image, SB perceived value, Brazil.

Paper type Research paper

The influence of image and consumer factors on store brand choice in the Brazilian market: Evidence from two retail chains

1. Introduction

Store Brands (hereafter, SBs) have become increasingly common (Hyman *et al.*, 2010). They now feature on the shelves of retailers in most countries and in many product categories. There are numerous attractions for retailers in pursuing SB programmes including building store loyalty, increasing store traffic, improving margins, and enhancing negotiation strength with manufacturers (Batra and Sinha, 2000). In Western Europe, SB penetration exceeds 50% of sales volume in Switzerland, and over 35% in the United Kingdom, Belgium and Germany (Lamey *et al.*, 2007). SBs are growing faster than manufacturer brands (Kumar and Steenkamp, 2007), and for retailers, they have become a reliable means to increase sales and market share.

The globalisation of economic activities has created retail opportunities in emerging markets, notably in the BRIC nations (Brazil, Russia, India, and China) (Alexander and de Lira e Silva, 2002). The competitive pressure in Western retail markets has led many multinational grocery retailers (e.g. Carrefour, Metro, Tesco, etc.) to expand into selected emerging markets. As these retailers develop a trading presence in these countries, they transfer a range of business practices, including their SB programmes. At the same time, local retailers are themselves offering more SBs. SBs are thus playing a greater role in emerging markets (Hernstein and Jaffe, 2007), but consumer attitudes and behaviours towards SBs in these markets are not well understood (Lin *et al.*, 2009). Fastoso and Whitelock (2012) have recently called for more research on Latin American countries, stating that no attention has been specifically paid to this region in international marketing research, which is surprising

given the economic importance of Latin America. Similarly, Amal and Svensson (2011) have also called for a better understanding of Latin America, especially Brazil.

Previous research on SBs has been undertaken primarily in developed markets (e.g. Burton *et al.*, 1998; Lamey *et al.*, 2007). Little research has been conducted into consumer attitudes towards SBs, and the purchase of SBs in emerging markets. Consequently, the aim of this research is to investigate SB choice in the Brazilian context by considering its relationships with image factors (e.g. store image perceptions and SB price-image) and consumer factors (e.g. SB perceived value and SB attitude). These relationships, fundamental in existing studies in developed markets, have not been widely studied in the context of SB purchasing behaviour in emerging markets, especially in Latin America.

This research provides a contribution in three ways. First, we propose a conceptual model of SB choice integrating image and consumer factors in a Latin American emerging country. Existing research on the influence of these factors on SB purchase behaviour has not clearly specified whether image or consumer factors are more important for emerging market consumers (e.g., Wu *et al.*, 2011). Second, we test the proposed model for two retail chains well rooted in Brazil, but different in terms of retail trajectory and market positioning. Previous research has not specified how Brazilian consumers make their SB purchases in retail chains with different origins (home grown versus foreign). Third, we present the effect of socio-demographic variables in the model (as covariates), investigating their influence on consumer behaviour towards SBs in Brazil. Some existing research in developed markets has addressed the effect of these variables on SB purchase (e.g., Martinez and Montaner, 2008), but it is not clear how these variables affect consumer behaviour in emerging countries in general and especially in Latin America.

The organisation of the paper is as follows: first, we present the theoretical framework and determine the hypotheses for investigation. Second, we explain the research methodology employed. Third, the results are presented. Finally, we highlight implications from the findings, acknowledge the limitations of the current study, and suggest opportunities for future research.

2. Theoretical framework and hypotheses development

Mass retailers in Western industrialised markets are now facing increased competition in their domestic markets. This competition, coupled with market saturation and low growth prospects in these countries, has encouraged internationalisation. Emerging markets in general and particularly the BRICs offer greater growth potential and have thus attracted the attention of internationalising retailers (Diallo, 2012). Historically, emerging markets were highly fragmented retail markets characterised by limited logistics infrastructures, dichotomous consumer societies, and a lack of regulation (Sternquist, 2007). However, as these countries have developed, local retailers began to realise economies of scale in purchasing and operations, and 'modern' retail systems and strategic approaches have emerged. Retail brand management is a rapidly emerging theme in these markets (Diallo, 2012), although the introduction of SBs is relatively new and has been mainly driven by incoming international retailers such as Carrefour in Brazil, Metro in Vietnam, Tesco in Thailand or Wal-Mart in China (Alexander and de Lira e Silva, 2002). SBs have a major strategic role to play in emerging markets as they constitute a means for internationalising retailers to build relationships with consumers, and provide one way of differentiating their product offer from that of the local competition (Herstein and Jaffe, 2007).

In such a changing retail context, there is a need to understand how emerging market consumers react to SBs in general, and to explore if they differentiate between SB ranges offered by retail operators with different backgrounds (locally grown versus international operator). This is in line with the recommendations of Lahiri (2011) in his review of Brazil-focused business journal publications and with Borini and Fleury's (2011) work on emerging market multinationals. In this research, we take into account a number of image and consumer factors, which have not been widely investigated in relation to SBs in the context of Latin America, to explain store brand choice which here refers to actual purchase.

