Customer tradeoffs between key determinants of SME Banking Loyalty
Regan Lam, City University of Hong Kong*
Suzan Burton, Macquarie University
Hing-Po Lo, City University of Hong Kong

May 2009

Brief professional biography

Regan Lam
Regan Lam is an instructor at the Department of Marketing, City University of Hong Kong. He earns his Master and Doctoral degree from Macquarie Graduate School of Management, Macquarie University. Prior to joining CityU, he had substantial work experience in the field of bank marketing. His research interests focus on financial services marketing, particularly on business customer loyalty analysis. Regan can be contacted at mkregan@cityu.edu.hk

Suzan Burton
Suzan Burton is an Associate Professor at Macquarie Graduate School of Management, Macquarie University, Australia. Her research interests include customer satisfaction and retention, and customer choice in the area of socially undesirable products. (email: suzan.burton@mgsm.edu.au).

Hing-Po Lo
Hing-Po Lo is an Associate Professor at the Department of Management Science and the Director of Statistical Consulting Unit of City University of Hong Kong. His research interest is in discrete choice modeling, competitive bidding and statistical modeling in marketing research and transportation. (email: mshplo@cityu.edu.hk)

*Address for correspondence
Regan Lam
Department of Marketing, City University of Hong Kong,
Tat Chee Avenue,
Kowloon Tong,
Hong Kong.
Ph: (852) 2784-4618 / (852) 6053-2841
Fax: (852) 2788-9146 Email: mkregan@cityu.edu.hk
Customer tradeoffs between key determinants of SME banking loyalty

Structured Abstract

Paper type
Research Paper

Purpose
This study demonstrates a method for estimating the tradeoffs that banking customers make between different attributes of a service, thus allowing businesses to estimate the likely impact on customer loyalty of changes in different attributes of a service.

Design/methodology/approach
The data were collected using a mail survey that was sent to SME decision makers in Hong Kong. The data were then analyzed using a choice modeling approach in the form of ordinal logistic regression.

Findings
Both affective components, such as relational bonds, and cognitive components, such as perceived service quality, are shown to influence customers’ switching behavior. The specific tradeoffs that customers make between these attributes are also estimated.

Research limitations/implications
This study is the first to quantify the effect of different variables on SME customer loyalty in a largely disloyal services sector. The study also demonstrates and quantifies the tradeoffs that customers make between various cognitive and affective attributes.

Practical implications
The tradeoff analysis shows how improvement in one attribute can have an impact that is equivalent to a change in another attribute. This provides additional strategic options for financial services marketers to cost-effectively achieve a higher level of loyalty.

Originality/value
The study is the first to show how choice modelling can be used to calculate the tradeoffs that customers make in their purchase decisions, thereby providing financial services marketers with an effective way to estimate the impact of alternative strategies on customer loyalty.

Keywords
Customer loyalty, tradeoff, pricing, share-of-wallet, guanxi, choice modeling.
Customer tradeoffs between key determinants of SME Banking Loyalty

Introduction and purpose

Customer retention has been said to have become the ‘Holy Grail’ of diverse industries (Coyles and Gokey, 2005). A number of studies have demonstrated the benefits of customer retention and/or customer loyalty: Gronroos (1990) suggests that customer retention leads to lower sales and marketing costs compared to selling to new customers, and other authors argue that customer loyalty is a key determinant of the long-term financial performance of firms (Reichheld, 1993, Jones and Sasser, 1995, Reichheld et al., 2000). As a result, an increasing amount of research has examined the drivers of customer loyalty (e.g., Chintagunta et al., 1991, de Ruyter et al., 1997, Desai and Mahajan, 1998, Yim and Kannan, 1999, Zins, 2001, Beerli et al., 2004, Chiu et al., 2005).

Despite the attractiveness of achieving ‘loyal’ customers, research has indicated that 100% customer loyalty is relatively unusual: customers in banking and other industries are increasingly sharing their purchases between multiple brands, thus demonstrating what has been called ‘polygamous loyalty’ (Uncles et al., 1994, Rust et al., 2004, Cooil et al., 2007). Obtaining loyal customers is likely to be particularly challenging for banks, since the banking industry is characterized by many customers having multiple simultaneous relationships with various service providers. For example, a significant number of customers have been shown to use more than one bank (e.g., Chan and Ma, 1990, Denton and Chan, 1991, Nielsen et al., 1998, Trayler et al., 2000, Lam and Burton, 2005, Calik and Balta, 2006).

