

# **Effects of Switching Barriers on Satisfaction, Repurchase Intentions and Attitudinal Loyalty**

Claes-Robert Julander  
Ragnar Söderberg Professor  
of Business Administration  
Center for Consumer Marketing  
Stockholm School of Economics<sup>1</sup>

Magnus Söderlund  
Associate Professor  
Center for Consumer Marketing  
Stockholm School of Economics

SSE/EFI Working Paper Series in Business Administration. No. 2003:1.

Stockholm: January 2003.

---

<sup>1</sup> Claes-Robert Julander  
Stockholm School of Economics  
Box 6501  
se 113 83 Stockholm  
Sweden  
Phone: +468 736 90 13  
Fax: +468 33 94 89  
Email: [claes-roboter.Julander@hhs.se](mailto:claes-roboter.Julander@hhs.se)

## Effects of Switching Barriers on Satisfaction, Repurchase Intentions and Attitudinal Loyalty

### ABSTRACT

The positive effect of customer satisfaction on repurchase intentions and attitudinal loyalty has been shown in numerous studies. The effect of switching barriers on these variables, however, have been subject to much less attention from researchers. In this study we propose that switching barriers can be seen as either positive or negative, and we examine their effects on customer satisfaction, repurchase intentions and attitudinal loyalty. A LISREL analysis of the empirical data shows that negative switching barriers have negative effects on customer satisfaction and attitudinal loyalty, but a positive effect on repurchase intentions. Positive switching barriers impinge positively on customer satisfaction, repurchase intentions and attitudinal loyalty.

Keywords: Switching barriers, loyalty, satisfaction, repurchase intentions

## **Introduction**

Numerous studies show that customer satisfaction is related to repurchase intentions and attitudinal loyalty (Cronin & Taylor, 1992; Fornell, 1992; Anderson & Sullivan, 1990; Boulding, Kalra, Staeling, & Zeithaml, 1993; Taylor & Baker 1994; de Ruyter, Wetzels, & Bloemer, 1996; Zeithamel, Berry, & Parasuraman, 1996; Mägi & Julander 1996). However, customer satisfaction never explains all of the variation in repurchase intentions or attitudinal loyalty, since customers seldom are completely free to choose suppliers. In fact, different types of constraints, together with customer satisfaction, determine customers choice of supplier (Bendapudi & Berry 1997). In this paper such constraints are termed switching barriers. Only a few empirical studies, however, investigate how various types of switching barriers affect satisfaction with suppliers, repurchase intentions, attitudinal loyalty and the relationships between these variables (Jones, Mothersbaugh, & Beatty, 2000). It has been pointed out, starting with Hirschman, that customers remain loyal to a supplier either because they want to or they have to (Hirschman, 1970; Johnson, 1982; Levinger, 1979; Ping, 1993). High switching barriers mean that customers have to stay (or perceive that they have to) with suppliers, irrespective of the satisfaction created in the relationship. Such constrained freedom of choice could, according to reactance theory, create lower satisfaction, repurchase intentions and attitudinal loyalty than a more unconstrained situation (cf. Ringold, 1988).

Both from a theoretical and a managerial perspective it is of interest to investigate how switching barriers affect satisfaction, repurchase intentions and attitudinal loyalty. That is to say, the theoretical framework built up around customer satisfaction and loyalty needs to incorporate switching barriers (Bendapudi & Berry 1997), and address several questions that to date have received little attention. How important are they for customer retention, loyalty and repurchase intentions? Do switching barriers interact with satisfaction and in this way enhance loyalty or do they affect purchase intentions and long-term customer loyalty independently of satisfaction? Are switching barriers a unidimensional concept or are there different types of switching

barriers - with unique effects on customer satisfaction, customer loyalty and repurchase intentions?

From a managerial point of view, and given that long-term customer relationships are important, suppliers should not only manage customer satisfaction, but also switching barriers. A “management of barriers approach”, however, seems to involve several trade-offs. Creating too high switching barriers may result in negative word of mouth and dissatisfaction, and creating too low barriers may make it too easy for customers to defect. This area of research has drawn very little research from academicians.

The purpose of this paper is to make some distinctions as to the character of switching barriers, and to formulate and empirically test hypotheses regarding the role of switching barriers in the context of satisfaction, repurchase intentions and attitudinal loyalty.