2.1 Store image perceptions

One of the earliest definitions of store image was provided by Martineau (1958). He posited that a store image was defined in the shopper's mind, partly by functional qualities and partly by an aura of psychological attributes. Store image develops from the objective and subjective perceptions of consumers which are learned over time. Subsequent conceptualisations of store image have taken into account the interaction amongst attribute perceptions. Previous research has also established the relationship between store image perceptions and consumer purchase behaviour in industrialised countries (Grewal et al., 1998) and in emerging markets (Wu et al., 2011). According to cue utilisation theory, store image can be a determinant of product quality (Richardson et al., 1994; Smeijn et al., 2004). SBs are a form of brand extension of the store (Burt and Davies, 2010), and brand extension research supports the idea that store associations and store evaluations can be also generalised to SBs (Collins-Dodd and Lindley, 2003). Previous studies also showed the importance of store image cues on consumer purchase behaviour in the retail sector in emerging markets. According to Wu et al. (2011), store image directly affects SB purchase behaviour in the Taiwanese market. In the Chinese context, Wong and Dean (2009) reported that shopping plays a significant role and "consumers' interaction with the shopping environment has been shown to influence their experiences and patronage decisions" (p. 125). Paswan et al. (2010) found similar results in the Mexican market where store image cues (selective goods, convenience, variety of merchandise, etc.) are strong determinants of purchase behaviour between small and large stores. Based on these findings, we anticipate that store image perceptions will have a positive influence on SB purchase behaviour in the Brazilian market. Therefore:

H1. Consumers' store image perceptions will have a positive influence on SB purchase intention in Brazil.

2.2 Store brand price-image

Price-image perceptions are considered to be a part of a retailer's overall store image (Lindquist, 1974). SB price-image is generally considered as a set of factors related to consumers' perceived image and price of SBs, which leads them to buy SB products (Diallo, 2012; Jara and Cliquet, 2012). Following Martineau (1958) and Mazurky and Jacoby (1986), SB price-image can be defined as a global representation of the relative level of prices of SBs. SB price-image is an important factor as SBs are generally associated with price, even though this perception is changing as SB ranges have improved in quality over time (see Richardson et al., 1994). Although previous research has not widely studied the relationship between store image perceptions and SB price-image, the relationship has been established by some researchers (e.g. Jara and Cliquet, 2012). Earlier, Martineau (1958) showed that store image and price image are strongly related but distinct constructs. Store image perceptions provide a highly relevant cue for SBs, as they act as the original brand in a brand extension scheme, thus providing a basis for overall SB quality and/or price perceptions (Collins-Dodd and Lindley, 2003). Vahie and Paswan (2006) showed that store image can positively influence SB image. When consumers are not familiar with the brand, the store image is often a cue for judging the SBs. In this line of thought, Cremer and Viot (2012) demonstrated that store image perceptions have a significant effect on SB brand image in general in the French market. In emerging markets, Diallo (2012) established that store image perceptions have a significant, positive, and strong effect on SB price-image in the Latin American context. Therefore, we consider that the influence of store image on SB price-image will be significant in the Brazilian market. Consequently, we anticipate that:

H2. Consumers' store image perceptions will have a positive influence on SB priceimage in Brazil.

SB price-image is also reported to influence SB purchase behaviour. It can be a reference point for the consumer when purchasing a SB product. Retailers are now offering different types of SB product ranges typically including premium, standard, value, organic, healthy eating etc., each with a different value proposition (see Kumar and Steenkamp, 2007). Previous research showed that SBs are a key component of store image (Burt and Mavrommatis, 2006; Collins-Dodd and Lindley, 2003; Vahie and Paswan, 2006), which in turn is believed to influence SB purchase behaviour (Richardson *et al.*, 1994). More precisely, Bao *et al.* (2011) showed that SB image positively influences SB purchase behaviour. Jara and Cliquet (2012) confirm these results and also found that SB price-image positively influences consumer behaviours. In the context of emerging countries, Diallo (2012) found a significant effect of SB price-image on SB purchase behaviour in the Latin American context. This effect is quite strong compared to previous research findings (e.g. Jara and Cliquet, 2012). As SBs are generally positioned on price relative to national manufacturer brands, we can expect that SB price-image will have a positive influence on consumer behaviour towards SBs in the Brazilian market. Therefore, we propose:

H3. SB price-image will have a positive influence on SB purchase intention in Brazil.

H4. SB price-image will have a positive influence on SB choice in Brazil.

2.3 Store brand perceived value

Perceived value can be derived from a comparison between the expected benefits of a product and the sacrifices that a consumer will have to make in order to assure those benefits. According to Zeithaml (1988), customers define the term value in different ways ("low price", "the benefits they receive from the products", "the quality they get for the price they pay" and "what they get for what they give"). However, most of the definitions used in previous research report the expression "the quality one gets for the price one pays" (e.g. Jin et Suh, 2005). Following Lichtenstein *et al.* (1990), perceived value can be defined as "a concern for paying low prices, subject to some quality constraint" (p. 56).

In the marketing literature, it is well established that the intention to buy a given brand is strongly influenced by the perceived monetary sacrifice, in conjunction with the perception of product quality. Empirical research has confirmed that perceived value is positively related to SB purchase behaviour and to SB attitude (Ailawadi *et al.*, 2001; Garretson *et al.*, 2002). As noted earlier, SBs have experienced major improvements in product quality in recent years (Burt and Davies, 2010), and many consumers now accept that SBs offer good quality at a competitive price, and hence provide good value compared to national brands. Therefore, SB perceived value is now an important factor of SB purchase. In emerging markets, Jin and Suh (2005) showed that consumer perceived value has a positive influence on SB purchase behaviour in South Korea, either for home apparel or food products. Therefore, we hypothesise that:

H5. SB perceived value will have a positive influence on SB purchase intention in Brazil.

H6. SB perceived value will have a positive influence on SB choice in Brazil.

Previous research has also demonstrated that perceived value is positively related to SB attitude (Burton *et al.*, 1998). According to Garretson *et al.* (2002), "where consumers balance price and quality there is a more favorable attitude towards private labels" (p. 92). They also showed empirically that consumer perceived value affects directly and positively attitudes towards SB products. According to these authors, for SBs, promotional messages used by retailers often focus on encouraging consumers to use product value as the determinant attribute in SB evaluations. Empirical research has identified that value-related measures are positively related to SB attitude (Burton *et al.*, 1998). Besides, research in emerging countries has established the effect of perceived value on SB purchase behaviour. For instance, Jin and Suh (2005) demonstrated a significant and positive influence of perceived value on SB attitude in the South Korean context. Therefore, we propose:

H7. SB perceived value will have a positive influence on SB attitude in Brazil.

