The Family Life Cycle and Banking Relationships

Claire Matthews
Department of Economics and Finance (PN & Wgtn)
Massey University
Private Bag 11-222, Palmerston North, New Zealand 4442
Ph +64 6 3569099 Extn 2329
C.D.Matthews@massey.ac.nz

Abstract

Switching costs generate customer inertia, locking customers in to their existing financial services provider. Perceptions of switching costs have been found to vary between life cycle groups. This paper enhances the understanding of switching costs in banking by exploring the link between the family life cycle and the nature of the banking relationship, as well as the variation in perceptions of switching costs related to the nature of the banking relationship. Three aspects of the banking relationship are considered: the size, the spread and the complexity.

The data used is from a larger study of switching costs in banking, comprising 955 responses that were received to a mail survey. Both size and complexity of the banking relationship are found to be related to the family life cycle, while both spread and complexity are found to be associated with perceptions of switching costs. The conclusion drawn is that the differences in complexity of the banking relationship associated with the family life cycle helps explain the differences in perceptions of switching costs.

Key words: Life cycle; Banking; Switching costs

JEL codes: D12, D14, D91, G21

INTRODUCTION

Although there is widespread expression of dissatisfaction with banks, the proportion of bank customers who switch banks each year is low. Research reported by Sheeran (2003, p. 29) showed that only 3-5% of New Zealand bank customers actually switch banks each year, although 15-20% have thought of doing so. Similar low rates of switching have been found by other researchers for the New Zealand banking market, as well as for banking markets in other countries including the UK and Canada (Carlisle & De Freitas, 2004; Carrick, 2006; Cruickshank, 2000; Howorth, Peel, & Wilson, 2003; Rogers, 2008; Wood, 2002). It has even been suggested that bank "customers are more likely to divorce than switch banks" (Staff, 2007).

Much of the blame for the low rate of bank switching is attributed to switching costs, which incorporate the range of financial and non-financial factors that lock customers in to their existing banking service provider. Switching costs include, but are not limited to, the time and effort involved in actually switching, the process of finding a new provider, the breaking of relationship bonds with the existing provider, and the monetary costs incurred. Perceptions of switching costs vary between customers, with customer characteristics identified among the factors that generate switching costs.

As will be discussed in the next section, attitudes related to financial issues have been found to differ based on the family life cycle. Recent research has confirmed that perceptions of switching costs also vary between family life cycle groups (Matthews, 2009), and it can be argued that this relates to customers' changing financial needs over their lifetime. As a person progresses through the "standard" family life cycle, it appears reasonable to suggest one's financial needs change and therefore the nature of one's banking relationship. In simplified terms, the cycle starts with a young, single person living at home with limited needs, and perhaps holding a transaction account, a savings account, a debit card and internet banking. That person moves out of home, necessitating the addition of automatic payments for rent and power. Typically, that person then becomes part of a couple, perhaps entailing additional accounts, including a home loan to facilitate a house purchase. This is followed by the addition of children to the family, with the extra demands generated requiring additional automatic payments and/or direct debits, as well as accounts for the children. Then the

children leave home, life gets simpler, bills become fewer, and the banking relationship can again simplify.

A young person's banking arrangements of two accounts, a debit card and internet banking, would appear relatively easier to switch than a family's banking arrangements of three transaction accounts, four savings account, two debit cards, a credit card, a home loan, two separate internet banking relationships, four direct debits and an automatic payment. If the "typical" progression through the family life cycle is similar to reality, it would seem that the switching process would become progressively more difficult and then more simple again. At the same time, however, the banking relationship is becoming more established with the passage of time, which may create bonds that are difficult to break. There may also be issues related to having the time available to make the switch, with the demands of a young family or of a burgeoning career meaning that there is less time available than for retirees for example. On the other hand, it may be that the family's range of products makes it more important to choose the provider carefully to ensure that the right products and services are being used, and switching to achieve this may be considered necessary and desirable.

This paper explores the association between the nature of the banking relationship and the family life cycle, as well as with perceptions of switching costs. In the next section prior research on switching costs in banking and on the family life cycle is discussed. This is followed by an outline of the methodology used. The results are reported and discussed in the fourth section, before the conclusions are presented in the final section.

PRIOR RESEARCH

Banking is a sector in which the existence of switching costs is widely acknowledged, and as a result there is a substantial body of literature that explores issues related to switching costs in banking. It is argued that switching costs in a service-based sector, such as banking, are greater than in a goods market (Gremler and Brown, 1996, in de Ruyter & Wetzels, 1998).