Previous research has shown that polygamous loyalty is associated with lower loyalty to the main bank: customers who allocate a greater percentage of their banking transactions to one bank (i.e. those who have a higher share of wallet (SOW)) are more likely to be loyal to, and less likely to switch from a bank than customers with a lower SOW (Baumann et al., 2005). These finding suggests that in modelling future customer loyalty, it is important to model a customer’s usage of competing providers. However, few customer loyalty studies have allowed for the effect of use of competing products, and if they have done so, have typically modelled loyalty in the consumer packaged goods market (e.g., Chintagunta et al., 1991, Yim and Kannan, 1999), not the financial services market. Divided loyalty is not unique to the banking industry: for example there is substantial evidence that most consumers of packaged goods purchase regularly from a portfolio of brands (Ehrenberg et al., 1990, Uncles et al., 1994). Previous research has shown that banking customers may stay with a provider, even if dissatisfied, because the costs of switching are perceived to be higher than the benefits of switching (Panther and Farquhar, 2004). However a customer who concurrently maintains
multiple accounts is likely to be able to defect more easily, by shifting some or all of their financial activity from one bank to another. In addition, a customer with multiple accounts with different banks is likely to receive targeted offers from those banks, so is thus more likely to be aware of competitors’ offerings. As a result, a customer’s current SOW is likely to be a particularly important predictor of future loyalty in banking, and this study extends prior research by modeling the factors which predict customer loyalty, after allowing for current customer behavior (assessed by current share-of-wallet).

Many banks already have a strategic focus on customer retention due to keen competition, rising costs of customer acquisition and increasing customer switching behaviours (Ennew and Binks, 1996, Manrai and Manrai, 2007). While there has been previous research studying loyalty in business banking (e.g., Chan and Ma, 1990, Zineldin, 1995, Ennew and Binks, 1996, Ennew and Binks, 1999, Madill et al., 2002), there has been a relative lack of research into business customer loyalty, compared to research in the retail banking market. The decision making process by business customers is also said to be becoming more complex, as customer choice increasingly depends on many different criteria simultaneously, including brand, quality, performance, price, features and distribution channel (McFadden, 1986). This problem is further confounded in purchasing financial services, where customers may consider other intangible features and characteristics of the market offerings such as service quality, perceived guanxi, and trust (Verma et al., 2008). This has resulted in a substantial body of research examining consumers’ choice strategies (e.g., Bettman, 1974, Wright, 1975, Bettman et al., 1998). In choosing between competing products, customers need to decide between the different bundles of attributes offered by competing products, a process which sometimes involves difficult tradeoffs (Bettman et al., 1998). The design of effective marketing programs therefore requires an accurate forecast of the choice strategy used by consumers in the particular decision environment (Wright, 1975). For financial services providers, understanding customers’ choice strategies, and in particular, their tradeoffs between key attributes, can therefore help to develop appropriate product specifications and customer retention and cross-selling programs, improving or emphasising features which are important to significant groups of customers. In this paper, we demonstrate a method for estimating the tradeoffs that consumers make, thus allowing marketers to more effectively tailor their marketing programs to respond to, or influence consumer choice.

The research setting for the study is banking loyalty by small-to-medium enterprises (SMEs) in Hong Kong, though the methodology used to estimate customer tradeoffs can be applied in any other setting. SMEs in Hong Kong are defined as manufacturing enterprises with less than 100 employees and non-manufacturing enterprises with less than 50 employees (Hong Kong Trade Development Council, 2007). The importance of SMEs appears to have been under-estimated in academic research, since there has been very little research into the sector.
In fact SMEs in Hong Kong account for 98% of all businesses and employ about 50% of the workforce in the private sector (Trade and Industry Department Hong Kong, 2007), so the sector is of critical importance for banks. The following sections of the paper review prior research into the cognitive and affective antecedents of customer loyalty and then present the research methodology. Subsequent sections present the results and discuss the key theoretical and managerial implications and directions for future research.

**Background and research hypotheses**

*Customer loyalty and behavioural intention*

Current definitions of customer loyalty include both behavioural and attitudinal aspects (Dick and Basu, 1994, Morgan and Hunt, 1994, Oliver, 1999). Actions of customers such as word-of-mouth or the degree of repeat purchase of a product or a service are said to reflect *behavioral* loyalty (Dekimpe *et al*., 1997, Chaudhuri and Holbrook, 2001). The attitudinal aspect, in contrast, sees a loyal consumer as someone who has a positive attitude and a high degree of dispositional commitment in terms of some unique value that is associated with a brand (Jacoby and Chestnut, 1978, Chaudhuri and Holbrook, 2001). Examples of measures of *attitudinal* loyalty include preference, or a commitment to repurchase (Gremler and Brown, 1996, Aydin and Ozer, 2005).

Apart from behavioural and attitudinal measures, most definitions of loyalty also incorporate an actual or proxy measure of *actual* behavior, and in the absence of measures of actual behavior, Zeithaml, Berry and Parasuraman (1996, p. 33) view behavioral intentions “as indicators that signal whether customers will remain with or defect from the company”. As a result, a number of studies have used behavioral intentions to measure customer loyalty (e.g., Jain *et al*., 1987, Boulding *et al*., 1993, Bloemer and de Ruyter, 1999, Ganesh *et al*., 2000, Chaudhuri and Holbrook, 2001). Hence this study models customer loyalty, as shown by the stated willingness of SME customers to switch from their existing bank service provider to a competing service provider.