## **Theoretical framework**

### *Switching barriers – a literature review*

Jones et al. (2000) define a switching barrier as any factor which makes it difficult or costly for consumers to change providers. In their empirical study they examined three types of switching barriers: strong interpersonal relationships (the strength of the personal bonds that may develop between the employees of a supplier and the customer), high switching costs (the customers perception of the time, money and effort associated with changing supplier) and attractiveness of alternatives, which refers to whether viable alternatives exist in the market. Ping (1993, 1997, 1999), following Johnson’s (1982) concept structural constraints, uses the term structural commitment as a measure of the extent to which as the customer has to remain in a relationship. Ping argues that structural commitment includes alternative attractiveness, investment in a relationship and switching cost. Fornell (1992), without proposing a formal definition of the concept, provides a list of factors that can constitute such barriers (i. e., if they are prevalent they will hinder customers to defect from a relationship): search costs, transaction costs, learning costs, loyal customer discounts, customer habit, emotional cost, cognitive effort and financial, social and psychological risk.

Klemperer (1987) distinguishes between three types of switching costs. One is transaction costs incurred when the customer changes supplier. For example, if you change stock-broker, you have to close one account and open another with the new supplier, entailing some effort. The second is learning costs. Suppose the new stock-broker uses other routines or other contractual rules than the first one, then you have to learn these new rules, which can be seen as a switching cost. The third is artificial switching costs and concerns what the firm does to retain customers – for example frequent flyer programs or discount coupons valid for the next purchase. Artificial switching costs are entirely at the firms discretion. Nilssen (1992) argues that these costs also can be decisions on whether to make the products compatible with others or not.

The assumption that barriers may enhance the probability of remaining in a social relationship was studied by Lund (1985). She posits that barriers are more important for the upholding of a relationship than positive pull (love of the partner and rewards from the relationship). She defines barriers as a) investment in the relationship (measured by items like trying to encourage and support your partner, contributing financially to the relationship), and b) commitment (measured by items such as how likely one is to pursue another relationship, how likely the partner is perceived to be willing to continue the relationship, and how obligated one feels to continue the relationship). She found that the barrier variables were better predictors of whether a romantic relationship would continue than the positive pull variables.

Rusbult, Johnson and Morrow (1986), in their study of romantic relationships, do not see commitment or investments as switching barriers, but as factors that increase the probability of a continuation of the relationship. Rusbult's theory of investment regarding interpersonal and romantic relationships consists of two main variables: satisfaction with the relationship (defined as the positivity of affect or attraction to ones relationship) and commitment (the tendency to maintain a relationship and feel psychologically attached to it). The investment model asserts that satisfaction is a function of the rewards from the relationship (in a business context the utility created by the suppliers products and services), and the costs of the relationship (possibly in a business context what one has to pay for the products and services). Commitment to

the relationship, which we in this study refer to as attitudinal loyalty, is a function of satisfaction, attractiveness of alternatives and investment in the relationship.

The various measures and variables used in earlier research to assess switching barriers are shown below (Table 1).

Table 1. Switching barrier variables in earlier research

Ping (1993):

Switching cost: Costs in time and money to change supplier

Alternative attractiveness: How much better or worse in various dimensions an alternative wholesaler would be

Investment: How much time, energy and money invested in the relationship

Uniqueness of investment in this wholesaler

Jones et al (2000):

Interpersonal relationships: Friends or bond with employees

Switching cost: Hassle to change, time and effort

Attractiveness of alternatives: How good other suppliers would be in comparison with current supplier

Fornell (1992):

Search costs, transaction costs, learning costs, loyal customer discounts, customer habit, emotional costs, cognitive effort, financial, social and psychological risk

Klemperer (1987):

Switching costs: transaction, learning, artificial

Lund (1985):

Investment in relationship: spending time with partner, investing financially...

Commitment: Likelihood of continued relationship

Rusbult et al (1986):

Alternative quality: How appealing are the alternatives

Investment in relation: time, energy, self-disclosures, shared experiences, number of children...

*Negative and positive switching barriers*

As mentioned earlier, Hirschman (1970) makes the distinction between “having to be” or “wanting to be” in a relationship. Having to be can be seen as a negative reason to stay in a relationship or to remain a customer, while wanting to be in a relationship as a positive reason to stay. Jones et al. (2000), in the end-discussion of their article,

mention that some switching barriers can be seen as more positive in their nature and others as more negative. We will argue that, both from a theoretical and managerial viewpoint, it is of great importance to explicitly distinguish between positive switching barriers, which are related to wanting to be in a relationship, and negative switching barriers reflecting having to be in a relationship. Psychologically, it should make a great difference whether one maintains a relationship because a perception that the supplier is superior in services and products (a positive reason), or because it is too expensive to leave the supplier, there is a monopoly on the market or the supplier is powerful (negative reasons). The main rationale behind the distinction between positive and negative reasons is similar to Lund's idea of barrier push vs. positive pull; a supplier that retains its customers through positive pull rather than through barrier push is likely to develop a stronger position vis-à-vis its customers.