The importance of switching costs as an issue arises from their impact on market operation. The underlying problem relates to the shift of competition between firms, from being based on the needs of one consumer in one time period to the needs of that consumer over multiple

time periods. Switching costs have been associated with "prices, entry decisions, new product diffusion patterns and price wars" according to Chen & Hitt (2002, p. 257). Switching costs can also be viewed as a form of defensive strategy that seeks to reduce customers leaving a firm. A particular issue is that switching costs have been found to generate monopolistic profits for the firms participating in the market. Profits equal to total switching costs[1] can generally be earned where competitors' costs and quality are similar (Shapiro & Varian, 1999). Ongena & Smith (1997) agree that banks providing lending facilities have the potential to extract monopoly rents from their customers, explained as being due to the proprietary information able to be observed by the bank. Padilla (1992) explained that switching costs resulted in more inelastic demand for a firm, thereby increasing its monopolistic power.

A government-initiated report on the UK banking market found it was unusual for bank customers to switch between lenders unless they were actually changing their property (Cruickshank, 2000). These findings were supported by a subsequent study for the period 1996-2001 that concluded that the dynamics of the UK market for personal current accounts were "consistent with the presence of switching costs" (Gondat-Larralde & Nier, 2004, p. 29). In other research, using data from the Norwegian banking market, Kim, Kliger, & Vale (2001) found that 16% of the value of an additional customer is able to be attributed to the lock-in of that customer due to switching costs. In the US market, Hubbard, Kuttner, & Palia (1999) found switching costs to be an issue for information-intensive firms, for whom their bank relationship is important to have access to borrowing. The credit card market has attracted particular attention in terms of switching costs, because it appears non-competitive despite a structure that fits the competitive paradigm (Stango, 2000). Stango (2002) found that "switching cost variables can explain economically significant within-firm variations in pricing" (p. 485), while Calem, Gordy, & Mester (2006) found switching costs provided market power for lenders with well-established relationships in the credit-card market.

Having established that switching costs are a problem and do exist in banking, what is the link to the family life cycle? The family life cycle is a demographic variable that describes a population's general character (McColl-Kennedy, Kiel, Lusch, & Lusch, 1994). Schaninger & Danko (1993) explain that it has been popular "because it captures life style, income and

---

[1] Total switching costs = Customers switching costs + supplier switching costs.

expenditure pattern differences brought about by family role transitions" (p. 580). In fact, one of the first studies related to the family life cycle sought to explain changes in consumers' finances, and found there was a relationship between a person's financial position and their stage in the family life cycle (Lansing & Morgan, 1955). Modigliani (1986) reviewed the Life Cycle Hypothesis of saving and found it was able to focus on systematic variations in income and in needs that occur over the family life cycle. The use of life cycle theory to guide financial decision-making was demonstrated by Bodie, Treussard, & Willen (2007). They used the example of buying a house to show the use of the life cycle model in the real world. They argue that the life cycle model "allows planners to adjust their advice to the enormous variation across households in income, future prospects, health and even tastes" (p. 18).

Prior research has found that a person's demographic characteristics influence their attitudes and behaviours, including in relation to financial issues. Mittal & Kamakura (2001) found that "customers with different characteristics have systematically different thresholds and response biases" (p. 132), with the characteristics including age, gender and education. A study of ATM use and satisfaction found differences in variables that could be attributed to age (Goode & Moutinho, 1996). However, another study, of the Canadian banking market, found age and education were not predictors of the relationship between changing customer satisfaction and changes in share of wallet, although income and length of relationship were (Cooil, Keiningham, Aksoy, & Hsu, 2007). Javalgi & Dion (1999) suggested that the changed structure of the financial services industry could be attributed in part to the changing structure of the family. They argued that "changes in family life cycle stages give rise to differences in financial services needs" (p. 75).

The characteristics of customers were found by Chen & Hitt (2002) to be among the factors from which switching costs arise. An exploratory study of the relationship between basic demographic characteristics and attitudes towards switching costs was reported by Matthews & MacRae (2006). Significant differences were found in both attitudes and switching behaviour that could be attributed to demographic characteristics. The specific issue of the relationship between perceptions of switching costs and the family life cycle was explored by Matthews (2009). For eight of the nine categories of switching costs used in the study a significant variance in perceptions of switching costs was found between family life cycle groups. The exception was Uncertainty, which related to concerns that the new bank would

turn out no better, and possibly even worse, than the old one. In particular, the retired groups (Older Couples where the head of the household is retired and Bachelor III) perceived switching costs, on average, as being different to other groups, but the groups involved and the direction of the differences varied between switching cost categories. This paper explores the relationship between perceptions of switching costs and the family life cycle, in order to help explain the reasons the relationship exists.