*Cognitive antecedents of loyalty*

McGuire (1969) suggests that cognitive components of attitude include brand beliefs, judgments, or thoughts that are associated with an attitude object. In a services market, critical cognitive components of customer attitudes are likely to include customer beliefs about, and judgments of, service quality (Roest and Pieters, 1997). Lee and Cunningham (2001) propose that service quality is a key determinant of customer loyalty in services and as a result, service quality has frequently been used in models of loyalty and retention (e.g., Bloemer and Kasper, 1995, Cronin *et al*., 2000, Lee and Cunningham, 2001, Beerli *et al*., 2004, Aydin and Ozer, 2005). However, all these studies were conducted in consumer markets, and investigation of
the contribution of perceived service quality to business customer loyalty is limited. Prior qualitative research suggests that for this market, one dimension of service is particularly important: the time required to process loan applications (Lam and Burton, 2006). As a result, this study models one key aspect of perceived service quality: loan application processing time, resulting in the first hypothesis;

**Hypothesis 1:** Perceived service quality (assessed by the time required to process applications) is associated with a business customer’s intention to stay with a service provider.

Convenience in buying and using services is increasingly important to consumers (Berry et al., 2002). A service’s facility location may impact on perceived service quality and influence the development of lasting customer relationships (Seiders et al., 2000). Nielsen, Terry and Trayler (1998) report that a conveniently located branch network is significantly associated with an SME’s choice of bank. Network wide, a larger number of bank branches is likely to result in higher convenience of locations for customers, but in an era of increasing online banking when many customers rarely go into a bank branch, customer perceptions of a conveniently located branch network may no longer impact on ongoing business customer loyalty. However, consistent with previous research reflecting the importance of convenient locations, this study proposes and tests the following hypothesis:

**Hypothesis 2:** The higher the number of bank branches, the less likely that a customer will intend to switch to other service providers.

A further critical cognitive component of customer attitude is likely to be the belief of customers about the relative price of an offering. Previous research shows that loyal customers may pay a price premium (Edvardsson et al., 2000, Kandampully and Suhartanto, 2000, Smith and Wright, 2004). Consumers will also tend to pay a higher price for products and services that they perceive to be of higher value (Murphy, 2002). This value may include higher levels of perceived service quality, but at the same service quality level, people are likely to prefer lower prices, leading to Hypothesis 3:

**Hypothesis 3:** For a given level of service quality, the product price differential relative to competitors is negatively associated with customer loyalty.

Affective antecedents of loyalty

In contrast with cognitive attributes, which are primarily based on beliefs and judgments, affective loyalty attributes reflect emotions or feelings that are associated with an attitude object (McGuire, 1969, Edwards, 1990). For example, McCall (1970) treats the perceived social bond by the buyer to the seller as an affective component, and a number of subsequent...
studies have shown the positive influence of social bonds on customer retention (e.g., Dwyer et al., 1987, Sharma et al., 1999, Eriksson and Vaghult, 2000). In particular, social bonds in the form of interpersonal interactions between a service provider employee and a customer have been shown to positively impact on the development of loyalty. For example, Anderson, Chu, and Weitz (1987) found that loyal customers in a business-to-business context have cordial interpersonal relationships with the salespeople of the firm. These friendly relationships dispose customers to self-disclosure, listening, and caring, which in turn improve the mutual understanding between the customer and the service provider (Chiu et al., 2005).

In Western countries, business is said to come first and interpersonal relationships may subsequently develop, while in Asia, interpersonal relationships are said to be established first, then followed by business (Smith, 1995), suggesting that interpersonal relationships may be particularly important in creating and maintaining customer loyalty for Asian businesses. Interpersonal relationships in a Chinese context usually involve the management of guanxi, that is, personal connections or relationships on which an individual can draw to secure resources or advantages when doing business and in the course of social life (Davies, 1995). The concept of guanxi has received growing attention in today’s global business development (Ramaseshan et al., 2006) and has been examined in a number of relationship marketing studies (Tomas and Arias, 1996, Lai and Speece, 2000, Gilbert and Choi, 2003, Gu et al., 2008). In the business-to-business context, guanxi is said to open dialogue, build trust, and facilitate exchange of favors for organizational purposes (Hoskisson et al., 2000). It is thus likely that the guanxi between an SME decision maker and their bank manager may play an important role in influencing his/her future loyalty to a financial services provider, yet no previous studies have analysed the extent to which guanxi might compensate (if at all) for perceived weaknesses of a service provider in other dimensions of service. As a result, the study proposes and tests the following hypothesis:

**Hypothesis 4:** A customer’s intention to switch from a service provider is negatively associated with their perception of guanxi with that provider.

