CHAPTER 3. RESEARCH HYPOTHESES

3.1. Overview

The objective of this thesis is to investigate the consumer decision-making with respect to choice between store brands and manufacturer's brands. The principal question focuses on identifying factors, which correlate with consumer's propensity to purchase store brands and explain the heterogeneity in consumers' preference for store brands over manufacturer's brands based on the identified factors.

Research hypotheses will address following research questions:

1. Does consumer’s propensity to purchase store brands vary due to perceived differences between store brands and manufacturer’s brands on with respect to various product attributes and benefits?

2. How does consumers' knowledge affect the store brand purchase?

3. How does consumers' perceived risk associated with brand usage affects their store brand consumption?

4. How do consumers' socio- demographic characteristics influence their store brand proneness?
5. Can heterogeneity in store brand proneness be explained by the consumers' psychographics pertaining to their decision-making styles?

6. Does consumer's propensity to purchase private brands associate with their shopping behavior?

We turn now into a discussion on our proposed structural model that attempts to address the research agenda; examinations of factors affecting the store brand proneness.

3.2. Proposed Framework of Store Brand Proneness

As discussed in the previous chapter, there have been few attempts in past to develop a cohesive model of understanding store brand purchase behaviour (Ailawadi, et al., 2001; Baltas, 2003; Baltas, et al., 1997; Batra & Sinha, 2000; Richardson, et al., 1996). Richardson et al. (1996) framework was primarily guided by the information processing theory of consumer decision-making and it included variables from demographic characteristics, store brand perceptions, personality, consumer knowledge and heuristics. Their model did not study the impact of shopping styles and shopping behaviour on store brand proneness. Baltas (1997) studied the impact of consumer characteristics with respect to their shopping styles, consumer knowledge and shopping behaviour. They did not include store brand perceptions and demographics in their logistic regression based modeling of store brand choice. Batra and Sinha (2000) studied only the impact of consumer perceptions regarding risks and extrinsic cues in determining
the cross-category differences in store brand consumption. Focus of the study carried out by Ailawadi et al. (2001) was primarily on understanding similarities and differences between store brand buyers and deal prone buyers. They examined the influence of certain consumer psychographics on store brand purchase behaviour. Baltas (2003) in their discrete/continuous choice modeling of store brand consumption examined influence of factors like shopping behaviour, consumer knowledge, and store loyalty.

We present a flow diagram of the proposed framework (See Figure 3-1) to examine the store brand buying behaviour at the household level. The presumption of the proposed model is that perceived quality variation between store brands and manufacturer's brands, perceived variation in extrinsic cues of the two brand categories, consumer familiarity with store brands, consumer perceived variation in value-for-money image of store brands and manufacturer's brands, frequency of shopping at modern format stores, store loyalty, share of modern format stores in monthly expenses on food & grocery (F&G) and non-food household items, consumer decision-making styles and key socio-economic demographic variables like socio-economic class, age of the primary shopper of the household and family size either directly or indirectly explain the heterogeneity in consumers' propensity to purchase store brands.
Figure 3-1 Hypothesized Model of Factors Affecting Store Brand Proneness

PECV: Perceived Variation In Extrinsic Cues
PQV: Perceived Variation in Quality
PVFM: Perceived Variation in "Value for Money" Image
PRV: Perceived Risk Variation
FAU: Familiarity; FSZE: Family Size; SEC: Socio Economic Status; AGE(HW): Age of Primary Shopper
SFREQ: Shopping Frequency; SOMF: Share of Modern Retail in Monthly spend; SLOY: Store Loyalty
CDM1-8: Consumers' Decision-Making Styles
In the following section, we describe each of the constructs of the hypothesized framework and the theoretical support for each of the proposed relationship.

3.2.1.1. Store Brand Proneness

We define store brand proneness as consumer's overall likelihood of purchasing store brands in F&G and non-food household consumption items. In the literature, we find more than one way in which store brand proneness has been measured. Store brand proneness has been measured by computing the share of store brands in category purchase based on panel data (Baltas, 2003; Frank & Boyd, 1965). There are other studies, in which researchers have relied on consumer's self-reports regarding the degree to which they chose store brands in general or in a particular category (Batra & Sinha, 2000; Bettman, 1974; Harcar, et al., 2006; Richardson, et al., 1996). In case of consumers' self-reporting of their store brand proneness, either their past behavior regarding store brand purchase has been recorded (Batra & Sinha, 2000; Bettman, 1974; Richardson, et al., 1996) or their claims on purchase intention was measured (Harcar, et al., 2006).