RESEARCH METHODOLOGY

Differences based on the family life cycle concept have been found in attitudes and behaviour related to financial matters, as discussed in the previous section. Of particular interest is the difference in perceptions of switching costs. It can be argued that this relates to changes in financial needs as a person progresses through the family life cycle, from a young person who simply needs a transaction account, with additional products and services added and removed over time as needed, such as savings accounts, automatic payments, direct credits, home loans, through to wealth management services in retirement. These changes mean that the nature of a person's relationship with their bank may also change over time, and these changes could be in terms of size, spread between banks, or complexity. These changes in the nature of the banking relationship could result in changes in how switching costs are perceived.

This leads to the following hypotheses to be explored in this paper:

H1_Size: That the size of banking relationships does not vary between family life cycle groups

H1_Spread: That the spread of banking relationships does not vary between family life cycle groups

H1_Complexity: That the complexity of banking relationships does not vary between family life cycle groups.

H2_Size: That perceptions of switching costs do not vary in relation to the size of banking relationships.

H2_Spread: That perceptions of switching costs do not vary in relation to the spread of banking relationships.

H2_Complexity: That perceptions of switching costs do not vary in relation to the complexity of banking relationships.

These hypotheses all propose a variation between groups, essentially that there is a difference between the group means. ANOVA is used to test whether the group means are in fact different, and therefore whether the hypothesis of no variance is supported. Where the hypothesis is not supported, and therefore there is variance, it is useful to explore the data further to better understand the nature of the variance found. The Bonferroni procedure is used for pairwise comparisons to determine which pairs of groups, if any, have significant differences. The large number of tests being done increases the probability of a significant difference being found where none exists. The Bonferroni procedure is a conservative multiple comparison procedure that adjusts the observed significance level to reduce the probability of finding a falsely significant difference.

The data used is from a larger study exploring switching costs in the New Zealand banking market. The study took the form of a postal survey to 2983 people whose names were drawn at random from the New Zealand electoral rolls. Three mailings were sent, with the first and third comprising a full set of survey material (questionnaire, covering letter and return addressed post-paid envelope), while the second mailing was a single page letter reminder. From the three mailings, 955 valid responses were received, while 135 were returned undelivered, 130 questionnaires were returned by people who were unwilling to participate and in 37 cases the recipient was reported to be ineligible to participate. This gave a final response rate of 33.5%, after allowing for the undelivered questionnaires and the ineligible recipients. The questionnaire consisted of 70 questions covering a range of issues related to switching costs. The questions of relevance for the hypotheses discussed here were those that measured the size, spread and complexity of the banking relationship, as well as perceptions of switching costs and those questions that enabled the respondents' life cycle group to be determined.

The size of the banking relationship was ascertained with a single question that asked for the total amount of loans and deposits the respondent had with their main bank; the question included an instruction to include mortgages, credit cards, personal loans and overdrafts, and gave a simple example. The six response options covered a range of sizes, from "Less than $25,000" to "$500,000 or more". The spread of the banking relationship was measured in three ways, being in terms of the spread of loans and deposits, and in terms of the spread of

transactional activity, as well as simply in terms of the number of banks with which the respondent had a banking relationship. For the first two measures, respondents were asked to identify the proportion (in percentage terms) of their banking business held with each of the banks they did business with. Complexity of the banking relationship was measured by asking how many the respondent had of each of a list of banking products, with response options for each product being 0, 1, 2, 3, and 4 or more.

Perceptions of switching costs were measured using a series of 36 statements to which the respondents were asked to indicate the extent of their agreement or disagreement on a 7-point Likert scale. Nine categories of switching costs were used, with each measured on a summated basis using 3-5 of the statements. The nine categories of switching cost used were largely based on the eight categories used by Burnham, Frels, & Mahajan (2003), but some labels were changed and a ninth category of Hassle was added. The nine categories were: Learning, to become familiar with the products and services of the new bank; Search, to find and evaluate alternative financial services providers; Uncertainty, being the risk that the new bank is actually worse than the current one; Benefit Loss, of accumulated benefits; Monetary Loss, involving the direct financial costs of terminating the old relationship and establishing the new relationship; Hassle, the time, effort and inconvenience of undertaking the switch; Brand Relationship, being no longer able to identify as a customer of the old bank; Personal Relationship, losing the relationship with the staff at the old bank; and, Service Disruption, such as an automatic payment being missed during the changeover period. Most of the statements used were also based on Burnham et al (2003), but others were drawn from Colgate & Lang (2001) and Jones, Mothersbaugh & Beatty (2002).

The life cycle model used in this study was based on that of Schaninger & Lee (2002), which was an evolution from the original model developed by Wells & Gubar (1966). The Schaninger & Lee (2002) model was adapted by making three changes. The first change was for the transition between the middle-aged and the oldest age group, making it based on retirement (of the household head for couples) rather than age. The second change made the transition between the family groups based on the age of the youngest child rather than that child's stage at school. The final change was to ignore any previous marriage in identifying members of the Delayed Full Nest I group. The use of retirement reflects the earlier finding of Schaninger & Danko (1993) finding that retirement was better than age at delineating between middle-aged and older households, whereas Schaninger & Lee (2002) was focussed

on the Full Nest households and did not justify the move away from retirement. The other two changes were made to simplify the collection of information from respondents and guard against intrusive questions that could discourage participation.