Given the importance of the notion of negative and positive switching barriers, we will now turn to an attempt to classify previous measures of switching barriers into these two types. We will start with negative switching barriers. Papers regarding switching barriers coming from marketing or economics mention switching costs as an important switching barrier. Switching costs refer to various types of costly obstacles of changing supplier. High switching costs tend to lock customers to suppliers and we thus classify switching costs as negative switching barriers. From the economics literature we would like to add the degree of monopoly on the market, and supplier power, which, when high, may lock the customer to the supplier. Moreover, investment in the supplier by the customer (generally how much time, money and effort invested in the relationship) is also considered a negative switching barrier, since it tends to lock the customer to the supplier, especially if the customer has made physical investments in equipment. Since investment locks the customer to the supplier, we classify high investments in the relationship by the customer as negative switching barriers.

As a positive switching barrier we classify attractiveness of other alternatives. If the chosen supplier is better than the other available alternatives the customer, stays with, or is locked to the supplier, because the supplier is perceived to be better than other potential suppliers. That is, there is a positive motivation to stay with the supplier. Positive interpersonal relationships are also viewed as positive switching barriers.

They could be said to be a part of the product offered, especially if it is a service. It can be expected that customers stay with suppliers because of such positive relationships. We classify loyal customer discounts and customer habit (cf. Fornell 1992) as positive switching barriers, since they are positive aspects of the product or service bundle offered. They resemble the artificial switching barriers mentioned by Klemperer (1987) and Nilssen (1992). Fornell also mentions financial, social and psychological risk. We would put these under the heading of positive switching barriers. These risks should occur in a comparison of what you get from the current supplier and the probability that you will get the same utility from other suppliers. Thus, if one perceives high risks in a change of supplier this is here classified as a positive switching barrier.

### **Effects of positive and negative switching barriers - hypotheses**

In this section, we develop hypotheses about the relationships between positive switching and negative switching barriers and customer satisfaction, attitudinal loyalty, and repurchase intentions. When customers have to stay with suppliers because of negative switching barriers, we expect that satisfaction and attitudinal loyalty will be lower than for customers that are in a more unconstrained situation. However, we expect that repurchase intentions will be higher, since customers in the constrained situation have to choose the given supplier. That satisfaction and attitudinal loyalty would be adversely affected in the constrained situation could be explained by the idea of the positive value of freedom of choice (cf. Ringold 1988), and that the probability that those who are free to choose can find the best possible alternatives is higher than for those who have to choose in the constrained situation. Furthermore, if the supplier knows that customers are locked in, the service probably becomes of lower quality than when this is not the case. Thus we formulate the following hypothesis:

H1a. Negative switching barriers are negatively associated with customer satisfaction and attitudinal loyalty, but positively associated with repurchase intentions.

We also expect that negative switching barriers will moderate the effect of satisfaction on repurchase intentions. For example, it can be expected that high switching barriers



may offset the effect of low satisfaction on repurchase intentions. From this follows our second hypothesis:

H1b. Satisfaction's association with repurchase intentions and attitudinal loyalty is weakened when negative switching barriers are high.

Positive switching barriers are expected to have a positive effect on satisfaction, repurchase intentions and attitudinal loyalty, and reinforce the effect of satisfaction on repurchase intention and attitudinal loyalty. Negative and positive switching barriers are expected to be independent of each other. This generates the following hypotheses:

H2a. Positive switching barriers are positively associated with customer satisfaction, repurchase intentions, and attitudinal loyalty.

H2b. Satisfaction and positive switching barriers will reinforce each other in their effects on repurchase intentions and attitudinal loyalty

Some support for these hypotheses can be found in Jones et al. (2000) and in Ping (1993, 1997, 1999). Jones et al. (2000) propose that the relationship between satisfaction and repurchase intentions is contingent on switching barriers. They hypothesize that switching barriers have a positive effect on repurchase intentions. Furthermore, they propose that the relationship between satisfaction and repurchase intentions is contingent on switching barriers. The hypotheses regarding the interaction between satisfaction and switching barriers were accepted in their empirical study, but the effect sizes were quite modest. No distinction, however, was made between positive and negative switching barriers. Ping (1993, 1997, 1999) studied how "structural" constraints are related to exit and voice. He measured the following types of switching barriers: attractiveness of alternatives, investment in the relationship and switching costs. Attractiveness of alternatives were more strongly associated with customer satisfaction than with switching costs and investment in the relationship. The results speak in favor of looking at attractiveness of alternatives as a positive switching barrier.

