The Demographics of Switching

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Abstract

Switching costs are an issue for the banking industry around the world, restricting the ability to attract customers from competitors. Considerable work has been done looking at customers' attitudes to switching and the associated costs, as well as the typology and antecedents of switching costs. However, limited work has been done looking at the influence of customer characteristics on switching attitudes and behaviour. This paper reports an exploratory study into the relationship between basic demographic characteristics and switching attitudes and behaviour. We find that there are significant differences in attitudes and behaviour, which can be attributed to differences in demographic characteristics and further investigation is warranted.

The Demographics of Switching

Introduction

A number of financial institutions, including both registered banks and non-banks, operate in the retail financial services sector in New Zealand, and the level of competition is generally perceived as being acceptable. Nevertheless the rate of churn in the market is relatively low, being estimated by Colgate (1999) at around 4% p.a., which is in line with findings that switching in service markets is rare (Sharp, Wright, & Goodhardt, 2002). It is commonly understood that one reason for the low churn rate is the costs associated with switching between financial institutions, including both financial and non-financial costs.

It is rare for a financial institution in New Zealand to find a potential new customer who is new to the market, as the number of unbanked among the New Zealand population is small. As a result, existing customers of other financial institutions represent the principal source of new customers for a financial institution, and in general a new customer for one financial institution means a customer loss to another. However, the low churn rate noted above means that in practice there are few customers switching between financial institutions, so the opportunities to gain new customers are limited.

At the same time banking is a subscription market with infrequent sales. This factor combines with the high level of competition, the high cost of acquisition, and the low rate of churn to create a market where customer retention is important. In order to retain customers there is a need to understand customers' attitudes and behaviour in regards to switching.

Substantial quantities of research have explored customers' attitudes towards switching in the financial industry, and found that switching costs are an issue. However, limited work has been done investigating differences between different market sectors.

This paper reports an exploratory study into the relationship between basic demographic characteristics and switching attitudes and behaviour. The next section outlines prior related work, while the following section details the methodology for this research. The fourth section discusses the findings, and the final section concludes.

Prior Research

A useful word picture of switching costs is provided by Patterson and Smith (2003), who conceptualise switching costs as "the perception of the magnitude of the additional costs required to terminate a relationship and secure an alternative one" (p. 108). Burnham, Frels and Mahajan (2003) refer to the one-time costs of changing supplier, and note switching costs are not limited to objective or economic costs. The importance of switching costs is conveyed by Jones, Mothersbaugh and Beatty (2002) who describe them as "barriers that hold customers in service relationships" (p. 441). In simple terms switching costs can be thought of as the financial and non-financial costs incurred in changing supplier.

A number of different classifications of switching costs exist, generally including 4-8 categories, for example see Guiltinan (1989), Ausubel (1991), To (1996), Lee and Cunningham (2001), and Pae and Hyun (2002). Klemperer's (1995) list of physical investment, information investment, artificial investment and psychological investment is one of the earliest and most commonly used. A longer, and arguably more complete, classification is used by Burnham, Frels and Mahajan (2003), with their switching costs being:

- Economic risk costs – the potential for a negative outcome
- Evaluation costs – associated with the search for and analysis of alternatives
- Learning costs – in gaining the knowledge to be able to use the new product/service
- Set-up costs – initiating the relationship
- Benefit loss costs – including discounts and other rewards for 'loyalty'
- Monetary loss costs – initial financial outlays
- Personal relationship loss costs – breaking the bonds of interaction
- Brand relationship loss costs – breaking bonds of identification with brand or company

The importance of switching costs is due to the impact they can have on market operation. For example "switching costs can cause an allocative inefficiency" according to Klemperer (1987, p. 390). Chen and Hitt (2002) note that switching costs can be associated with "prices, entry decisions, new product diffusion patterns, and price wars" (p. 257). Shapiro and Varian (1999) suggest that lock-in of existing customers is one issue a new supplier seeking new customers must overcome, and in the context of this paper this is the issue that makes

switching costs of interest. Sengupta, Krapfel and Pusateri (1997) found that "the net result of switching costs is that they produce inertia for the customer to remain in the relationship with the current supplier" (p. 10).