2.4 Store brand attitude

SB attitude is defined as a predisposition to respond in a favorable or unfavorable manner to SBs due to product evaluation, purchase evaluation, and/or self-evaluation associated with SB grocery products (Burton *et al.*, 1998). SBs have historically been affected by negative stereotypes, often characterised as low quality goods designed for low income consumers. For this reason, SBs have held low market shares in some product categories such as shampoo and have traditionally been most successful in low value added product ranges. Consumer SB attitude was often negative when SBs first appeared in the marketplace.

However, SB attitude is now changing as retailers launch higher value added products appealing to a wider range of consumer values, other than simply low price. In the United Kingdom, Tesco has premium SBs that compete directly with manufacturer brands on a quality basis, and which are often perceived to be of higher quality (Kumar and Steenkamp, 2007). Consumers hold generalised SB attitudes that influence their propensity to purchase SBs (Collins-Dodd and Lindley, 2003). The improved quality of SB products has led consumers to develop better SB attitude and stronger preferences for SBs in many product categories (Huang and Huddleston, 2009). Burton *et al.* (1998) have also demonstrated the positive the positive influence of SB attitude on SB purchase behaviour. Other studies have also empirically established the positive and direct influence of SB attitude on SB purchase behaviour in the context of emerging countries (Jin and Suh, 2005). Thus, we anticipate that:

H8. SB attitude will have a positive influence on SB choice in Brazil.

2.5 Store brand purchase intention

Purchase intention refers to "the possibility that consumers will plan or be willing to purchase a certain product or service in the future" (Wu *et al.*, 2011, p. 32). Purchase intention has been widely used in the literature as a predictor of subsequent purchase and the concept was found to be strongly correlated with actual behaviour (Fishbein and Ajzen, 1975). In this respect, SB purchase intention should lead directly to SB choice. Sometimes, purchase intention has been used as a proxy for SB purchase, creating some confusion between the two variables (see Jin and Suh, 2005). However, they differ in the sense that SB purchase intention is a projection of future behaviour whereas SB choice is an action. In the context of emerging countries, to the best of our knowledge, no research has yet given evidence of the relationship between SB purchase intention and SB choice. However, based on previous well established research in other contexts (see Fishbein and Ajzen, 1975; Sun and Morwitz, 2010), we consider that greater SB purchase intention will lead to greater SB choice in a Latin American market. Simply put, anything else being equal, consumers' SB purchase intention may influence SB choice in the Brazilian market. Hence, we derive:

H9. SB purchase intention will have a positive influence on SB choice in Brazil.

Figure 1 summarises our conceptual model in which store image perceptions, SB price-image, SB perceived value, SB attitude and SB purchase intention are direct or indirect antecedents of SB choice. Our aim is to test this new model for SBs in the Brazilian market in two retail chains operating a similar trading format but with different backgrounds and branding strategies (Carrefour and Extra). In additional analyses, we also evaluate the effects of four socio-demographic covariates (age, gender, family size and household income) on SB purchase behaviour. Previous research showed that socio-demographic variables influence SB purchase behaviour in various ways (Batra and Sinha, 2000; Burton *et al.*, 1998), but less is known about the effect of these variables in the Latin American context in general and specially in Brazil.

[Take in Figure 1: Conceptual model]

3. Research Methodology

3.1 Data collection and sample

This research is based on a survey undertaken in the Brazilian market. Brazil is an emerging market, a BRIC nation, and is one of the highest priority markets for retail expansion (AT Kearney, 2010). The Brazilian retail market is attractive for retailers "considering the country's large population and the relatively stable macroeconomic conditions that had emerged in recent years" (De Angelo *et al.*, 2010, p. 204). The two leading retailers in the Brazilian retail market are the French retailer Carrefour and the Pão de Açucar group.

Carrefour, the second largest grocery retailer in the world, was the first foreign retailer to open in Brazil in the 1970s. It has traded successfully in this market for over 40 years, more than a generation, leading some Brazilians to regard Carrefour as a home grown retail company. Founded in 1948, and although now partly owned by Casino, Pão de Açucar is a retail group which competes against Carrefour through its Extra hypermarkets and other fascias (Casas Bahia, Ponto Frio, etc.). The rapid growth of Pão de Açucar has been powered by the Brazilian businessman Abilio Diniz and strengthened by Casino's investment in the group.

These retail chains are strongly rooted in Brazil and well known to consumers. Although both trading through the same retail format, the hypermarket, they employ different retail positioning strategies. Carrefour mainly uses its tradename on its SB products, while Extra uses its own name only on a few products. The two retail chains communicate primarily through point of sale advertising, but Carrefour also leverages on its corporate name while Extra cannot do this to the same extent as it trades under a different name (and other tradenames for other formats) than the group name (Pão de Açucar).

Data were collected using a questionnaire administered by a Brazilian survey company. Respondents were randomly intercepted during their shopping trips in Extra and Carrefour hypermarkets in Brasilia. Investigators targeted each fifth client at the entrance to each retail chain. In total, 620 questionnaires were obtained from respondents, although 20 were deleted as they were not fully completed. The remaining 600 usable questionnaires were randomly split into two sub-files for exploratory and confirmatory factor analysis, respectively N1=221 and N2=379.

The socio-demographic characteristics of the respondents in the final sample are as follows: 48% of respondents were between 18-34 years old; 41% between 35-64; and 11% over 64. In terms of gender, 59% of respondents were women, and for monthly household income, 39% of the respondents earned R\$2000 or less; 30% between R\$2001-4000 and 31%

earned more than R\$4000¹. In terms of family size, 53% of respondents were in a family with 1-4 members and 47% with more than 4 members. Finally, for educational attainment, 31% of respondents had completed up to high school, 57% had an undergraduate diploma, and 12% held a master's degree or higher. Subsequent χ^2 tests on the categories showed no differences (at *p*<0.05), presuming that the respondents' distribution was homogeneous across the subsamples.

