THE NON-LINEAR RELATIONSHIP BETWEEN CUSTOMER SATISFACTION AND CUSTOMER LOYALTY IN RETAIL BANKING – AN EMPIRICAL INVESTIGATION

Chris Baumann, Macquarie University NSW 2109, Australia, cbaumann@efs.mq.edu.au
Suzan Burton, Macquarie Graduate School of Management NSW 2109, Australia, suzan.burton@mq.edu.au
Gregory Elliott, Macquarie University NSW 2109, Australia, greg.elliott@efs.mq.edu.au

ABSTRACT

The customer loyalty literature has investigated the association between customer satisfaction and a customer's loyalty and revealed mixed results. While some studies indicate that the relationship is linear, others have found a very low correlation between the two constructs, and in some cases there was a non-linear relationship. While the bank marketing literature is generally extensive, this particular issue has not been empirically tested in retail banking, a gap investigated by this study. A non-linear relationship between customer satisfaction and customer loyalty was found, and a model explaining 57% of a customer's variation was developed. This study incorporated potential predictors of loyalty beyond the attitudinal dimensions traditionally tested for their association with loyalty measures, and found that market conditions such as switching costs and benefits, as well as the length of the relationship add explanatory power. The model can be used by bankers to profile customers who are likely to defect, and this will allow practitioners to implement pro-active marketing action to prevent customer switching.

INTRODUCTION AND LITERATURE REVIEW

This study investigates the factors that predict consumers' behavioral intentions in retail banking. In particular, this research examines the associations between customer satisfaction, perceived service quality, current consumer behavior and consumer intentions. The literature has previously established a relationship between *customer satisfaction* and customer loyalty (Oliver 1980; Oliver and Swan 1989; Cronin and Taylor 1992; Levesque and McDougall 1996; Mooradian and Olver 1997; McDougall and Levesque 2000), as well as between *service quality* and customer loyalty (Bitner 1990; Taylor and Baker 1994; Spreng, Harrell, and Mackoy 1995; Zeithaml, Berry, and Parasuraman 1996). Generally, strong associations have been found, indicating that both customer satisfaction and perceived service quality are associated with customer loyalty. Consequently, a substantial body of literature on the topic of customer satisfaction has emerged. There is also evidence, however, that satisfaction and loyalty are not always strongly correlated (Cronin and Taylor 1992; Oliva, Oliver, and MacMillan 1992; Mittal and Lassar 1998). Stauss and Neuhaus (1997) reflected on the thesis that 'customer satisfaction leads to customer loyalty' (p. 237) and their review of the literature found that the thesis was not supported, i.e. some customers defect although they are actually satisfied. East and Hammond (1999), in their review of the relationship between satisfaction and retention, also found that most studies only revealed weak associations between customer satisfaction and customer loyalty.

Based on theoretical grounds, this study incorporated customer perceptions, such as overall satisfaction, affective attitude and service quality dimensions as potential predictors of loyalty. In addition, a more practical approach was also incorporated by including market conditions such as switching costs and benefits, as well as customer characteristics in order to maximize prediction of customer loyalty. Demographic variables have been found to play a role in consumer behavior, but they have only rarely been tested for their prediction of loyalty in banking. Recent consumer behavior was incorporated in this study based on the Markov Model where past behavior is used to predict current and future behavior

(Vilcassim and Jain 1991; Ansari, Jedidi, and Jagpal 2000; Shively, Allenby, and Kohn 2000; Chib, Seetharaman, and Strijnev 2004; Paas, Bijmolt, and Vermunt 2004). There is also some indication in the literature that past purchase behavior is a strong predictor of future behavioral intentions (e.g. Woodside and Bearden 1977; McQuarrie 1988; Bagozzi, Baumgartner, and Yi 1991). The importance of using customers' behavioral intentions to predict customer retention has been recognized by many researchers (e.g. Norman and Smith 1995; Godin, Gagne, and Sheeran 2004; Patterson 2004; Luarn and Lin 2005), and consequently, customer loyalty in this study has been measured as a customer's long-term intention to remain with their main bank.

METHODOLOGY

Customer loyalty was investigated using a survey to examine the banking attitudes, perceptions and behavior of Australian retail banking customers. The study achieved a high response rate (nearly 40%), and the subsequent data analyses were based on a sample of 1,951 responses. Females (61%) are over-weighted in the sample, reflecting the higher proportion in the sample frame (63% females). Principal component analysis was used for data reduction (Johnson and Wichern 2002), providing a single value for the multi-item constructs. The resulting variables were subsequently used in multivariate analyses to model behavioral intentions, where all variables were considered simultaneously, and non-significant predictors were progressively eliminated using a backward elimination approach.