The importance of switching costs in the banking industry is suggested by the argument that switching costs are greater for services than goods, with the latter argument proposed by Gremler and Brown (1996, in de Ruyter and Wetzels, 1998). In a Norwegian study Kim, Kliger and Vale (2001) found that "switching costs in the market for bank loans are quite substantial" (p. 30), while in a US study Hubbard, Kuttner and Palia (1999) found evidence that for certain borrower groups switching costs exist in financing.

Substantial work has been completed exploring the relationship between switching costs and customer satisfaction and intention to switch. See for example Sharma and Patterson (2000), Lee, Lee and Feick (2001), Julander and Solander (2003), and Burnham, Frels and Mahajan (2003). However, the relationship between demographic characteristics or life-cycle stage and switching costs is largely unknown, particularly in the banking industry.

Wells and Gubar (1966) found that the family life-cycle was more useful than chronological age in consumer analysis and studies have found that customer demographic characteristics and life-cycle stage can affect attitudes towards financial issues. A study by Javalgi and Dion (1999) found differences between the life-cycle based segments in respect of financial attitudes. Similarly, Goode and Moutinho (1996) found a number of important life cycle differences in respect of satisfaction with ATM use.

The relationship between demographic characteristics and/or life-cycle stages and switching costs is important because it can influence the way in which banks target their marketing efforts towards the existing customers of other banks. For example, Javalgi and Dion (1999) note that "changes in family life cycle stages give rise to differences in financial services needs" (p. 75), which they then suggest should influence marketing strategies. This paper reports some exploratory work which looks at this relationship.

Methodology

This is an exploratory paper utilising data collected for a Masters research project that explored switching determinants in the banking and electricity markets in New Zealand

(MacRae, 2004). The data was collected from a mail survey undertaken in November 2003[1]. The banking questionnaire was mailed to 750 people selected at random by stratified sampling from the New Zealand electoral rolls. A reminder letter was sent two weeks after the initial mailing, and a second reminder that included the questionnaire was sent two weeks later. A total of 353 responses were received, giving a response rate of 54% after allowing for gone-no-address returns and refusals.

A comparison of early respondents (first 10%) and late respondents (final 10%) was undertaken as recommended by Armstrong and Overton (1977) to test for non-response bias. No significant differences were found in the series of chi-square tests carried out.

The questionnaire comprised a series of 41 questions regarding attitudes towards the respondent's bank and switching costs, customer satisfaction and intention to stay, with most using a Likert Agreement Scale. These were followed by 8 demographic questions and an opportunity for comment on the questionnaire.

The original study was a replication of the Burnham, Frels and Mahajan (2003) study, and therefore used their classification of switching costs as discussed earlier. Accordingly, the analysis undertaken in this paper also uses this same classification. Each of the switching costs categories was measured using 2-6 statements, with most using four statements.

Results

(1) Demographics and Switching Intentions

The survey included three questions related to respondents' switching intentions, with similar results found in each case.

The questions were:

(a) How likely are you to switch to a competing bank during the next year? A 5-point Likert Scale was used for the responses ranging from Very Unlikely to Very Likely.

[1] The original research involved two concurrent surveys. In this paper we are discussing only the banking stream of the research.

(b) What are the chances that you stay with your bank for the next year? Again, a 5-point Likert Scale was used, ranging from 0% (No chance I will stay) to 100% (I certainly will stay).

(c) Using the scale below, how likely would you be to switch banks in the next year? An 11-point Likert Scale was used, ranging from 10 (Certain, practically certain – 99 in 100) to 0 (No chance, almost no chance – 1 in 100).

It is important to note the difference in question (b), which asks about the chance of staying rather than the likelihood of switching as questions (a) and (c) do. The results are shown in Table 1 below.

Question (a) – Switch			Question (b) - Stay			Question (c) - Switch		
Very Unlikely	38.2	38.2	100 % (I certainly will stay)	49.0	49.0	0 No chance, almost no chance (1 in 100)	44.1	44.1
						1 Very slight possibility (1 in 10)	18.1	62.2
Unlikely	35.1	73.3	75%	27.4	76.4	2 Slight possibility (2 in 10)	9.4	71.5
						3 Some possibility (3 in 10)	8.3	79.9
Neither unlikely nor likely	10.8	84.0	50%	14.6	91.0	4 Fair possibility (4 in 10)	2.4	82.3
						5 Fairly good possibility (5 in 10)	2.8	85.1
						6 Good possibility (6 in 10)	5.2	90.3
Likely	10.1	84.2	25%	7.3	98.3	7 Probable (7 in 10)	2.8	93.1
						8 Very probable (8 in 10)	2.1	95.1
Very Likely	5.9	100.0	0% (No chance I will stay)	1.7	100.0	9 Almost sure (9 in 10)	3.8	99.0
						10 Certain, practically certain (99 in 100)	1.0	100.0

Table 1: Switching Intentions[2]

As these results show, no matter how the question is asked, the respondents indicated they were unlikely to change banks within the next twelve months. While 38.2% indicated they were very unlikely to switch banks, 49% reported there was a 100% chance they would stay with their current bank, and 62.2% indicated there was no chance or only a very slight possibility that they would switch.