Our measure of store brand proneness is based on subject's self-reporting of the frequency at which they bought the store brands in each of the twenty-four product categories studied. Points on the scale were labeled 0 (never buy the product), 1 (buy the product but never a store brand), 2, (rarely buy a store brand), 3(sometimes buy a store brand), 4(often buy a store brand) and 5(always
buy a store brand). For a given respondent, we summed the number of responses and divided the sum by the number of products actually bought by the household. Equation 1 gives the formula to calculate store brand proneness. The ratio thus generated for each of the household was in the range of 1 to 5.

Equation 1 Store Brand Proneness

\[
SBP = \frac{\sum_{i=1}^{n} x_i}{n}
\]

where,

\(x_i\) = frequency of store brand purchase for the \(i^{th}\) category

\(n\) = total number of categories bought by the household

3.2.1.2. Perceived Variation in "Value for Money" Image (PVFM)

Perceived value is regarded as consumer's overall assessment of the utility of a product or service based on perception of what is given and what is received (Zeithaml, 1988). The most common definition of value has been seen as ratio of trade off between quality and price (Dodds, Monroe, & Grewal, 1991), which is a value for money conceptualization. The two components, price and quality have different and differential effects on perceived value for money (Zeithaml, 1988). She argued that some consumers would perceive value when there is a balance
between price and quality, while some others would perceive value when there is low price. Sweeney and Soutar (2001) identified value for money as the function or price aspect of the perceived value construct. Thus, value for money construct refers to the evaluation of quality not in absolute terms but in relation to the price of a particular product or brand. Retail customers have been seen as value driven or value conscious consumers (Ailawadi, et al., 2001; Richardson, et al., 1996) Retailers positioning strategies in India and abroad inspire consumers to compare the quality of their store products versus manufacturer's products not in absolute terms but relative to their price levels. We conjecture that other things being equal, greater value for money perception would build higher level of store brand proneness.

**H1:** The greater the value for money perception about store brands, the greater would be household's store brand proneness.

### 3.2.1.3. Perceived Risk Variation (PRV)

The concept of perceived risk is based on the premise that all consumers make a purchase decision under some degree of uncertainty. The specific components of risk are physical, psychological, social, financial, performance and overall risk (Jacoby & Kaplan, 1972). The perceived risk associated with store brand usage has been found as an important factor influencing store brand consumption level.

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6 Big Bazaar uses the positioning punch line: "isse sasta aur isse achha aur kahan" (Where can you get cheaper than this and better than this?) (Source: www.bigbazaar.com)
Vishal Megamart uses the punch line: "sabse sasta aur sabse achha" (the cheapest and the best) (Source: www.vishalmegamart.com)
In numerous empirical studies (Batra & Sinha, 2000; Bettman, 1974; Richardson, et al., 1996). In case of store brand usage, Bettman (1974) studied the physical risk in terms of uncertainty regarding store brand food quality and perceived danger associated with it and found the risk perception, as the key variable discriminating between store brand prone and manufacturer's brand buyers. Another form of risk, which has been found to be influencing store brand usage, is the social risk (Livesey & Lennon, 1978). They found that selection of store brands varied according to their usage situation. For example, they argued that British consumers would serve national brand tea to guests, but they would consume less expensive store brand tea in private settings. Richardson et al. (1996) examined the impact of physical perceived risk variation between store brands and national brands on the store brand proneness and value for money perception of consumers for store brands versus national brands. In line with these findings, we presume the risk perception to be directly affecting the store brand proneness and indirectly affecting the store brand proneness via value for money image of store brands. Hence, our next hypotheses are:

**H2:** The greater the risk perception about store brands, the lower would be household's store brand proneness.

**H3:** The greater the risk perception about store brands, the lower would be consumer's value for money perception about store brands.
3.2.1.4. **Perceived Variation in Quality (PQV)**

Quality can be defined as "the ability of a product to perform its functions; it includes the product's overall durability, reliability, precision, ease of operation and repair and other valued attributes" (Kotler & Armstrong, 2006). Product quality has two dimensions: level, which means performance quality, and consistency that means conformance quality – delivering the same benefits every time. Quality perceptions about a product hence form a critical criterion in purchase decision process. Store brands have generally been found to be inferior in quality attributes like taste, texture, ingredients, freshness, nutritional value, etc. as compared to manufacturer's brands (Bellizzi, et al., 1981; Cunningham, et al., 1982). In previous researches on store brand purchase, a strong positive association between perceived quality variation between store brand and manufacturer's brand has been found (Bettman, 1974; Dick, et al., 1995; Richardson, et al., 1996). In the 1996 study by Richardson et al., they observed that perceived quality variation of store brand and manufacturer's brand had a significant indirect effect on store brand proneness via perceived risk variation and perceived variation in value for money image of store brand and manufacturer's brand. In accordance with these findings, we also postulate the following hypotheses;