Table 1: Description of life cycle groups

Life Cycle Group	Marital Status	Children	Head employment	Age	Propor-tion[d]
Bachelor I	Single[a]	None	Employed	<35 yrs	6.1%
Bachelor II	Single	None	Employed	35+ yrs	7.6%
Bachelor III	Single	None at home	Retired		5.1%
Young Couple	Married[b]	None	Employed	< 35 yrs	5.1%
Childless Couple	Married	None at home	Employed	35+ yrs	21.0%
Older Couple	Married	None at home	Retired		13.1%
Full Nest 1	Married	Youngest at home is <5	Employed	c	4.8%
Delayed Full Nest I	Married	Youngest at home is <5	Employed	c	5.8%
Full Nest II	Married	Youngest at home is 5-12	Employed		12.1%
Full Nest III	Married	Youngest at home is 13+	Employed		13.8%
Single Parent I	Single	Youngest at home is <5	Employed		0.7%
Single Parent II	Single	Youngest at home is 5-12	Employed		1.5%
Single Parent III	Single	Youngest at home is 13+	Employed		3.2%

a. Single includes widowed.

b. Married includes de facto relationships and civil unions.

c. Full Nest 1 will have parents aged <30(M)/28(F) at birth of oldest child and Delayed Full Nest 1 will have parents aged >30(M)/28(F) at birth of oldest child.

d. Some respondents (11.9%) were unable to be classified into a life cycle group, in most cases because the respondent had not answered all the necessary questions for classification.

RESULTS

Size

Relationship size could be part of the explanation for the differences in perceptions of switching costs between life cycle groups found by Matthews (2009). A customer's financial position, and therefore the size of their banking requirements, may vary as they progress through the family life cycle, particularly as they accumulate and then utilise retirement

savings, and as they borrow funds for a home with the loan then paid off over time. The possible influence in relation to switching costs is due to the use made by banks of the size of a customer's relationship with the bank as a proxy for the value of that relationship to the bank. Customers with larger banking relationships, which are believed to therefore be of greater value to the bank, are usually provided with better service, which can create switching costs. The distribution for the size of the banking relationship for study respondents is shown in Table 2.

Table 2: Size of banking relationship

Less than $25,000	40.2%
$25,000 - $49,999	11.6%
$50,000 - $99,999	12.5%
$100,000 - $249,999	20.6%
$250,000 - $499,999	10.4%
$500,000 or more	4.7%

The first hypothesis (H1_Size) suggests there is no variation in size of banking relationship between life cycle groups. Using ANOVA, testing found a significant variation in the size of the banking relationship between the life cycle groups (p=0.00). Of the 36 possible pairings between life cycle groups, 58.3% were found to have a significant difference using the Bonferroni procedure, as shown in Table 3. The italicised number for each group is the mean value for size, where a lower mean represents a smaller banking relationship size. The life cycle groups listed across the top of Table 3 are smaller on average than those listed in the left column. Accordingly, the hypothesis of no variation was rejected.

Table 3: Significant differences between life cycle groups based on size

	mean	Bachelor I	Bachelor II	Bachelor III	Young Couple	Older Couple	Single Parent III
		1.5	*2.4*	*1.9*	*2.4*	*2.2*	*1.6*
Full Nest I	*3.1*	0.00	n.s.	0.03	n.s.	n.s.	0.01
Delayed Full Nest I	*3.7*	0.00	0.00	0.00	0.01	0.00	0.00
Full Nest II	*3.3*	0.00	0.02	0.00	n.s.	0.00	0.00
Full Nest III	*3.2*	0.00	n.s.	0.00	n.s.	0.00	0.00
Childless Couple	*2.9*	0.00	n.s.	0.03	n.s.	n.s.	0.01

n.s. = not significant

Most (71.4%) of the significant differences are between childless groups and groups with children, with the childless groups having a smaller average relationship size. The exception

is where the Childless Couple group has a larger mean relationship size than the Single Parent III group.

Spread

The extent to which banking relationships are spread between financial institutions could also vary between life cycle groups. As an example, a Couple may be more likely to have banking relationships with multiple financial institutions because each had an existing relationship with a different financial institution prior to them becoming a couple. By the time a Couple becomes a Full Nest with children they may have chosen to rationalise their banking arrangements to fewer financial institutions; or they could have increased the spread of their banking relationships, with each retaining their original relationship and adding a joint relationship at a third institution. In this study, three measurements of spread are used. Spread1 is a simple measure of spread, being the number of financial institutions the respondent had any type of banking relationship with. Few respondents had relationships with more than five financial institutions, so the possible responses were restricted to 1, 2, 3, 4, and 5 or more; the distribution of responses is shown in Table 4.