**Share of wallet**

As previously discussed, a limitation of previous research is the failure to model the effect of a customer’s usage of competing providers, despite evidence that retail banking customers with a lower SOW are likely to be less loyal, and more likely to switch banks (Baumann et al., 2005). In financial markets, a customer’s share of wallet (SOW) is a reflection of both their current behavior (what accounts they use) and of their past behavior (since a customer who only uses one account is likely to have decided, at some time in the past, not to open other accounts and/or to close other accounts). Previous research has shown that many banking
customers perceive switching costs as higher than switching benefits (Panther and Farquhar, 2004) suggesting that current SOW may be associated with future customer behaviour due to perceived switching costs, and/or due to customer satisfaction with the existing provider. SOW is also strategically important for banks: Coyles and Cokey (2005) argue that focusing on the SOW pattern of customers in addition to customer retention can have as much as ten times greater value to a company than focusing on retention alone. Any attempt to model future behavior should therefore allow for the effect of current SOW, resulting in Hypothesis 5:

**Hypothesis 5:** The higher the extent of the existing share of wallet, the less likely a customer will intend to switch service providers.

In summary, most studies investigating the antecedents of customer loyalty have been conducted in consumer markets with a relative lack of research into business customer loyalty. Previous studies of loyalty in services sectors have also typically failed to include important factors, such as current customer behavior, or to model customers’ tradeoffs between important cognitive and affective components of attitude. In addition, previous studies have typically not modeled the effect of price, though price relative to competition is likely to be a critical factor in predicting customer loyalty. This study therefore investigates the tradeoffs that customers make between cognitive and affective factors and examines the relative contribution of these factors to customers’ intention to switch from their existing service provider, after allowing for the effect of current SOW.

**Research Methodology**

**Procedure and samples**
Data were collected using a mail survey sent to small-to-medium enterprises (SMEs) in Hong Kong. After pre-testing, the survey was sent to 700 SMEs randomly selected from the Hong Kong Dun & Bradstreet SME Business Directory listing of the garment and electronics industries. To encourage response, follow-up phone calls were made to the 700 SMEs one week after the questionnaire was sent out. A total of 115 useable questionnaires was received, representing a response rate of 16.4%.

**Measures**
Five key attributes were included as independent variables. These included three cognitive attributes, one affective attribute, and an additional attribute (SOW). The three cognitive attributes were a measure of service quality (approval time for loan applications), number of bank branches, and pricing of an overdraft loan facility. Three levels of each cognitive
attribute were varied in a $3^3$ factorial design choice model. The approval time of loan applications reflected three different approval times, chosen to reflect realistic variations in industry performance (less than one week, one to two weeks, and two to three weeks). The number of bank branches of the competing bank offered in the choice scenario was varied relative to the SME’s existing main bank (more than, about the same as, less than). Pricing varied by the interest rate of an overdraft loan facility (0.5%, 1%, and 1.5% over the local prime rate). (The local prime rate is the best lending rate offered by banks in Hong Kong. The term is widely understood in the SME market, and provides a well-understood way to compare pricing by competing banks.)

Two further measures were included in the logistic model as covariates. The inclusion of these measures as covariates allowed perceptions of respondents to be directly modeled, rather than modeling the effect of predetermined experimental levels. The first covariate was perceived guanxi, an affective attribute, estimated by the reported perception of SMEs of having a good interpersonal relationship with their main bank’s manager or relationship manager. Perceived guanxi was measured on a seven-point Likert scale, modified from the scales used by Gu et al. (2008) to reflect the observation of those authors that the core concept underlying guanxi is personalized relationships with important people. The second covariate was the share of wallet (SOW) of the SMEs with their main bank, estimated by asking the SMEs to indicate the number of banks that they were currently using. Full details of all measures are listed in Appendix A. Earlier qualitative research in the same market suggests that variation in the loan rate is more important for this market than the deposit rate (Lam and Burton, 2006). As a result, variation in the loan rate was modelled in the fractional factorial design, as described above. However, to test for any additional effect due to the deposit rate while preserving experimental parsimony, a final measure was used to assess the effect of the deposit rate. In each scenario where respondents indicated low likelihood of switching (a rating of four or less on a seven point scale), an additional question asked whether a variation of 0.5% in the deposit rate would affect the respondent’s bank switching decision.