## **Research method**

### *Data collection and sampling procedure*

Data were collected with a questionnaire. The respondent was instructed to think of and refer to one particular supplier, which the respondent as a customer had been using more than once. This condition was used in order to make the respondent think of a supplier that s/he had some experience of. In the first section of the questionnaire the respondent was asked to provide some descriptive information about the selected supplier. In the following sections a set of statements designed to measure the variables in the hypothesized associations were presented, and the respondents were asked to express the extent of agreement or disagreement with these statements. A convenience sample was used; questionnaires were distributed to participants in a set of seminars on relationship marketing and customer satisfaction. The participants were asked to complete the questionnaire before coming to the seminar, and were informed that the data would be used as illustrations and discussed in class. This sampling procedure resulted in 152 completed questionnaires.

### *Characteristics of the sample and the related suppliers*

The first part of the questionnaire contained open questions asking the respondent to provide the name of the selected supplier and to identify the particular products which had been bought from this supplier. Moreover, the respondent was asked to specify whether the products were goods or services and whether they were purchased for private consumption or for professional use. Finally, the respondent was asked how long time s/he had been a customer of the selected supplier. The results from an analysis of this part of the questionnaire reveal that a wide range of industries, and products, were covered in the sample, for instance computer suppliers, travel agencies, hairdressers, grocery stores and sport equipment manufacturers. Some 40 % indicated that they bought goods, 26 % services, and 34 % both goods and services from the supplier. As for the use of the items purchased from the supplier 47 % were for private consumption, 44 % for professional use, and 9 % for both private and professional use. The average length of the relationship to the supplier was 5.7 years and the maximum relationship length in the sample was 25 years. The average length

of relationships to a supplier of private use was longer (6.5 years) than that of professional users (4.8 years). The heterogeneity in terms of industries means that we have lesser control of confounding factors, than would be the case with a more constrained set of industries. On the other hand, significant results will in this case have strong external validity.

### *Measurement*

All variables in our hypotheses were assessed with multi-item scales (cf. Appendix 1). Customer satisfaction was measured with a 3-item scale designed to capture the overall satisfaction. We have thus adopted a common approach to the measurement of customer satisfaction in the literature (cf. Hausknecht, 1990 and Yi, 1990 for reviews of existing approaches to measurement of customer satisfaction), in the sense that accumulated satisfaction is in focus. Repurchase intentions was measured with a 2-item scale. Similar items appear in Cronin & Taylor (1992), Rust et al. (1995) and Taylor & Baker (1994). Finally, attitudinal loyalty was assessed with a two-item scale that replicates the commitment scale developed by Morgan & Hunt (1994).

Seven questions were used to measure switching barriers. A factor analysis of these questions revealed the presence of two main factors. The first one was classified as consisting of five items measuring negative switching barriers (it is difficult to find realistic alternatives to this supplier, it is difficult to find other suppliers, it would be quite complicated to change supplier, it takes a lot of time to get information about other suppliers, perception of being locked to the supplier). All items, except for the last one, are indirect measures of switching costs. The exception is the “locked to” item, which mainly measures a feeling of the impossibility to change supplier. The positive switching barrier factor consisted of two items: I feel uncertain about whether other suppliers can deliver as well as this supplier and, if I choose another supplier I do not know what I will get. Both items are assumed to reflect the relative attractiveness of other alternatives.

Since LISREL was used as analytical tool all of the constructs were subject to confirmatory factor analysis.

## **Analyses and results**

The hypotheses were tested by the use of structural equation modelling (we used LISREL 8.51). The path diagram, the separate structural equations and regression analyses with the latent variable scores will be reported. The latter analyses are used for the test of interaction effects. The collected evidence from all these analyses will be used for conclusions regarding the stated hypotheses. Separate models were built for the two dependent variables (repurchase intentions and attitudinal loyalty).

### *Repurchase intentions*

In Figure 1 the path model is reported and the structural equations can be found in Table 2. The regression analyses using the latent variable scores are reported in Table 3. Hypothesis H1a stated that negative switching barriers would have a negative association with customer satisfaction and a positive relation with repurchase intentions, and hypothesis H2a stated that positive switching barriers would impinge positively on both customer satisfaction and repurchase intentions.