Respondents were also asked about their actual switching behaviour. Specifically they were asked how many times they had changed banks in the last five years. Nearly three-quarters of respondents (74.3%) had not switched in that period, while 19.8% had switched once, 5.2% had switched twice and just 0.7% had switched three times.

[2] The shaded column represents the cumulative percentage.

The survey included a range of demographic questions, including year of birth, gender, number of people in the household, household income, and education level. A series of cross-tabulations and chi-square tests were undertaken to determine whether any of these factors had a significant relationship with regard to intention to switch[3] or actual switching behaviour.

Switching intentions were found to be significantly related to the number of people in the household and household income, but not for any of the other demographic factors noted above.

Likelihood of switching	Number of People in the Household			
	One	Two	Three/Four	Five or more
Very unlikely	25.0%	46.3%	37.1%	30.2%
Unlikely	50.0%	34.7%	32.8%	34.9%
Neither unlikely nor likely	21.4%	4.2%	9.5%	20.9%
Likely	3.6%	7.4%	14.7%	7.0%
Very likely	0.0%	7.4%	6.0%	7.0%

Table 2: Switching Intentions and Household Size

Table 2 shows the results for household size. The Pearson's chi-square statistic has a value of 23.585 and a significance value of 0.023, although it should be noted that 6 cells had an expected count of less than five[4]. However, the nature of the relationship between household size and likelihood of switching is not clear, although the two larger household sizes have lower proportions in the unlikely and very unlikely categories.

Likelihood of switching	Household Income		
	Under $30,000	$30,000-$60,000	Over $60,000
Very unlikely	28.6%	30.4%	50.5%
Unlikely	44.2%	37.0%	28.7%
Neither unlikely nor likely	14.3%	10.9%	7.9%
Likely	5.2%	15.2%	8.9%
Very likely	7.8%	6.5%	4.0%

Table 3: Switching Intentions and Household Income

[3] As we have established that switching intentions are essentially the same irrespective of how the question is asked, we have used the first of the switching intentions questions for the tests.
[4] Cells with an expected count of less than five means that the chi-square results should be treated with caution.

The results for household income are shown in Table 3. The Pearson's chi-square statistic has a value of 17.587 and a significance value of 0.025, with 1 cell having an expected count of less than five. Both the high income and the low income households showed a greater reluctance to switch. This could be explained by noting that lower income households may have simpler banking requirements that are more easily satisfied, while higher income households may have more complex banking requirements that make it more difficult to switch.

We then explored the relationship between past switching behaviour and the identified demographic factors. A significant relationship was found with household income and age[5].

	Household Income		
Past switching	**Under $30,000**	**$30,000-$60,000**	**Over $60,000**
Never	68.8%	85.9%	68.3%
Once	24.7%	10.9%	22.8%
Twice	5.2%	2.2%	8.9%
Three times	1.3%	1.1%	0.0%

Table 4: Past Switching and Household Income

The results for household income are shown in Table 4. The Pearson's chi-square statistic has a value of 12.810 and a significance value of 0.046, although it should be noted that 4 cells had an expected count of less than five. The difference between the income groups was that the middle income group was more likely to have never switched. This is an interesting contrast to the previous result where they reported being more likely to switch, highlighting the difference between intentions and actual behaviour.

	Age					
Past switching	**21-30**	**31-40**	**41-50**	**51-60**	**61-70**	**71+**
Never	31.1%	61.5%	70.3%	82.7%	86.8%	100.0%
Once	25.0%	26.9%	24.3%	13.5%	13.2%	0.0%
Twice	11.1%	9.6%	5.4%	3.8%	0.0%	0.0%
Three times	2.8%	1.9%	0.0%	0.0%	0.0%	0.0%

Table 5: Past Switching and Age

[5] The questionnaire actually asked for year of birth. This was not found to be significantly related to past switching behaviour. However, the year of birth was recoded to give age groupings and found to be significant.