RESULTS

The key focus of this research was on the prediction of a customer's behavioral intentions in retail banking and the association between customer satisfaction and loyalty. Figure 1 shows the non-linear relationship between overall satisfaction and long-term behavioral intentions (BI). The equation based on the model presented in Table 1 for a customer's long-term behavioral intentions is as follows:

> ***Long-term BI*** *= -0.523 + 0.311 * affective attitude + 0.125 * overall satisfaction - 0.219 * SB + 0.204 * SC + 0.039 * length of relationship + 0.024 * overall satisfaction squared*

Figure 1 shows the non-linear and additive effect of satisfaction in relation to a customer's long-term behavioral intentions after allowing for the effects of all the other variables in the model.

The model presented in Table 1 explained 57.1% of long-term behavioral intentions' variation. The model was tested for model fit and no evidence of lack of fit was found.

The strongest single predictor of a customer's long-term intention to remain with the main bank was affective attitude towards the bank, followed by overall satisfaction. Both predictors had a positive association with intentions to remain a customer: the more positive a customer's attitude towards the bank and the more satisfied they are, the more likely they are to stay for another five years. Switching benefits and switching costs were also found to be strong predictors of long-term behavioral intentions, but unsurprisingly, with opposite associations (i.e. the effect of switching benefits was negative; and of switching costs was positive). The negative association (β = -0.220, $p < 0.001$) for switching benefits indicates that the less benefits that customers see in switching, the more they intend to remain with their main bank in the long run. Switching costs, on the other hand, had a positive association with the dependent variable (β = 0.208, $p < 0.001$): the higher the perceived switching costs, the more likely that a customer intends to remain with their main bank in the long term. After allowing for the effects of all the other predictors in the model, length of relationship with the main bank was the fifth strongest predictor (β = 0.091, $p < 0.001$). The longer a customer had been banking with their main bank, the higher their intentions to remain a customer for the next five years.

Figure 1: Non-linear relationship between overall satisfaction and long-term behavioral intentions

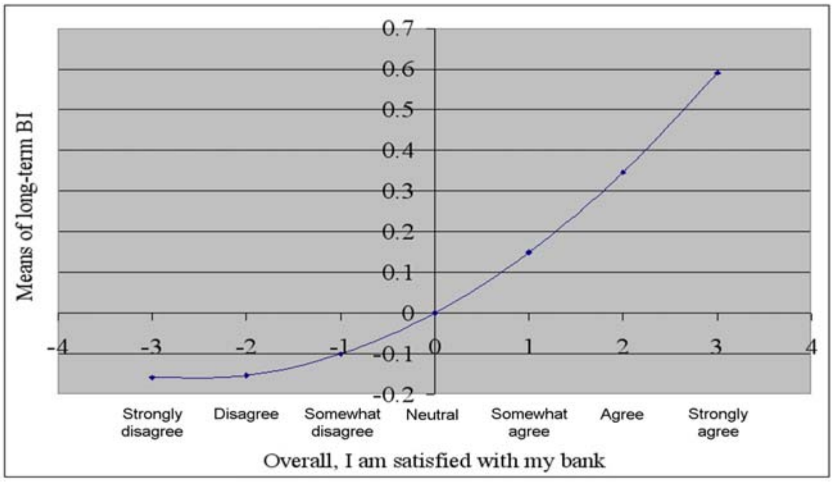

Table 1: Multivariate predictors of long-term behavioral intentions—Multiple regression—based on all potential predictors

Predictor	Unstandard Coefficients	Standard error	Standardized Coefficients (Beta)	*t*	*p*
Constant	-0.523	0.065		-7.993	<0.001
Affective attitude towards the bank	0.311	0.034	0.319	9.234	<0.001
Overall satisfaction	0.125	0.020	0.214	6.329	<0.001
Switching benefits	-0.219	0.021	-0.220	-10.373	<0.001
Switching costs	0.204	0.018	0.208	11.262	<0.001
Length of relationship	0.039	0.008	0.091	5.036	<0.001
Overall satisfaction squared	0.024	0.006	0.078	4.054	<0.001

R^2= 0.571; Adjusted R^2 = 0.569; n = 1,333

CONCLUSION

This study modeled a customer's long-term intentions to remain with their main bank. Testing a range of potential determinants of loyalty in retail banking in this study found that customer perceptions such as overall satisfaction and affective attitude have strong associations with behavioral intentions. Service quality dimensions were not found to be unique predictors of behavioral intentions. The study also tested perceived market conditions as potential predicators of loyalty in retail banking. Both switching costs and switching benefits were found to be unique predictors of long-term intentions. This result suggests that market conditions are associated with customer loyalty, especially where switching is complicated, such as with debts and loans. The results also indicated that the association between satisfaction and long-term behavioral intentions was of a non-linear nature. Customers who are *very* satisfied with their bank had an over-proportionately high level of intention to remain with their bank in the long run.

References are available from the first author of this paper.