**H4:** The greater the difference between quality perceptions of store brands and manufacturer's brands, the higher would be consumer's perceived value for money image of store brands
3.2.1.5. Perceived Variation in Extrinsic Cues (PECV)

According to cue utilization theory Cox and Olson (as cited in Richardson, et al., 1994), products comprise of a range of cues that serve as surrogate indicators of quality to consumers. Cues can be further classified as extrinsic or intrinsic to the product. While extrinsic cues are product related attributes but not the part of physical products; such as price, brand name, packaging, and advertising, intrinsic cues are attributes that are integral to the physical product; such as ingredient. A review of literature suggests that consumers rely on extrinsic cues like price (Leavitt, 1954), brand name (Allison & Uhl, 1964), packaging (McDaniel & Baker, 1977) and store name (Wheatley, Chiu, & Goldman, 1981) for quality assessment of products. Dick et al. (1997) found significant difference between store brand prone and non-store brand prone consumers with respect to utilization of extrinsic cues in assessing the quality of the product. They found that brand name was not an important extrinsic cue for store brand prone consumers in evaluation of products. Store brand prone consumers were also found less inclined to believe in price equals quality schema or brand equals quality schema. Richardson et al. (1996) in their modeling exercise on household store brand proneness found that consumer’s reliance on extrinsic cues to be negatively associated with store brand proneness. We introduce a slightly different construct in our proposed model; instead of measuring the extrinsic cue reliance of the consumer, we propose to measure the difference in perception about relevant extrinsic cues between store brands and manufacturer’s brands and examine how this perception variation between store brands and
manufacturer's brands affects consumer's propensity to purchase store brands. We hypothesize that

**H5:** The greater the perceived variation in extrinsic cues of Store brands and Manufacturer's brands, the higher would be the perceived quality of Store brands.

3.2.1.6. **Familiarity (FAM)**

Familiarity refers to brand comprehension, product knowledge or skill in judging the criteria required to evaluate products (Howard, 1977). Bettman (1974) was first to examine the role of familiarity in store brand proneness. He found the store brand familiarity increased the store brand proneness by reducing the perceived risk level associated with store brand usage and by increasing the perceived quality of Store brands. Positive association between familiarity and store brand consumption was found in subsequent studies on store brand buying behavior (Baltas, 2003; Baltas, et al., 1997; Richardson, et al., 1996). In line with these findings, we hypothesize that:

**H6:** The greater the consumer's familiarity with store brands, higher would be the perceived quality of store brands.

**H7:** The greater the consumer's familiarity with store brands, higher would be perception about extrinsic cues of store brands.

**H8:** The greater the consumer's familiarity with store brands, lesser would be risk perception associated with store brand usage.
H9: Greater familiarity with store brands is positively associated with store brand proneness.

3.2.1.7. Shopping Behaviour

Shopping pattern of buyers' at large format stores have been found to impact store brand proneness in studies related to examination of determinants of private brand buying behaviour (Baltas, 2003; Baltas & Argouslidis, 2007; Baltas, et al., 1997). Frequent shopping at modern retail stores tends to increase store brand proneness of consumers. Frequent buyers have greater shopping expertise and hence there is reduced perceived risk and greater objective assessment of quality of store products (Michelle & Prince, 1993). Expenditure in modern retail stores is also examined in context of understanding store brand purchase behaviour (Baltas, 2003; Frank & Boyd, 1965). Store loyalty has also been researched in context of store brand proneness. There have been mixed results on relationship between store loyalty and store brand proneness (Baltas, 2003; Baltas & Argouslidis, 2007). It has been argued that when a store brand prone consumer switches to another store, there are more chances that he/she would buy store brands of the new store he/she visited (Cataluna, et al., 2006). Baltas and Argouslidis (2007) found store loyalty to be negatively associated with store brand proneness and they argued that if store brand prone consumers' strong value orientation is true; it appears that value-oriented store brand consumers would shop around for better prices and therefore they might not be
regular patrons to a primary store. On the other hand, store brand development is seen as a strategy to build customer loyalty for the store and hence store loyalty should result in higher level of store brand proneness (Ailawadi & Keller, 2004). Building on these inputs from literature, we hypothesize that:

**H10:** Higher shopping frequency would result in greater familiarity with store brands.

**H11:** Higher shopping frequency would result in higher levels of store brand proneness.

**H12:** Higher the share of modern format stores in F&G and non-food household consumption items, higher would be levels of store brand proneness.