3.2 Measures

The survey instrument was developed from previous studies and following exploratory research (entailing interviews with 24 consumers) as the scales had not been previously tested in the Brazilian context. The questionnaire was double back-translated within the framework of collaborative and iterative translation proposed by Douglas and Craig (2007). We then assessed the content and face validity of the items with eight academic experts who were familiar with the topic under investigation.

The items were rated on a 7 point-Likert scale ranging from 1 "strongly disagree" to 7 "strongly agree". To measure store image perceptions, nine items from Smeijn *et al.* (2004) were employed comprising three dimensions (layout, merchandise and service). SB priceimage was measured using six items adapted from previous research (Zeithaml, 1988; Zielke, 2010). Two dimensions were derived: "SB perceived relative price" (i.e., the consumer's perception of one retailer offering the best SB prices compared to other retailers) and "SB perceived benefit" (i.e., the perception that a basket of SBs would provide the consumer with good quality products for the same monetary value). SB perceived value was measured by four items adapted from Burton *et al.* (1998), and SB attitude was measured through four items from Garretson *et al.* (2002). SB purchase intention was measured with four items

¹ 1R \approx 0.44 euros at the time of the survey.

adapted from previous research (Grewal *et al.*, 1998 and Jin and Suh, 2005). The dependent variable, SB choice, was measured by a single item (% of SB purchase) using the till receipt, following Burton *et al.* (1998). Also included in the model were four socio-demographic variables (age, gender, family size and household income) each measured by a categorisation scheme.

4. Results

4.1 Measurement model

The measurement model was assessed using exploratory and confirmatory factor analysis (EFA and CFA) following Gerbing and Anderson (1988). The exploratory factor analysis (N1=221) ensured that the data were appropriate for factor analysis. KMO values are greater than 0.7. We retained items that load well on their factor (loading and communalities >0.5). The cronbach alphas are greater than the recommend cutoff value $(0.7)^2$. Subsequently, we used confirmatory factor analysis (N2=379) to validate the structural factor obtained. Table 1 presents the means, standard deviations and correlations amongst the constructs.

[Take in Table 1: Means, standards deviations and correlations between constructs]

The overall measurement model's fit indices indicated satisfactory model fit [e.g., $(\chi^2)/(d.f.)=336.72/331=1.01$, p=.40; RMSEA=.007; CFI=.99; TLI=.99; CAIC=857.03 and $\chi^2/df=1.07$]. Table 2 shows that reliability values (composite reliability) were above the recommended cut-off criteria (0.7). Convergent validity of the constructs was fulfilled as AVE values (ρ_{VC}) were greater than 0.5 for each construct (Fornell and Larcker, 1981). Discriminant validity of constructs was assessed following Fornell and Larcker (1981) by

 $^{^{2}}$ The complete results of the exploratory factor analysis are available upon request from the corresponding author. They are not presented for space constraints and given their exploratory nature.

comparing ρ VC values to squared correlations between the constructs and was found to be satisfactory (see table 2).

[Take in Table 2: Scaling and measurement properties]

4.2 Structural model and hypothesis testing

The proposed model showed a good fit to the data (see table 3). The results also indicated that the predictors explained substantial amounts of variance in the two main endogenous constructs: SB purchase intention: $R^2 = .57$ and SB choice: $R^2 = .63$. We used structural equation modelling (covariance matrix and maximum likelihood in Amos 18) to test our hypotheses. Table 3 shows the structural coefficients of estimating our model. We can see that all our main hypotheses (H1 to H9) are supported, except H6 (influence of SB value consciousness on SB choice) which is not supported ($\gamma_{direct}=.00$, p>.05). However, meditational analysis (bootstrapping following Cheung and Lau, 2008) showed that SB perceived value has a significant indirect effect on SB choice ($\gamma_{indirect}=.29$, p<.01). Besides, the coefficients are in the proposed directions. We also tested the model in subsamples (Carrefour and Extra), and found partial support for H1 and H9 (with significant effects only for Carrefour). The other coefficients remained stable in terms of significance.

[Take in Table 3: Model fit, standardised coefficients and hypothesis testing]

The introduction of the socio-demographic variables in the model shows that they affect significantly SB purchase behaviour: age (γ =.46, p<0.01), gender (γ =-.32, p<0.01), family size (γ =.22, p<0.01), household income (γ =-.46, p<0.01). We discuss these results in the next section.

5. Discussion and implications

In this research, we sought to investigate how image and consumer factors affect SB purchase behavior, to develop a new model for SBs in a Latin American emerging market (Brazil) taking into account two different retail chains, and to explore the effect of sociodemographic variables on Brazilian SB purchase behaviour. Next, we summarise our results, suggest managerial implications, identify limitations of the current research and provide future research opportunities.

5.1 Discussion and theoretical implications

This research demonstrates that image factors are strong predictors of SB choice in the context of an emerging Latin American market, Brazil. The results indicate that Brazilian consumers indirectly take into account store image dimensions ($\gamma_{indirect}$ =.44, *p*<.01) such as layout, merchandise and service to make inferences about SB product choice. Compared to previous research in developed markets, store image perceptions seem to carry a higher importance for Brazilian consumers. For instance, in their partial mediation model, Bao *et al.* (2011) found the effect of store image on SB purchase intention to be weak (γ =.12, *p*<.05) in the US market while this effect is stronger in our research (γ =.37, *p*<.01). Our results also present departures from some previous research conducted in emerging Asian markets. For example, Wu *et al.* (2011) found that in the Taiwanese market store image perceptions affect both purchase intention and SB price-image in the Brazilian market. This result can be considered as an extension of the findings of Batra *et al.* (2000) which suggest that emerging market consumers in Western countries.