The results for age are shown in Table 5. The Pearson's chi-square statistic has a value of 22.604 and a significance value of 0.093, although it is important to note that 13 cells had an expected count of less than five. Although the significance level is marginal, there is an apparent relationship that the proportion of older respondents who had switched in the past five years was lower.

Recoding the data to give just two categories of switching behaviour, switching and non-switching, resulted in a stronger relationship with age. The Pearson's chi-square statistic value for this relationship is 17.119 and the significance value is 0.004, with only one cell having an expected count of less than 5. The relationship can be clearly seen in Figure 1 below, with lower levels of switching being reported as the age increased.

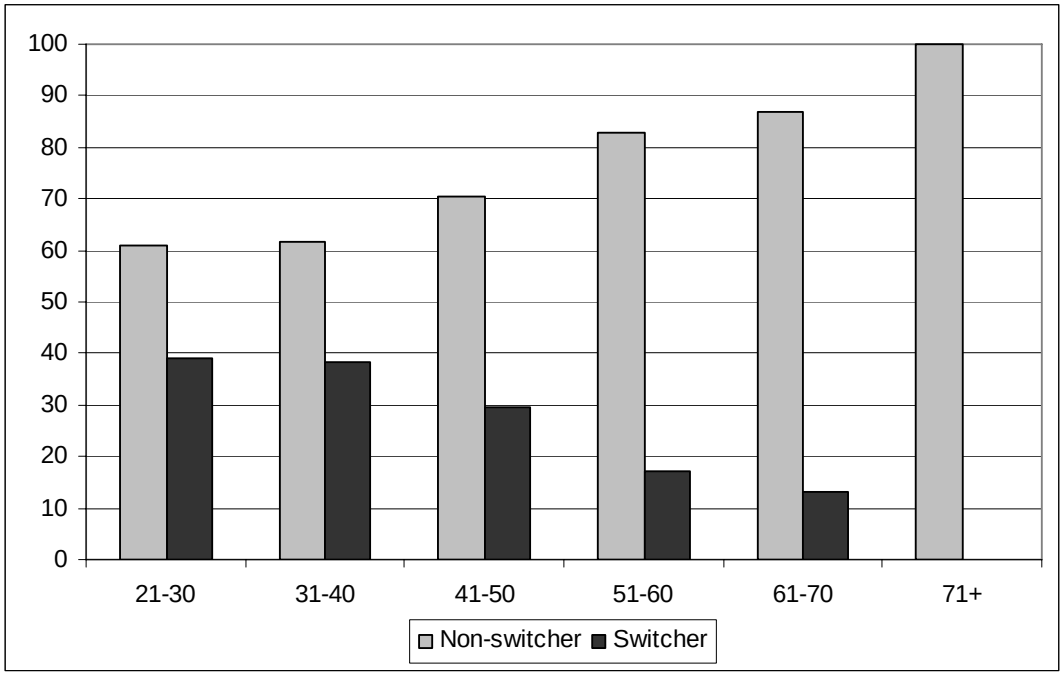

Figure 1: Switching Behaviour and Age

(2) Demographics and Switching Costs

A series of cross-tabulations was also undertaken to explore the relationship between the respondents' demographic characteristics and the categories of switching costs used by Burnham, Frels and Mahajan (2003), i.e. economic risk factors, evaluation costs, learning costs, set-up costs, benefit costs, monetary loss costs, personal relationship costs and brand relationship costs. As above, the demographic characteristics used were gender, age, household income, household size and education level.

No relationship was found between gender and any of the switching cost types.

Age was found to have a relationship with learning costs, i.e. issues related to understanding the features of accounts at a new bank and how to undertake particular activities at a new bank. The Pearson's chi-square statistic has a value of 78.760 and a significance value of 0.019, although it should be noted that 72% of cells had an expected count of less than five. Younger respondents were more likely to agree with the statements related to learning costs, indicating that learning costs were a greater issue for them.

Exploring further by looking at the relationship of age with the individual statements associated with learning costs, the only statement with a relationship was that *"There is not much involved in understanding a new bank well"*. However, the significance level associated with the Pearson's chi-square statistic was a marginal 0.070.