The other two measures of spread looked at how the respondent actually split their business between banks, in terms of both total loans and deposits (Spread2) and in terms of transactions (Spread3). These measures of spread were calculated as the difference in proportion between the bank with the highest proportion of the respondent's banking business and that of the bank with the lowest proportion, whereby a smaller value indicates a wider spread. For example, a value of 0 would indicate the relationships were equal, such as two banks with 50% each or four banks with 25% each, while a value of 90 could indicate one bank has 95% of the respondent's business and a second bank has just 5%. To facilitate the analysis these measures were grouped as shown in Table 4. The final group (100%) represents those with just one banking relationship.

Table 4: Distribution for spread of banking relationships

No. of banking relationships	Spread1	Difference in proportion of	Loans/ Deposits Spread2	Transactions Spread3
1	48.1%	0-9.9%	1.8%	1.8%
2	34.1%	10-24.9%	2.1%	2.1%
3	13.4%	25-49.9%	2.9%	2.9%
4	3.1%	50-74.9%	9.4%	10.1%
5 or more	1.3%	75-89.9%	9.6%	10.4%
		90-99.9%	12.3%	14.6%
		100%	55.9%	58.1%

The second hypothesis (H1_Spread) is that the spread of banking relationships does not vary between life cycle groups. A significant variation was found only for Spread1, with p=0.01, but in the pairwise comparison for Spread1 no pairs were found to have a significant difference. No significant variation was found for either Spread2 (p=0.08) or Spread3 (p=0.43). Accordingly, the hypothesis of no variation is supported.

Complexity

The final aspect of the banking relationship that could vary between life cycle groups is the complexity of the banking relationship. In this study, two measures of complexity are used. The first measure is the number of different types of products that the respondent had with their main bank (Complex1), with a list of 13 different types of products provided. As few respondents reported having more than 10 types of products, the responses were restricted to 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11 or more. However, a customer may have more than one of any particular product type, two transaction accounts for example, and the second measure of complexity was the total number of products that the respondent had with their main bank (Complex2), irrespective of product type. The responses ranged from 1-35, which were grouped as shown in Table 5.

Table 5: Distribution for complexity of banking relationship

Complex1		Complex2	
Number of product types		*Total number of products*	
1	2.4%	1-5	23.0%
2	4.9%	6-10	39.6%
3	7.1%	11-15	21.8%
4	8.5%	16-20	9.2%
5	12.9%	21-25	4.4%
6	15.4%	26 or more	2.0%
7	16.6%		
8	11.6%		
9	10.6%		
10	6.1%		
11 or more	3.0%		

The third hypothesis (H1_Complexity) is that there is no variation in complexity of banking relationship between life cycle groups. Testing, via ANOVA, found complexity does vary between life cycle groups, with $p=0.00$ for both complexity measures. In the pairwise comparison, using the Bonferroni procedure, 23 pairings (63.8%) were found to have significant differences for Complex1, while 21 pairings (58.3%) had significant differences for Complex2. The results of the Bonferroni procedure are shown in Table 7. The first number shown for the groups in the left column of the table is the mean for that group for Complex1, and the second number is the mean for Complex2. The results indicate that the groups listed along the top of the table had a more complex relationship than those listed at the left-hand side, and in most cases this means that families with children had more complex relationships than single people, remembering that a larger mean represents a more complex relationship.

Table 6: Complexity and life cycle groups

		Complex1					Complex2				
		Childless Couple	Full Nest I	Delayed Full Nest I	Full Nest II	Full Nest III	Childless Couple	Full Nest I	Delayed Full Nest I	Full Nest II	Full Nest III
	mean	*6.6*	*7.3*	*7.6*	*7.4*	*7.2*	*2.5*	*2.9*	*3.0*	*2.8*	*2.9*
Bachelor I	*1.8*	0.01	0.00	0.00	0.00	0.00					
	5.2						0.01	0.00	0.00	0.00	0.00
Bachelor II	*2.0*	n.s.	0.03	0.01	0.00	0.00					
	5.6						n.s.	0.00	0.00	0.00	0.00
Bachelor III	*5.0*	0.00	0.00	0.00	0.00	0.00					
	2.0						n.s.	0.01	0.00	0.00	0.00
Older Couple	*5.0*	0.00	0.00	0.00	0.00	0.00					
	2.1						n.s.	0.00	0.00	0.00	0.00
Single Parent III	*5.3*	n.s.	0.03	0.02	0.02	0.01					
	1.9						n.s.	0.03	0.00	0.02	0.01

n.s. = not significant

Accordingly, the third hypothesis of no variation is rejected.