The results also show that SB price-image is a leading factor in SB choice. Not only does it directly influence SB choice (γ_{direct} =.40, p<.001) but it has an indirect effect on it ($\gamma_{indirect}$ =.12, p < .01) via the mediation of SB purchase intention. In comparison to previous research in developed markets (e.g., Jara and Cliquet, 2012; Vahie and Paswan, 2006), SB price-image seems to be an important factor in Brazil, especially in respect of the Extra SB, and both dimensions of price-image are strong. This result is in line with that of Zielke (2010), who argues that for store price-image a greater emphasis should be placed upon the multidimensional aspects of price perceptions in the retail sector. It is generally recognised that perceived value has a major influence on SB purchase behaviour as most SB consumers in developed markets focus on "the price they pay for the quality they get" (Burton et al., 1998; Garretson *et al.*, 2002). This study shows that this is only partially true in the Brazilian market, as SB perceived value has no significant direct effect on SB choice ($\gamma_{\text{direct}}=.00, p>.05$) and has only an indirect effect on SB choice via the mediation of SB attitude and SB purchase intention ($\gamma_{indirect}$ =.29, p<.01). This finding suggests that Brazilian consumers do not just place an emphasis on price in relation to quality when buying SB products, but also that their SB attitude and SB purchase intention are taken into account.

5.2 Managerial implications

For store image perceptions, the structural relationships are stronger for the Carrefour retail chain compared to the Extra retail chain. Additionally, store image perceptions also strongly influence SB price-image (γ =.58, *p*<.001). Furthermore, even with the introduction of the covariates into the model, the effects of this construct remain stable. This implies that retail managers should focus on improving store image perceptions in an emerging country like Brazil in order to increase SB sales. Efforts should be concentrated upon carefully managing

the three dimensions of store image perceptions as their factorial contributions are significant, high and comparable (Layout: λ =.72, Merchandise: λ =.77 and Service: λ =.70).

The influence of SB price-image on SB purchase behaviour is almost twice as strong for the Extra chain compared to the Carrefour chain. As previous research on industrialised and other emerging countries has primarily focused on other aspects of price such as price consciousness (see Garretson *et al.*, 2002; Jin and Suh, 2005; etc.), we suggest that retailers adopt a broader perspective when managing price-image in the Brazilian market by focusing both on SB perceived relative price (λ =0.79) and SB perceived benefit (λ =0.81).

As expected, we found that both SB attitude (β_{direct} =.35, *p*<.001) and SB purchase intention (β_{direct} =.35, *p*<.001) significantly influence SB choice in the Brazilian market. These findings are consistent with results of previous studies in industrialised countries (see Burton *et al.*, 1998). We therefore recommend that retail managers operating in Brazil not only place more emphasis on store image and SB price-image perceptions, but also pay attention to other variables (SB attitude and SB purchase intention) in order to improve SB purchase choice and increase SB sales. In all cases, the Extra SB has better price evaluations compared to the Carrefour SB. These findings are consistent with those found in other emerging markets, suggesting that retailers perceived as being endogenous have an advantage on price related variables when compared to perceptions of international retail chains (see Cheng *et al.*, 2007; Lupton *et al.*, 2010). However, our results go further by highlighting the stronger influence of image factors on SB purchase behaviour, even when we include covariates (age, gender, household income and family size) in the analysis. Brazilian consumers seem to purchase the Carrefour SB because of store image perceptions and SB attitude, while they purchase

retail managers should focus on their store image while Carrefour should pay attention to its SBs price positioning.

Finally, we evaluated a model including four socio-demographic variables (age, gender, household income and family size) as covariates (antecedents of SB choice). Sociodemographic variables are probably the most frequently studied aspect of SB purchase behaviour, although previous findings are on the whole inconclusive (Martinez and Montaner, 2008). Our results indicate that all of these variables have significant effects on SB choice. As the influence of age (γ =.46), gender (γ =-.34) and household income (γ =-.22) are stronger than that of family size (γ =.13), we recommend that more consideration is given to these three variables. Specifically, we draw retailers' attention to the influence of age as younger consumers (18-34 years) seem to purchase fewer SBs, but they constitute a major demographic segment in Brazil (about 27% of the Brazilian population). After estimating the model in sub-samples (Carrefour or Extra), age and household income are found to be more strongly related to the 'Extra' SB, and gender is more connected to the Carrefour SB. This result implies that the Carrefour chain in particular should focus on younger and less wealthy consumers that constitute a huge segment in Brazil.

5.3 Limitations and future research opportunities

This study has some limitations. First, it was conducted in only one emerging Latin American market (Brazil), and with two retailers (Carrefour and Extra). Consequently, caution should be exercised when generalising the results to other emerging markets. Second, we measured SB choice on a single shopping occasion. Following Burton *et al.* (1998), we recommend that future research should develop longitudinal data in order to cover a broader time frame and provide more understanding about the relationships between the variables

under investigation. As emerging market countries are diverse in terms of culture, longitudinal studies can help our understanding of consumer behaviour in these markets.

The results of this study open a number of avenues for future research. For example, several product categories must be taken into account in future studies in order to have more generalisable results. Furthermore, today, retailers are placing more attention on innovation through SBs and are developing segmented SBs such as their premium ranges (e.g., *Tesco Finest* in the UK, *Sam's Choice* in the US, etc.) and organic ranges (e.g., *Carrefour Bio* in France). Huang and Huddleston (2009), showed that premium SBs can be used to create customer loyalty. The positioning of these types of SBs is revolutionising the retail landscape. Given the growing interest in these segmented categories of SBs, it is important to investigate Latin American consumers' purchase behaviour towards segmented SB ranges (e.g. organic SBs compared to premium SBs) using our model.