Household income, interestingly, was found to have a relationship with both the economic risk and monetary loss associated with switching. Economic risks included concerns about whether there may be hidden costs in switching and the potential for unexpected switching. Monetary loss refers to the actual financial costs of switching, such as set up fees for automatic payments. The Pearson's chi-square statistic for household income and economic risk has a value of 56.849 and a significance value of 0.063, although it should be noted that 67% of cells had an expected count of less than five. For household income and monetary loss, the Pearson's chi-square statistic has a value of 25.489 and a significance value of 0.013, with 28% of cells having an expected count of less than five.

Household income had just three levels and respondents in the middle bracket of $30,000 to $60,000 per annum were more likely to disagree with the statements related to economic risk. This indicates that concerns about the possibility of getting bad service at the new bank and getting a bad financial deal were greater for both the lower income and higher income respondents. In the case of monetary loss, however, the middle bracket of respondents was more likely to see this as an issue.

In terms of economic risk, two of the associated statements were found to have a relationship with household income. The first was *"I worry that the service offered by the other banks won't work as well as expected"*, with the Pearson's chi-square statistic having a significance value of 0.005. The second was *"Switching to a new bank will probably result in some unexpected hassle"*, with the significance value of the Pearson's chi-square statistic being

0.047. The wording of these statements suggests the concern relates to the associated uncertainty.

Household size was found to have a relationship with evaluation cost and benefit loss. Evaluation cost refers to the time and effort of finding and assessing a new bank, while benefit loss relates to the loss of loyalty benefits etc as a result of discontinuing the existing relationship. The Pearson's chi-square statistic for household size and evaluation cost has a value of 54.079 and a significance value of 0.027, although it should be noted that 64% of cells had an expected count of less than five. For household size and benefit loss, the relationship is marginal with the Pearson's chi-square statistic having a value of 37.479 and a significance value of 0.086, with 55% of cells having an expected count of less than five.

Bigger households were more likely to agree that evaluation costs are an issue, possibly reflecting a busier lifestyle because of children. Benefit loss appears to be a greater concern for households of 3 or 4 than both smaller and larger households. It is not immediately evident as to why this would be the case, but it may be that smaller households are not big enough to generate good loyalty benefits while the bigger households may not have the time to worry about doing so.

That statement that *"I cannot afford the time to get the information to fully evaluate other banks"*, which was one of those related to evaluation costs, was found to have a relationship with household size and had a significance value of 0.020 for the Pearson's chi-square statistic.

A strong relationship was found between the respondent's education level and brand relationship. Brand relationship refers to the image associated with the bank brand. The Pearson's chi-square statistic for household size and evaluation cost has a value of 97.439 and a significance value of 0.002, although 77% of cells had an expected count of less than five. For those with the highest (university education of four years or more) and lowest level of education (up to 3 years of secondary education) the brand relationship was of lesser importance than for those of the two levels in between.

In this case, the statement that *"I like the public image my bank has"* had a Pearson's chi-square statistic with a significance value of 0.014.

Conclusion

Switching costs are a generally acknowledged issue for the banking industry. The low rate of churn in this industry is widely attributed at least in part to the existence of switching costs.

We have found that demographic characteristics do affect attitudes towards switching. Both household size and household income had a relationship with switching intentions, actual switching behaviours and switching costs. Similarly, demographic characteristics were found to have an impact on attitudes towards switching costs, with all characteristics tested other than gender having a significant relationship with one or more switching cost categories.

The key findings were that:

- Middle income grouping respondents had a greater likelihood of switching, but were less likely to have switched in the past.
- Larger households, which were likely to include children, reported a lower likelihood of switching
- A lower proportion of older respondents reported past switching behaviour
- Learning costs were more of an issue for younger respondents
- Middle income grouping respondents were less concerned about the economic risk associated with switching than both the higher and lower income groups. However, monetary loss was a greater issue for the middle income group.
- Larger households found evaluation costs an issue, while benefit loss was more of an issue for households of three or four people
- Brand relationship was less important for both the highest and lowest education levels

While it is acknowledged that the chi-square testing results are limited in their applicability due to a key assumption not being met, it is not considered a serious deficiency as this is an exploratory look at the data only. In particular, the existence of a relationship involving household size and age indicate the possibility of a life-cycle stage relationship. Our findings confirm that there is value in further exploring the relationship between demographic characteristics and life-cycle stage with switching intentions and attitudes to switching costs.

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