A one-third replicate of a $3^3$ fractional factorial design involving nine combinations of bank offers was given to respondents for comparison with their existing main bank’s offer. This design reduced the respondent burden while enabling an assessment of the effect of each offer on the choice behavior of respondents. The nine combinations followed the experimental design of Cochran and Cox (1992). The analysis included a total of 1,035 observations (115 respondents * 9 scenarios each). The dependent variable was the likelihood of switching to other banks, measured on a 7-point semantic differential scale, where 1 = very unlikely and 7 = very likely, with a neutral midpoint of 4, consistent with previous measurement of likelihood of switching (Moutinho and Smith, 2000). All observations were then analyzed in SAS Version 9.1, using a choice modeling approach in the form of ordinal logistic regression.
This regression method was originally proposed by Walker and Duncan (1967) and later named by McCullagh (1980) as the proportional odds model or parallel regression. This method is appropriate when the independent variables and the outcome categories of the dependent variable are ordinal in nature, as in this study.

Analysis and results

Table I shows demographic information for the respondents. Approximately 58% of the respondents had used their main bank for more than 10 years. Based on the length of the relationship, this finding might suggest that these SMEs are loyal. However, very few were 100% loyal; only 24.3% of the companies used only one bank, with the rest dividing their bank usage between two to more than five banks, which indicates polygamous (or shared) loyalty by many SMEs. Moreover, 59% of the respondents indicated that they would be likely to switch from their main bank in one of the nine scenarios, which further reinforces the finding of predominant disloyalty in this sector.
Table I - Demographic information for the 115 SME respondents

<table>
<thead>
<tr>
<th>Items</th>
<th>Number of SMEs and Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual sales range (HK$)</strong>*</td>
<td></td>
</tr>
<tr>
<td>Less than 10M</td>
<td>27 (24.1)</td>
</tr>
<tr>
<td>10M-30M</td>
<td>36 (32.1)</td>
</tr>
<tr>
<td>Over 30M</td>
<td>49 (43.8)</td>
</tr>
<tr>
<td><strong>Number of employees</strong></td>
<td></td>
</tr>
<tr>
<td>Less than 10 employees</td>
<td>64 (55.7)</td>
</tr>
<tr>
<td>11-30</td>
<td>36 (31.3)</td>
</tr>
<tr>
<td>31-50</td>
<td>7 (6.1)</td>
</tr>
<tr>
<td>Over 50</td>
<td>8 (6.9)</td>
</tr>
<tr>
<td><strong>Number of servicing banks</strong></td>
<td></td>
</tr>
<tr>
<td>One bank</td>
<td>28 (24.3)</td>
</tr>
<tr>
<td>2-3</td>
<td>74 (64.3)</td>
</tr>
<tr>
<td>4-5</td>
<td>10 (8.7)</td>
</tr>
<tr>
<td>Over 5</td>
<td>3 (2.6)</td>
</tr>
<tr>
<td><strong>Years of business</strong></td>
<td></td>
</tr>
<tr>
<td>Less than 5 years</td>
<td>7 (6.1)</td>
</tr>
<tr>
<td>6-10</td>
<td>20 (17.4)</td>
</tr>
<tr>
<td>11-15</td>
<td>42 (36.5)</td>
</tr>
<tr>
<td>Over 15</td>
<td>46 (40.0)</td>
</tr>
<tr>
<td><strong>Length of time with main bank</strong></td>
<td></td>
</tr>
<tr>
<td>Less than 5 years</td>
<td>11 (9.6)</td>
</tr>
<tr>
<td>5-10</td>
<td>37 (32.2)</td>
</tr>
<tr>
<td>11-15</td>
<td>33 (28.7)</td>
</tr>
<tr>
<td>Over 15</td>
<td>34 (29.6)</td>
</tr>
</tbody>
</table>

*Note:* * Three SMEs have not disclosed their annual sales information in the questionnaire.

Table II shows the results of the ordinal logistic regression. The chi-square score test for testing the proportional odds assumption is 34.173, and not significant at the 0.1 level with respect to a chi-square distribution with 25 degrees of freedom ($p > 0.1$), which indicates that the model adequately fits the data (Long, 1997, p. 143). The estimated Wald chi-square scores shown in Table II suggest that all five explanatory variables investigated have a statistically significant effect on SMEs’ intentions to switch banks. Two-way interactions between these five explanatory variables were tested but were not statistically significant ($p > 0.1$), so they were not included in the final model. Demographic measures for the SMEs (as shown in Table II) were added to the ordinal regression analysis in the choice model but they were not significant. Therefore, they were not included in the analysis and in the final model. The regression output allows derivation of six statistical equations, but because the magnitudes of the five independent variables across the equations are the same (except for the intercepts), only two are shown (see (1) and (2) below).
\[
\ln \left( \frac{P[\text{LIKSWITCH} = 1]}{P[\text{LIKSWITCH} = 2,3,4,5,6,\text{or} 7]} \right) = -3.282 - 0.199 * SOW - 0.118 * BRANCH + 0.635 * ODPRICE + 0.577 * APPVTIME + 0.473 * GUANXI \quad (1)
\]

\[
\ln \left( \frac{P[\text{LIKSWITCH} = 1,2]}{P[\text{LIKSWITCH} = 3,4,5,6,\text{or} 7]} \right) = -2.633 - 0.199 * SOW - 0.118 * BRANCH + 0.635 * ODPRICE + 0.577 * APPVTIME + 0.473 * GUANXI \quad (2)
\]