It would also be important to replicate this study in other emerging countries in order to see if there are differences amongst emerging markets (Russia, India, China, etc.). Emerging market countries present several economic, cultural and political differences from each other. Yet, currently, no study has investigated the effects of these socio-economic differences on SB purchase behaviour in different emerging markets. Future studies should test the validated focal model for the metric invariance of the scales by using samples from different emerging markets.

References

Ailawadi, K.L., Neslin, S.A. and Gedenk, K. (2001), "Pursuing the value conscious consumer: store brands versus national brand promotions", *Journal of Marketing*, Vol. 65 No. 1, pp. 71-89.

Alexander, N. and de Lira e Silva, M. (2002), "Emerging markets and the internationalization of retailing: The Brazilian experience", *International Journal of Retail and Distribution Management*, Vol. 30 No. 6, pp. 300–314.

Amal, M. and Svensson, G (2011), "Guest editorial: Business research in Brazil and Latin America", *European Business Review*, Vol. 23 No. 1, p.-

AT Kearney (2010), "Expanding opportunities for global retailers", The 2010 AT Kearney Global Retail Development Index, AT Kearney, available at:

http://www.atkearney.ae/mideast/images/mideast/pdf/2010_global_retail_development_index. pdf (accessed October 15, 2012)

Bao, J., Bao, Y. and Sheng, S. (2011), "Motivating purchase of private brands: Effects of store image, product signatureness, and quality variation", *Journal of Business Research*, Vol. 64 No. 2, pp. 220–226.

Batra, R., Ramaswamy, V., Alden, D.L., Steenkamp, J.-B. E.M. and Ramachander, S. (2000), "Effects of brand local and non-local origin on consumer attitudes in developing countries", *Journal of Consumer Psychology*, Vol. 9 No. 2, pp. 83–95.

Batra, R. and Sinha, I. (2000), "Consumer-level factors moderating the success of private label brands", *Journal of Retailing*, Vol. 76 No. 2, pp.175-191.

Bhardwaj, V., Kumar, A. and Kim, Y.-K. (2010), "Brand analyses of U.S. global and local brands in India: The case of Levi's," *Journal of Global Marketing*, Vol. 23 No. 1, pp. 80–94.

Borini, F.M. and Fleury M.T.L. (2011), "Development of non-local competences in foreign subsidiaries of Brazilian multinationals", *European Business Review*, Vol. 23 No. 1, pp. 106-119.

Burt, S. and Davies, K. (2010), "From the retail brand to the retailer as a brand: themes and issues in retail branding research", *International Journal of Retail and Distribution Management*, Vol. 38 No. 11/12, pp. 865-878.

Burt, S. and Mavrommatis, A. (2006), "The international transfer of store brand image", *International Review of Retail, Distribution and Consumer Research*, Vol. 16 No. 4, pp. 395–413.

Burton, S., Lichtenstein, D., Netemeyer, R., and Garretson, J. (1998), "A scale for measuring attitude toward private label products and an examination of its psychological and behavioral correlates", *Journal of the Academy of Marketing Science*, Vol. 26 No. 4, pp. 293-306.

Cheng, J.M.S., Chen, L.S.L., Lin, J.Y.C. and Wang, E.S.T. (2007), "Do consumers perceive differences among national brands, international private labels and local private labels? The case of Taiwan", *Journal of Product* and *Brand Management*, Vol. 16 No. 6, pp. 368–376.

Cheung, G.W. and Lau, R.S. (2008), "Testing mediation and suppression effects of latent variables: bootstrapping with structural equation models", *Organizational Research Methods*, Vol. 11 No. 2, pp. 296-325.

Collins-Dodd, C. and Lindley, T. (2003), "Store brand and retail differentiation: the influence of store image and store brand attitude on store own brand perceptions", *Journal of Retailing and Consumer Services*, Vol. 10 No. 6, pp. 345-352.

Cremer, F. and Viot, C. (2012), "How store brands build retailer brand image", *International Journal of Retail and Distribution Management*, Vol. 40 No. 7, pp. 528 – 543.

De Angelo, C.F., Rangamohan, V.E. and Fouto, N.M.M.D. (2010), "Determinants of FDI in emerging markets: evidence from Brazil", *International Journal of Commerce and Management*, Vol. 20 No. 3, pp. 203-216.

Diallo, M.F. (2012), "Effects of store image and store brand price-image on store brand purchase intention: Application to an emerging market", *Journal of Retailing and Consumer Services*, Vol.19 No. 3, pp. 360-367.

Douglas, S.P. and Craig, C.S. (2007), "Collaborative and iterative translation: an alternative approach to back translation", *Journal of International Marketing*, Vol. 15 No. 1, pp. 30-43.

Fastoso F. and Whitelock, J. (2012), "Guest editorial", *International Marketing Review*, Vol. 29 No. 3, pp.-.

Fishbein, M. and Ajzen, I. (1975), *Belief, attitude, intention, and behavior: an introduction to theory and research*, Reading, Addison-Wesley.

Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39–50.

Garretson, J.A., Fisher, D. and Burton, S. (2002), "Antecedents of private label attitude and national brand promotion attitude: similarities and differences", *Journal of Retailing*, Vol. 78 No. 2, pp. 91-99.

Gerbing, D.W. and Anderson, J.C. (1988), "An updated paradigm for scale development incorporating unidimensionality and its assessment", *Journal of Marketing Research*, Vol. 25 No. 2, pp. 186–192.

Grewal, D., Krishnan, R., Baker, J. and Borin, N. (1998), "The effect of store name, brand name and price discounts on consumers' evaluations and purchase intentions", *Journal of Retailing*, Vol. 74 No. 3, pp. 331-352.

Hartman, K.B. and Spiro, R.L. (2005), "Recapturing store image in customer-based store equity: a construct conceptualization", *Journal of Business Research*, Vol. 58 No. 8, pp. 1112–1120.