Switching Cost Perceptions

The second group of hypotheses is that perceptions of overall switching costs do not vary according to the size, spread or complexity of the banking relationship. Table 8 shows where significant differences in perceptions of switching costs were found, using ANOVA, for each of the three elements of the banking relationship. As can be seen there are no significant variations in perceptions based on the size of the banking relationship. Accordingly, the fourth hypothesis (H2_Size) of no variation is supported.

There is some variation in perceptions of switching costs based on the spread of the banking relationship, particularly with respect to how the business is split between the banks. Switching costs are also found to vary based on the complexity of the relationship, with the strongest variance in respect of the total number of products.

Table 7: Significant differences in switching cost perceptions

	Size	Spread1	Spread2	Spread3	Complex1	Complex2
Overall switching costs		0.03	0.01	0.00	n.s.	0.00
Learning		0.01	n.s.	n.s.	0.01	0.00
Search		n.s.	n.s. 0.01		n.s.	0.01
Hassle		n.s.	0.02	n.s.	0.00	0.00
Service Disruption		n.s.	n.s.	n.s.	n.s.	0.03
Uncertainty		n.s.	0.00	0.04	n.s.	0.02
Benefit Loss		0.02	0.03	0.00	n.s.	0.00
Monetary Loss		n.s.	0.03	n.s.	n.s.	0.00
Brand Relationship		n.s.	n.s.	n.s.	n.s.	0.03
Personal Relationship		n.s.	0.02	0.01	0.00	0.00

Note: The "Size" column is annotated vertically with "No significant differences found".

n.s. = not significant

The variance found in respect of spread and complexity of the banking relationship was explored further, with pairwise comparisons using the Bonferroni procedure. In the case of the spread of the banking relationship a number of pairs of groups were found to have significantly different perceptions of switching costs as shown in Table 8. Although there was significant variation for all three measures of spread in perceptions of Benefit Loss, only one pairing was found to have a significant difference. Only five of the switching cost categories had any significant differences between pairs of groups. In all cases where a significant difference was found, the life cycle group with the least spread of banking perceived switching costs to be higher.

Table 8: Significant different switching cost perceptions for pairwise comparisons based on spread

		Spread1	Spread2	Spread3
Overall costs				
50-74.9%	*100%*	*n.a.*	*n.a.*	*0.00*
Learning				
1 (3.6)	*5+ (4.6)*	*0.01*	*n.a.*	*n.a.*
2 (3.7)	*5+ (4.6)*	*0.02*	*n.a.*	*n.a.*
3 (3.5)	*5+ (4.6)*	*0.00*	*n.a.*	*n.a.*
4 (3.6)	*5+ (4.6)*	*0.04*	*n.a.*	*n.a.*
Search				
100% (3.7)	*50-74.9% (5.3)*	*n.a.*	*n.s.*	*0.01*
Uncertainty				
75-89.9% (3.7)	*25-49.9% (4.6)*	*n.a.*	*0.00*	*n.s.*
90-99.9% (3.7)	*25-49.9% (4.6)*	*n.a.*	*0.00*	*n.s.*
100% (3.7)	*25-49.9% (4.6)*	*n.a.*	*0.00*	*n.s.*
100% (3.7)	*50-74.9% (4.1)*	*n.a.*	*n.s.*	*0.03*
Benefit Loss				
100% (3.8)	*50-74.9% (4.4)*	*n.a.*	*n.s.*	*0.00*
Personal Relationship				
100% (3.6)	*50-74.9% (4.3)*	*n.a.*	*n.s.*	*0.01*

n.s. = not significant   n.a. = not applicable

The direction of causality of the variance has not been explored. Therefore it is unknown whether switching costs are perceived to be high because a person has multiple bank relationships, or whether a person chooses to spread their banking arrangements around more banks because they perceive switching costs to be high. Part of the work undertaken in the larger study from which this data is drawn involved focus groups, and from the focus group discussions it appears likely switching costs cause multiple banking relationships because multiple banking relationships were reported as being used in order to avoid switching. One respondent to the mail survey included the comment that she had "changed from [Bank A] to [Bank B] because of poor service in 1961", yet she actually had an account with both banks, albeit heavily skewed with [Bank B] having 96% of her business. Another respondent simply noted that it is "useful to have two different banks". Based on these results, the hypothesis (H2_Spread), of no variation in perceptions of switching costs in relation to the spread of the banking relationship, is rejected.

Table 9 reports the results of the pairwise comparison in respect of complexity. On average a more complex banking relationship was associated with a perception of switching costs as being higher. However, there was an exception in the case of the Personal Relationship

category, where a more complex banking relationship was associated with a perception of switching costs as lower. This latter result is surprising, and no obvious explanation exists.