**Table II - Ordinal Logistic Regression Results**

<table>
<thead>
<tr>
<th>Score Test for the Proportional Odds Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chi-square</strong></td>
</tr>
<tr>
<td>34.173</td>
</tr>
</tbody>
</table>

Number of observations read = 1035

Number of observations used = 1035

<table>
<thead>
<tr>
<th>Model Fit Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criterion</td>
</tr>
<tr>
<td>AIC</td>
</tr>
<tr>
<td>SC</td>
</tr>
<tr>
<td>-2 Log L</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analysis of Maximum Likelihood Estimates and Odds Ratio Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parameter</strong></td>
</tr>
<tr>
<td>Intercept 1</td>
</tr>
<tr>
<td>Intercept 2</td>
</tr>
<tr>
<td>Intercept 3</td>
</tr>
<tr>
<td>Intercept 4</td>
</tr>
<tr>
<td>Intercept 5</td>
</tr>
<tr>
<td>Intercept 6</td>
</tr>
<tr>
<td>SOW</td>
</tr>
<tr>
<td>BRANCH</td>
</tr>
<tr>
<td>ODPRICE</td>
</tr>
<tr>
<td>APPVTIME</td>
</tr>
<tr>
<td>GUANXI</td>
</tr>
</tbody>
</table>

Note: *** denotes significance at the .01 level; ** denotes significance at the .05 level; and * denotes significance at the 0.1 level.

After allowing for the effect of SOW, pricing was the most important driver of bank switching \((Wald \chi^2 = 74.60)\), followed by approval time of loan applications \((Wald \chi^2 = 62.31)\) and the number of bank branches of a competing bank relative to the number of bank branches of an
SME’s existing main bank \((Wald\chi^2 = 2.72)\). From the odds ratio analysis, each one-unit increase (i.e., one week) in the approval time for loan applications (APPVTIME) is associated with an increase of 78.1% in the odds of switching from the main bank to another bank (LIKSWTCH). This finding supports Hypothesis 1 and reinforces the positive association between perceived service quality and customer retention. Each one-unit increase (i.e., more bank branches) of bank branches of another bank relative to the number of the SME’s main bank results in an increase of 11.1% in the odds of the SME switching from the main bank to the other bank. This finding supports Hypothesis 2. For pricing of an overdraft loan facility, each one-unit increase (i.e., +0.5% over the Hong Kong prime rate) in the overdraft price by competing banks results in an increase of 88.6% of the odds of an SME remaining with the main bank. This finding supports Hypothesis 3. After allowing for the effect of all other factors, an increment of 0.5% in the deposit rate by a competing bank has a significant effect on the switching decision of SMEs \((p < 0.01)\). With an increment of 0.5% in the deposit rate by a competing bank, 61 observations (out of 813) that originally indicated no likelihood of switching (i.e., LIKSWTCH \(\leq 4\)) would change and switch to the competing bank. This suggests that the pricing of the deposit rate also has an effect on loyalty.

GUANXI and SOW, the two covariates in the model, were also both strongly associated with SME loyalty. An increase of one unit of perceived guanxi between the SME’s decision maker and the main bank’s personnel resulted in a decrease of 60.4% in the odds of a one unit increase in switching intention. This finding supports Hypothesis 4 and indicates that the perception of having better guanxi with the main bank makes an SME less likely to switch to another bank. However, even after allowing for guanxi, the results indicate that if the SMEs currently use more than one bank (i.e., have a lower SOW), they are more likely to switch to other banks, which supports Hypothesis 5.

**Discussion and implications**

The results of the hypotheses are consistent with the results of previous research, and would not be surprising to managers or researchers. The relative importance of the different factors is much less obvious, however, and has not been examined in previous research. This relative importance is shown by the tradeoffs between cognitive and affective attributes, derived from the use of Equations (3) to (5) below. The change in one attribute which is equivalent to one unit of change in another attribute can be calculated by substituting the beta estimates for each attribute from Table II into the relative equation. The equations show that a one unit change in the numerator in each equation has an effect equivalent to the ratio of its beta estimate with the beta estimate contained in the denominator. So from Equation (3), one unit change in
ODPRICE (a change of 0.5% in the interest rate) has an effect equivalent to a change of 1.1 units (weeks) of approval time (since 0.635/0.577 = 1.1). Similarly, Equation (4) shows one unit improvement in GUANXI (i.e. respondents rating the bank one point higher on the seven point scale) has an effect equivalent to a decrease of 0.81 units (or weeks) in APPVTIME (since 0.473/0.577 = 0.81). Following this process, Equation (5) shows a one unit improvement in GUANXI (i.e. respondents rating the bank one point higher on the seven point scale) also has an effect equivalent to a decrease of 0.74 units in ODPRICE. Since one unit of ODPRICE represents a change of 0.5% in the prime rate, this means that one unit change in GUANXI is likely to have an equivalent effect on customer loyalty as a decrease of 0.37% in the overdraft price (i.e. 0.74*0.5%).