Herstein, R. and Jaffe, E.D. (2007), "Launching store brands in emerging markets: resistance crumbles", *Journal of Business Strategy*, Vol. 28 No. 5, pp. 13-19.

Huang, Y. and Huddleston, P. (2009), "Retailer premium own-brands: creating customer loyalty through own-brand products advantage", *International Journal of Retail and Distribution Management*, Vol. 37 No. 11, pp. 975–992.

Hyman, M.R., Kopf, D.A. and Lee, D. (2010), "Review of literature – Future research suggestions: private label brands: benefits, success factors and future research", *Journal of Brand Management*, Vol. 17 No. 5, pp. 368–389.

Jara, M. and Cliquet, G. (2012), "Retail brand equity: Conceptualization and measurement", *Journal of Retailing and Consumer Services*, Vol. 19 No. 2, 140-149.

Jin, B. and Suh, Y.G. (2005), "Integrating effect of consumer perception factors in predicting private brand purchase in a Korean discount store context", *Journal of Consumer Marketing*, Vol. 22 No. 2, pp. 62-71.

Kumar, N. and Steenkamp, J.-B. E.M. (2007), *Private label strategy: How to meet the store brand challenge*, Harvard Business School Press, Boston.

Lahiri, S. (2011), "Brazil-focused publications in leading business journals", *European Business Review*, Vol. 23 No. 1, pp. 23-44.

Lamey, L., Deleersnyder, B., Dekimpe, M.G. and Steenkamp, J.-B. E.M. (2007), "How business cycles contribute to private-label success: Evidence from the United States and Europe", *Journal of Marketing*, Vol. 71 No. 1, pp. 1-15.

Lichtenstein, D.R., Netemeyer, R.G. and Burton, S. (1990), "Distinguishing coupon proneness from value consciousness: An acquisition-transaction utility theory perspective", *Journal of Marketing*, Vol. 54 No. 3, pp. 54-67.

Lin, Y.L., Marshall, D. and Dawson, J. (2009), "Consumer attitudes towards a European retailer's private brand food products: an integrated model of Taiwanese consumers", *Journal of Marketing Management*, Vol. 25 No. 9-10, pp. 875-891.

Lindquist, J.D. (1974), "Meaning of image – A survey of empirical and hypothetical evidence", *Journal of Retailing*, Vol. 50 No. 4, pp. 29-38.

Lupton, R.A., Rawlinson, D.A. and Braunstein, L.A. (2010), "Private label branding in China: What do US and Chinese students think"? *Journal of Consumer Marketing*, Vol. 27 No. 2, pp. 104–113.

Martineau, P. (1958), "The personality of the retail store", *Harvard Business Review*, Vol. 36 (January–February), pp. 47–55.

Martinez, E. and Montaner, T. (2008), "Characterisation of Spanish store brand consumers", *International Journal of Retail and Distribution Management*, Vol. 36 No. 6, pp. 477–493.

Mazursky, D. and Jacoby, J. (1986), "Exploring the development of store image", *Journal of Retailing*, Vol. 62 No. 2, pp. 145–165.

Monroe, K.B. and Krishnan, R. (1985), "The effect of price on subjective product evaluations", in J. Jacoby and J. Olson, (Eds.), *Perceived Quality: how consumers view stores and merchandise*, Lexington Books, Lexington, MA, pp. 209-232.

Paswan, A., Pineda, M.D.S. and Ramirez, F.C.S. (2010), "Small versus large retail stores in an emerging market-Mexico", *Journal of Business Research*, Vol. 63 No. 7, pp. 667–672.

Richardson, P.S., Dick, A.S. and Jain, A.K. (1994), "Extrinsic and intrinsic cue effects on perceptions of store brand quality", *Journal of Marketing*, Vol. 58 No. 4, pp. 28–36.

Smeijn, J., van Riel, A.C.R. and Ambrosini, A.B. (2004), "Consumer evaluations of store brands: Effects of store image and product attributes", *Journal of Retailing and Consumer Services*, Vol. 11 No. 4, pp. 247–258.

Sternquist, B. (2007), International retailing, Fairchild publications, New York, NY.

Sun, B. and Morwitz, V.G. (2010), "Stated intentions and purchase behavior: A unified model", International Journal of Research in Marketing, Vol. 27 No. 4, 356–366.

Vahie, A. and Paswan, A. (2006), "Private label brand image: its relationship with store image and national brand", *International Journal of Retail and Distribution Management*, Vol. 34 No. 1, pp. 67-84.

Wong, A. and Dean, A. (2009), "Enhancing value for Chinese shoppers: The contribution of store and customer characteristics" *Journal of Retailing and Consumer Services*, Vol. 16 No 2, pp. 123-134.

Wu, P.C.S., Yeh, G.Y.-Y. and Hsiao, C.-R. (2011), "The effect of store image and service quality on brand image and purchase intention for private label brands", *Australasian Marketing Journal*, Vol. 19 No. 1, pp. 30-39.

Zeithaml, V.A. (1988), "Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence", *Journal of Marketing*, Vol. 52 No. 3, pp. 2-22.

Zielke, S. (2010), "How price-image dimensions influence shopping intentions for different store formats"? *European Journal of Marketing*, Vol. 44 No. 6, pp. 748-770.





Constructs	Mean	Std.	(1)	(2)	(3)	(4)	(5)	(6)
		Dev.						
(1) Store image perceptions	3.84	1.52	1					
(2) SB price-image	3.90	1.41	.55*	1				
(3) SB value consciousness	3.70	1.60	.44*	.60*	1			
(4) SB attitude	4.06	1.57	.62*	.69*	.50*	1		
(5) SB purchase intention	3.57	1.60	.67*	.72*	.62*	.63*	1	
(6) SB choice $^{(1)}$	0.11	0.05	.61*	.75*	.50*	.67*	.71*	1

Table 1: Means, standards deviations and correlations between constructs (N2=379)

* Correlation is significant at the 0.01 level for a two-tailed test. ⁽¹⁾ Mean and standard deviation of SB choice are smaller than those of other constructs as we used percentage (scale ranging from 0 to 1).