**H13:** Store loyalty is positively associated with store brand proneness.

### 3.2.1.8. Socio-Demographic Characteristics

Many of private brand proneness studies have searched for direction and strength of the impact of socio-demographic variables on the store brand proneness. However, studies have been largely inconclusive, as the results have varied substantially across studies (Ailawadi, et al., 2001; Baltas & Argouslidis, 2007; Bettman, 1974; Dick, et al., 1995; Frank & Boyd, 1965; Lybeck, et al., 2006; Omar, 1996; Richardson, et al., 1996). These studies indicate mixed results about impact of socio-demographic variables like family size, age, income
and education on store brand proneness. We also include socio demographics variables of social class, age and family size and hypothesize that

**H14:** Younger the housewife (the primary shopper of the household), the greater the store brand proneness

**H15:** Larger the family size of the households, higher would be the store brand proneness.

**H16:** Socio-economic class B is positively associated with store brand proneness.

3.2.1.9. **Consumer Decision Making (CDM) Styles**

General consumer psychographics have been widely studied in relation to store brands (Ailawadi, et al., 2001; Baltas, 1997; Baltas & Argouslidis, 2007; Cataluna, et al., 2006; Fin & Suh, 2005). A tabular summary of the results on consumer psychographics is presented in the Table 3-1. In our proposed model we address the role of consumer psychographics in explaining heterogeneity in store brand proneness.

CDMS developed by Sproles and Kendall (1986) are interpreted as basic buying decision-making attitudes that consumers adhere to, even when they are applied to different goods, services or purchasing situations (Walsh, et al., 2001) We examine the role of CDMS in store brand-choice decisions and hypothesize,

**H17:** Higher the quality consciousness, lower would be the store brand proneness.
H18: Greater the brand consciousness, lower would be the store brand proneness.

H19: Novelty consciousness would be positively associated with store brand proneness.

H20: Greater the hedonistic shopping consciousness, greater would be the store brand proneness.

H21: Greater the price and value for money consciousness, greater would be the store brand proneness.

H22: Higher Confusion from over-choice would result in higher level of store brand proneness.

H23: Impulsiveness would negatively influence store brand proneness.

H24: Brand loyalty /Habitual Buying would negatively influence the store brand proneness.
Table 3-1 Summary of Review of Literature on Consumer Psychographics and Store Brand Proneness

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Remarks: [+] indicates positive influence on store brand buying behaviour; [-] indicates negative influence on store brand buying behaviour; [x] indicates variable was either not studied or had no significant influence on store brand buying behaviour. List of Studies

1. Burron et al. (1998)
2. Garretson et al. (2002)
4. Cunningham et al. (1982)
5. Omar (1996)
9. Ailwadi et al. (2001)
10. Catauña et al. (2006)
3.3. Summary

The model of store brand proneness proposed in this chapter was developed to test the direct and indirect effects of consumer related factors influencing store brand choice. The hypotheses were put forward to test the direction and statistical significance of individual variables on the store brand proneness. The hypotheses were divided into four sections. Hypotheses in the first section were related to variation in consumer perceptions of store brands versus manufacturer's brands on extrinsic attributes, quality, value for money, risk associated with brand usage and consumer knowledge and familiarity with store brands.

With the rise in perceptual difference between store brands and manufacturer's brands would increase on quality, value for money and extrinsic cues and increased consumer's familiarity, store brand proneness is expected to increase. As the risk associated with store brand increases relative to manufacturer's brands, store brand proneness is assumed to decline.

In the second section, hypotheses were related to demographic variables and it is postulated that younger homemakers and larger families would tend to buy more of store brands.

In the third section, hypotheses were related to shopping behavior of consumers specific to modern format stores. Shoppers that are more frequent will have both direct and indirect effect on store brand proneness. Additionally share of modern
format stores in monthly FMCG basket of households and store loyalty are presumed to influence store brand proneness.

In the fourth section of this chapter, hypotheses have tried to examine the influence of consumers' decision-making styles on store brand buying behavior. While quality consciousness and brand consciousness is expected to lower the store brand proneness, price/value for money consciousness and hedonistic shopping consciousness is presumed to increase the store brand proneness.