\[ X_{APPVTIME} = -\frac{\beta_{ODPRICE}}{\beta_{APPVTIME}} \]  \hspace{1cm} (3)  
\[ X_{APPVTIME} = -\frac{\beta_{GUANXI}}{\beta_{APPVTIME}} \]  \hspace{1cm} (4)  
\[ X_{ODPRICE} = -\frac{\beta_{GUANXI}}{\beta_{ODPRICE}} \]  \hspace{1cm} (5)

The findings demonstrate that both cognitive and affective attitudinal elements have important and additive effects in explaining customers’ switching behavior. The results of the ordinal regression analysis indicate that the cognitive component of pricing exerts the most influence on customer loyalty, followed by approval time for loan applications. An affective measure, perceived guanxi, also had a strong negative impact on customer switching behavior. The results also demonstrate the importance of incorporating share of wallet into models of behavioral loyalty; the more a customer uses other service providers, the higher the stated intention of switching, suggesting that SOW may provide an early indicator of customers at risk of switching. After allowing for current share of wallet, however, pricing, approval time and guanxi were all significantly associated with customers’ behavioral intentions.

**Theoretical implications**

The study suggests several implications for the prediction of business customer loyalty using both cognitive and affective attributes. Firstly, this is the first study to use choice modeling to demonstrate and quantify the extent of tradeoffs that customers make between the various cognitive and affective evaluations of bank performance. For example, the study shows that an increase in the perceived guanxi between the customer and the bank manager can have an effect on customer loyalty equivalent to an increase in the perceived service quality level. The respective contributions of different attributes to customer loyalty can therefore be estimated. Secondly, the study demonstrates the influence of current behavior on business customer loyalty in a service setting, showing that the current behavior of customers (assessed by share
of wallet) is an important predictor of business customer loyalty, with a higher SOW having a positive association with customer loyalty.

Managerial implications
In order to build relationships with customers, financial institutions need to understand how to retain existing customers and increase their loyalty to the institution (Dawes and Swailes, 1999, Harrison, 2000). The results of this study therefore offer some strategic implications for banks seeking to improve loyalty levels in a largely disloyal market.

The majority of the SMEs in this study appear to actively choose not to use one bank exclusively, and a large proportion of the SMEs appear to be willing to switch to other banks that offer better services, which suggests that banks face a challenging task in aiming to increase the loyalty of SMEs. However, a strategy that focuses on pricing, service quality, and developing sustained social bonds with the customer may have the highest chance of maximizing the loyalty level, as the results show that these three factors are important predictors of loyalty. In particular, the results indicate that the pricing of loan facilities (i.e., an overdraft) has the strongest impact on customer switching, followed by service quality (in the form of the approval time of credit facilities). This finding suggests that when structuring credit proposals, banks should not only pay particular attention to the potential impact of the loan price, but should also attempt to minimize the processing time of the application to maximize customer loyalty. Pricing is often difficult for a bank to change, but the tradeoff analysis in the choice model shows that an improvement in service quality or guanxi can have an effect that is equivalent to a change in the bank’s loan pricing strategies. This knowledge provides additional strategic options for banks that are aiming to achieve higher levels of customer loyalty. For example, banks can choose to improve their service efficiency and/or guanxi with their customers as an alternative to lowering prices. Conversely, the tradeoffs analysis demonstrates the likely (negative) effect on loyalty of an increase in price, and allows banks to estimate the improvements required in one or more other attributes to offset the negative impact of any price increase.

Using the data obtained from the choice models, banks can therefore calculate the relative cost and benefit of different actions, and decide on the actions that most efficiently influence customer behavior, based on the respective cost to the bank, feasibility of change, and benefit to customers. This can allow banks and other service marketers to make tradeoffs on the basis of what they do best and also on what criteria matter most to their customers.
Limitations and future research

As with any research, the study has some limitations which may limit the generalisability of the results. The findings are based on a sample of SMEs in Hong Kong, and the tradeoffs found in this study are likely to vary in size in other markets or countries. However, SMEs comprise a substantial proportion of the Hong Kong business market, and the importance of the SME segment in this, or any other market, should not be underestimated.