Constructs	Dimensions and measurement items ⁽¹⁾	Stand.	r^{2 (3)}	AVE
	Layout: $\rho = .87$.72	.30	.70
	Physical facilities are visually appealing	.87		
	Store layout is clear	.81	_	
Store image	Easy to find articles on promotion	.84	_	
perceptions	Merchandise: $\rho = .88$.77	.29	.72
	Merchandise is available when needed	.85		
$\rho^{(4)} = .77$	Store offers high quality merchandise	.83		
AVE = .53	Store offers a broad assortment	.92		
$r^2 = .44$	Service: $\rho = .89$.70	.29	.73
	Employees are knowledgeable	.85		
	Employees are courteous	.85		
	Employees are willing to find customer solutions	.88		
	SB perceived relative price : $\rho = .83$.79	.33	.62
	I found low priced SB product ranges in this store	.81		
SB price-	compared to other stores			
image	All SB products in this store seem to be cheaper than	.76		
	those in other stores			
$\rho = .78$	I think that the SBs in this store are low priced	.80		
AVE = .64	compared to other stores			
$r^2 = .56$	SB perceived benefit: $\rho = .85$.81	.33	.65
	I have bought more SB products than I planned to buy	.82		
	in this store			
	I was tempted to buy more SB products in this store	.81		
	than I really needed		_	
	I bought some SB products not on my list in this store	.80		
	I am very concerned about SB prices, but I am equally	.87		
SB value	concerned about SB product quality		_	
consciousness	When grocery shopping, I compare the prices of	.75	20	(2)
0 - 97	different SBs to be sure I get the best value for money	74	.38	.03
p = .07	when purchasing a product, I always try to maximise the SD quality for the money I grand	.74		
	When I have SD products. Like to be sure that I am	02	-	
	getting my money's worth	.05		
	For most product estagories, the best buy is usually	80		
SR attitude	the SBs	.00		
5D attitude	I love it when SBs are available in the product	76		
$\rho = .85$	categories I purchase	.70	.47	.60
<i>p</i>	When I buy a SB. Lalways feel that I am getting a	.74		
	good deal	., .		
	In general, SBs are good quality products	.81		
SB purchase	The probability that I would consider buying SBs is	.86		
intention	high			
$\rho = .87$	I would purchase SBs next time	.78	.51	.63
`	I would consider buying SBs	.74	1	
	I will recommend buying SBs	.81	1	
SB choice	Percentage of SB purchase	-	-	-

Table 2: Scaling and measurement properties (N2=379)

⁽¹⁾ The measurement model was also tested in each sub-sample and the results confirmed the scales' good psychometric properties, satisfactory validity and reliability. ⁽²⁾ All of the factor loadings are significant at p < .01. ⁽³⁾ Highest squared correlation between the constructs. ⁽⁴⁾ ρ represents Jöreskog ρ (composite reliability).

Fit indigos	Enll	Correfour ⁽¹⁾	Extra (1)
Fit mulces	$\mathbf{F}\mathbf{u}\mathbf{n}$	Carrelour (NO 177)	
2 (12	(N2=379)	(N2=177)	(N2=202)
χ^2 (df), <i>p</i> -value	578.61 (337),	462.93 (337)	504.47 (337)
	<i>p</i> <.00	<i>p</i> <.00	<i>p</i> <.00
RMSEA	.044	.046	.050
CFI	.96	.95	.95
TLI	.95	.95	.94
χ^2/df	1.71	1.37	1.49
CAIC	1057	889	939
Hypotheses and paths	Standardised estimates		
H1+ : Store image perceptions \rightarrow SB	.37**	.46*	n.s.
purchase intention			
H2+ : Store image perceptions \rightarrow SB price-	.57**	.55*	.66*
image			
H3+ : SB price-image \rightarrow SB purchase	.36**	.25*	.62*
intention			
H4+ : SB price-image \rightarrow SB choice	.43**	.37*	.74*
H5+ : SB perceived value \rightarrow SB purchase	.40**	.36*	.43*
intention			
H6+ : SB perceived value \rightarrow SB choice	n.s.	n.s.	n.s.
H7+ : SB perceived value \rightarrow SB attitude	.51**	.46*	.55*
$H8+:SB$ attitude $\rightarrow SB$ choice	.35**	.35*	.33*
H9+ : SB purchase intention \rightarrow SB choice	.35**	.45*	.ns
Effects of socio-demographics ⁽²⁾	Standardised estimates		ates
Age (18-34 years / >34 years)	.46**	.44**	.50**
Gender (Men / Women)	34**	38**	28**
Family size (1-4 members / >4 members)	.22*	.11*	n.s.
Household income (≤2000R\$ / >2000R\$)	13**	18**	25**

Table 3: Model fit, standardised coefficients and hypothesis testing

**p*<.01 ** *p*<.001; ns= non significant.

⁽¹⁾ A bootstrap procedure was performed on the data (with 1000 bootstrap samples and 95% CI) to ensure that our estimations are stable and are not subject to sub-sample sizes.

⁽²⁾ Fit indices of the model with covariates : Full : χ^2 (df)=1445 (451), *p*<.00, RMSEA=.076, CFI=.086, TLI=.85 and χ^2 /df=3.2; Carrefour: χ^2 (df)=978 (451), *p*<.00, RMSEA=.082, CFI=.084, TLI=.83 and χ^2 /df=2.1 and Extra: χ^2 (df)=970 (451), *p*<.00, RMSEA=.076, CFI=.086, TLI=.85 and χ^2 /df=2.1.