Table 9: Complexity effects for switching cost categories

Complex1			Complex2		
Overall			Overall		
			6-10 (3.75)	16-20 (3.39)	0.00
Learning			Learning		
3 (3.9)	9 (3.3)	0.04	1-5 (3.7)	16-20 (3.3)	0.01
4 (3.9)	9 (3.3)	0.01	6-10 (3.7)	16-20 (3.3)	0.01
			Search		
			6-10 (4.0)	16-20 (3.5)	0.02
Hassle			Hassle		
4 (3.6)	8 (3.1)	0.02	1-5 (3.4)	11-15 (3.1)	0.01
4 (3.6)	9 (3.1)	0.02	1-5 (3.4)	16-20 (3.0)	0.01
			6-10 (3.5)	11-15 (3.1)	0.04
			Benefit loss		
			6-10 (4.1)	16-20 (3.6)	0.02
			6-10 (4.1)	26+ (3.0)	0.02
			11-15 (4.0)	26+ (3.0)	0.04
			Monetary loss		
			6-10 (4.2)	16-20 (3.7)	0.01
Personal relationship			Personal relationship		
6 (4.0)	3 (3.2)	0.00	11-15 (4.0)	1-5 (3.5)	0.01
7 (3.9)	3 (3.2)	0.02			
8 (4.0)	3 (3.2)	0.03			

The finding in respect of the final hypothesis (H2_Complexity) of no variation in perceptions of switching costs in relation to the complexity of the banking relationship is rejected.

CONCLUSIONS

We can conclude that the differences in perceptions of switching costs found between life cycle groups cannot be attributed to the size or spread of banking relationships. Although the size of the banking relationship varies between life cycle groups, perceptions of switching costs do not vary according to the size of the banking relationship. In the case of spread, the opposite situation applies. Perceptions of switching costs do vary based on the spread of banking relationships, but the spread of banking relationships do not vary between life cycle groups.

This leaves the complexity of the banking relationship, and it appears this may help explain the different switching cost perceptions between life cycle groups. A significant variation

was found in the complexity of the banking relationship based on life cycle groups, and, in particular, families with children were found on average to have more complex relationships than single people. At the same time, a significant variation was found in perceptions of switching costs based on the complexity of the banking relationship, particularly in terms of the total number of products held. Unsurprisingly, a more complex banking relationship was generally associated with a perception of switching costs as higher.

This finding of a relationship between complexity of the banking relationship and both life cycle group and switching cost perceptions is in line with expectations and has important practical implications. These customers who have the most products are the most desirable for banks, and also those who could benefit most from exploring different options to ensure they are getting the best products and services to meet their needs. However, these are also the customers who perceive switching costs to be highest and for whom switching banks is therefore a less attractive option.

It would be useful to further explore the relationship between banking relationship complexity and life cycle groups. In particular, it would be helpful to understand what types of products customers hold, and whether particular types of products have greater influence. For example, automatic payments and direct credits etc are commonly seen as being more difficult elements of a banking relationship to switch between banks, and customers can easily hold multiples of these products. In other words, it would be useful to know if customers with more complex relationships have more automatic payments and similar products, or do they hold more products across the entire product range.

It would also be useful to explore whether the perception of higher switching costs for more complex banking relationships translates into differences in actual switching behaviour.

REFERENCES

Bodie, Z., Treussard, J., & Willen, P. (2007). The theory of life-cycle saving and investing. Retrieved June 26, 2007, from http://www.bos.frb.org/economic/ppdp/2007/ppdp0703.htm

Burnham, T. A., Frels, J. K., & Mahajan, V. (2003). Consumer switching costs: A typology, antecedents, and consequences. *Journal of the Academy of Marketing Science, 31(2)*, 109-126.

Calem, P. S., Gordy, M. B., & Mester, L. J. (2006). Switching costs and adverse selection in the market for credit cards: New evidence. *Journal of Banking & Finance, 30*, 1653-1685.

Carlisle, H., & De Freitas, F. (2004). *NZ Consumer Banking*. Sydney: Merrill Lynch.

Carrick, R. (2006, 25 July). Banks are buying your loyalty at bargain-basement prices. *Globe and Mail,* p. B12.

Chen, P.-Y. S., & Hitt, L. M. (2002). Measuring switching costs and the determinants of customer retention in Internet-enabled Businesses: A study of the on-line brokerage industry. *Information Systems Research, 13(3)*, 255-274.

Colgate, M., & Lang, B. (2001). Switching barriers in consumer markets: an investigation of the financial services industry. *Journal of Consumer Marketing, 18(4)*, 332-347.

Cooil, B., Keiningham, T. L., Aksoy, L., & Hsu, M. (2007). A longitudinal analysis of customer satisfaction and share of wallet: Investigating the moderating effects of customer characteristics. *Journal of Marketing, 71*, 67-83.