A second limitation concerns the measures used for the independent variables in the choice modeling analysis. The study incorporated only one measure of service quality, the time required to process loan applications, since previous research suggested that this dimension of service quality is particularly important in this market. Exclusion of other components of service quality does not, however question the specific results of this analysis. Further research could use the tradeoff analysis demonstrated here to model the tradeoffs between other dimensions of service. The measure of SOW (estimated by asking respondents the number of banks used) also presents a limitation. A more accurate measure of SOW (as suggested by a reviewer) would be the percentage of spending with the main bank, or what has been called the ‘Share of Category Requirement’ (Cunningham, 1956). However estimating Share of Category Requirement is likely to be particularly problematic in banking, because of the large number of sometimes hidden fees which may be charged by different banks (e.g., commissions and bundled fees). Few customers (if any) are likely to be able to accurately estimate their spending on financial services, or the percentage which is spent with any one bank (i.e., their SOW). As a result, we believe that estimating share of wallet as a function of the number of banks used presents an alternative, though imperfect, measure of share of wallet.

We are also grateful to a reviewer for pointing out that our research suffers from an additional limitation, a lack of incentive compatibility – that is, there were potentially incentives for respondents to provide untruthful answers, over-emphasising aspects of the bank which are important to the respondent. While this is a limitation of much survey research, we believe that by requiring subjects to choose between different levels of different variables, the choice model offers some protection against respondents’ over-emphasising aspects which are most important to them. That is, in contrast with research which asks about each attribute separately, in the choice scenario a respondent cannot specify the highest level for multiple attributes, because the choice model requires them to choose between scenarios with varying levels of different attributes. This does not completely negate any risk of intentionally biased answers by respondents, and perhaps the variable most subject to any intentional over-emphasis would be overdraft price, since this variable is clearly salient, and varies between banks. If one believes that any over-emphasis on price is likely, the tradeoff estimates can therefore be
interpreted as the maximum change required to equate to a given change in the price variable.

In conclusion, the study shows that both cognitive and affective attitudinal elements are important in explaining business customers’ intentions to switch away from a service provider. Although customers in different industries and different regions may make different tradeoffs, the results show that the respective contributions of cognitive and affective factors can be quantified and used to predict customer switching behavior. The methodology used in the research can be replicated in other markets to estimate tradeoffs in different markets, and possibly by different customer segments. The study also estimates the relative impact of different attributes in a market that is characterized by disloyalty, instead reflecting shared or polygamous loyalty. To enhance loyalty in this relatively disloyal sector, banks may need to pay particular attention to building guanxi, to continually improving service efficiency, and to structuring optimal pricing strategies. Finally, the study shows the value of using choice models to understand the effects of different factors, and customer tradeoffs between different factors. By having a better understanding of what is most important to different customers, banks should be better able to target their marketing efforts towards service attributes which can be most cost-effectively altered to favourably influence customers’ intentions to stay with, or switch from, a service provider.
References


### Appendix A

<table>
<thead>
<tr>
<th>Measurement Items</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable: Likelihood of switching</strong></td>
<td>7-point Semantic Differential scale</td>
</tr>
<tr>
<td>How likely is it that you would switch from using the</td>
<td>1= very unlikely,</td>
</tr>
<tr>
<td>service of your existing main bank to a bank providing</td>
<td>7= very likely</td>
</tr>
<tr>
<td>you this offering?</td>
<td></td>
</tr>
<tr>
<td><strong>Social bonds</strong></td>
<td></td>
</tr>
<tr>
<td>I have good guanxi with the bank/relationship manager</td>
<td>7-point Likert scale</td>
</tr>
<tr>
<td>of my main bank.</td>
<td>1 = strongly disagree,</td>
</tr>
<tr>
<td></td>
<td>7 = strongly agree</td>
</tr>
<tr>
<td><strong>Share of Wallet</strong></td>
<td></td>
</tr>
<tr>
<td>As far as you know, how many banks and/or finance</td>
<td>Ordinal categories:</td>
</tr>
<tr>
<td>companies does your company currently use? (“Use”</td>
<td>One = 1</td>
</tr>
<tr>
<td>means a financial account on which you make</td>
<td>2-3 = 2</td>
</tr>
<tr>
<td>transactions and excludes a non-active/dormant account.</td>
<td>4-5 = 3</td>
</tr>
<tr>
<td></td>
<td>&gt; 5 = 4</td>
</tr>
<tr>
<td><strong>Deposit rate</strong></td>
<td></td>
</tr>
<tr>
<td>If this bank offers an increase of 0.5% in the HK$</td>
<td>Yes = 1</td>
</tr>
<tr>
<td>fixed deposit, will it alter your decision on your</td>
<td>No = 2</td>
</tr>
<tr>
<td>“likelihood to switch” to this bank?</td>
<td></td>
</tr>
</tbody>
</table>

*Note: The three experimental factors (approval time for loan applications, number of bank branches and overdraft pricing) were each varied in the 3*3 design, as described in the text of the paper*