Cruickshank, D. (2000). *Competition in UK Banking. A report to the Chancellor of the Exchequer.* United Kingdom: HM Treasury on behalf of the Controller of Her Majesty's Stationery Office.

de Ruyter, K., & Wetzels, M. (1998). On the relationship between perceived service quality, service loyalty and switching costs. *International Journal of Service Industry Management, 9(5)*, 436-453.

Gondat-Larralde, C., & Nier, E. (2004). The economics of retail banking - an empirical analysis of the UK market for personal current accounts. *Bank of England Quarterly Bulletin, 44(2)*, 153-159.

Goode, M. M. H., & Moutinho, L. A. (1996). The effects of consumers age on overall satisfaction: An application to financial services. *Journal of Professional Services Marketing, 13(2)*, 93-112.

Howorth, C., Peel, M. J., & Wilson, N. (2003). An examination of the factors associated with bank switching in the U.K. small firm sector. *Small Business Economics, 20(4)*, 305-317.

Hubbard, R. G., Kuttner, K. N., & Palia, D. N. (1999). *Are there "bank effects" in borrowers' costs of funds?: Evidence from a matched sample of borrowers and banks.*: New York Federal Reserve.

Javalgi, R. G., & Dion, P. (1999). A life cycle segmentation approach to marketing financial products and services. *The Services Industries Journal, 19(3)*, 74-96.

Jones, M. A., Mothersbaugh, D. L., & Beatty, S. E. (2002). Why customers stay: measuring the underlying dimensions of services switching costs and managing their differential strategic outcomes. *Journal of Business Research, 55*, 441-450.

Kim, M., Kliger, D., & Vale, B. (2001). Estimating switching costs and oligopolistic behaviour. *Wharton Working Papers, Working papers (01-13)*, 1-48.

Lansing, J. B., & Morgan, J. N. (1955). Consumer finances over the life cycle. In L. H. Clark (Ed.), *Consumer behaviour: The dynamics of consumer reaction* (pp. 36-51). New York: New York University Press.

Matthews, C. (2009). *Switching costs in the New Zealand banking market.* Unpublished Doctoral thesis, Massey University, Palmerston North.

Matthews, C. D., & MacRae, M. S. (2006). *The Demographics of Switching.* Paper presented at the 11th Finsia-Melbourne Centre for Financial Studies Conference, Melbourne, Australia.

McColl-Kennedy, J. R., Kiel, G. C., Lusch, R. F., & Lusch, V. N. (1994). *Marketing: Concepts and Strategies* (2nd ed.). Melbourne, Australia: Thomas Nelson Australia.

Mittal, V., & Kamakura, W. A. (2001). Satisfaction, repurchase intent, and repurchase behaviour: Investigating the moderating effect of customer characteristics. *Journal of Marketing Research, XXXVIII*, 131-142.

Modigliani, F. (1986). Life Cycle, Individual Thrift, and the Wealth of Nations. *The American Economic Review, 76(3)*, 297-313.

Ongena, S., & Smith, D. C. (1997). Empirical evidence on the duration of bank relationships. *WUSTL Working paper archive, Finance 9703002*.

Padilla, A. J. (1992). Mixed pricing in oligopoly with consumer switching costs. *International Journal of Industrial Organization, 10*, 393-411.

Rogers, I. (2008). Not much demand for switching accounts. *The Sheet* 11th February 2008. Retrieved 12th February, 2008, from http://www.thesheet.com/news_print.php?selkey=6173

Schaninger, C. M., & Danko, W. D. (1993). A conceptual and empirical comparison of alternative household life cycle models. *Journal of Consumer Research, 19*, 580-594.

Schaninger, C. M., & Lee, D. H. (2002). A new full-nest classification approach. *Psychology and Marketing, 19(1)*, 25-58.

Shapiro, C., & Varian, H. R. (1999). *Information rules: A strategic guide to the network economy*. Boston, Massachusetts: Harvard Business School Press.

Sheeran, G. (2003, 19 October). A change for good? Don't bank on it. *Sunday Star-Times,* pp. D5-D6.

Staff. (2007). Braveheart. *The Economist, 383(8526)*, 13-14.

Stango, V. (2000). Competition and pricing in the credit card market. *The Review of Economics and Statistics, 82(3)*, 499-508.

Stango, V. (2002). Pricing with consumer switching costs: Evidence from the credit card market. *The Journal of Industrial Economics, 50(4)*, 475-492.

Wells, W. D., & Gubar, G. (1966). Life cycle concept in marketing research. *Journal of Marketing Research, III*, 355-363.

Wood, D. (2002, 19 September). Consumers switch away from leading banks., from www.erisk.com/portal/news/analysis/news_analysis2002-09-19_01.asp