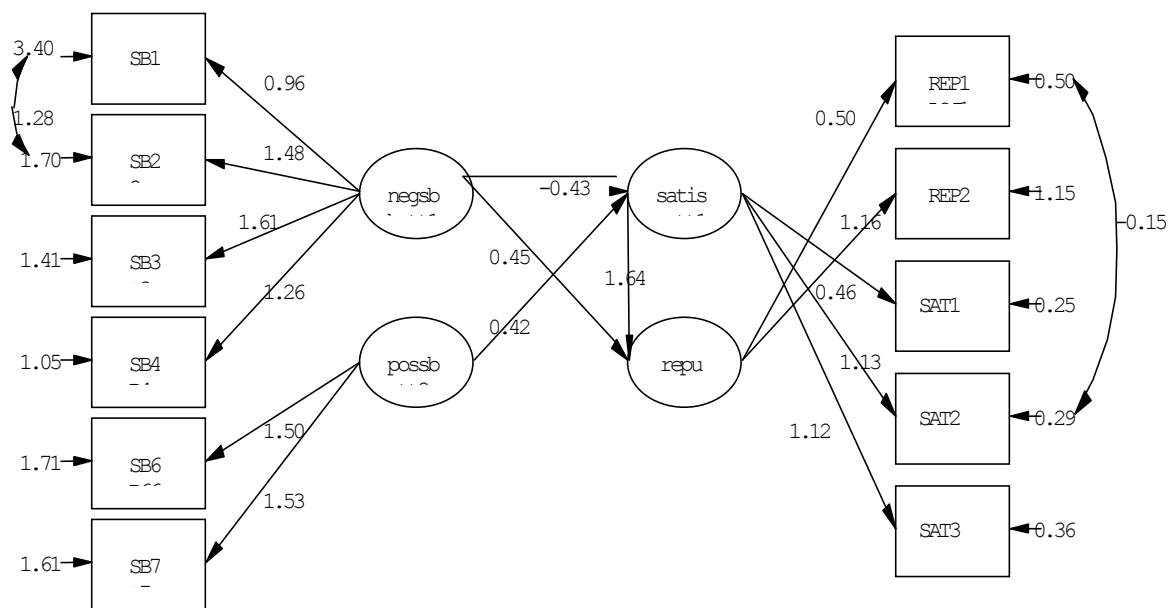
The path diagram (Figure 1) shows that the negative switching barriers (negsb in the diagram) has a negative direct effect on customer satisfaction and a positive direct effect on repurchase intentions. The positive switching barrier variable (possb) has no direct positive effect on repurchase intentions but, as hypothesized, a positive direct effect on customer satisfaction and the positive effect that was hypothesized is only indirect (through satisfaction). All estimates have t-values larger than 2 and are thus statistically significant.

The structural equations (the reduced models) as well as the multiple regression analysis confirm these results (Tables 2 and 3). In the regression analysis interaction effects were also tested. The expectation was that the effect of satisfaction will diminish when negative switching barriers are high, and that positive switching

barriers and satisfaction will reinforce each other in their effects on repurchase intentions. Both interaction terms have the expected signs and reach statistical significance.

These analyses confirm the hypotheses regarding the differential effects of negative and positive switching barriers on repurchase intentions. However, although the multiple regression analysis generated a high R-square (0.79), some of the fit measures did not indicate a good fit. This is the result for the Chi-square measure which should not be significant (see figure 1). RMSEA at 0.079, GFI at 0.92, AGFI at 0.86 and NFI at 0.93 show reasonable values.

**Figure 1.** The relationships between repurchase intentions (repu), customer satisfaction (satis), negative switching barriers (negsb) and positive switching barriers (posb).



Chi-Square=72.23, df=37, P-value=0.00047,

**Table 2.** Structural equations generated by the structural model depicted in Figure 1.

$$\text{Satis} = -0.43\text{negsb} + 0.45\text{posb} \quad R^2=0.20$$

t-values -3.64            3.62

$$\text{Repu} = 1.64\text{satis} + 0.42\text{negsb} \quad R^2=0.76$$

t-values 4.24 2.28

Table 3. Multiple regression with repurchase intentions (repu) as dependent variable and satisfaction (satis), negative switching barriers (negsb), positive switching barriers (possb), the interaction between satisfaction and negative (satisnegsb) and positive switching barriers (satispossb) and the two switching barrier variables (negsbpossb).

$$\text{Repu} = -0.374 + 1.790\text{satis} + 0.592\text{negsb} - 0.200\text{possb} - 0.177\text{satisnegsb} \\ + 0.161\text{satispossb} + 0.00547\text{negsbpossb}$$

t-values -2.58 20.80 5.42 ns -2.37  
t-values 2.160 ns

$$R^2 = 0.79$$

### *Attitudinal loyalty*

Figure 2 depicts the path model for attitudinal loyalty, and the structural equations are reported in Table 4 and the regression analysis is found in Table 5.

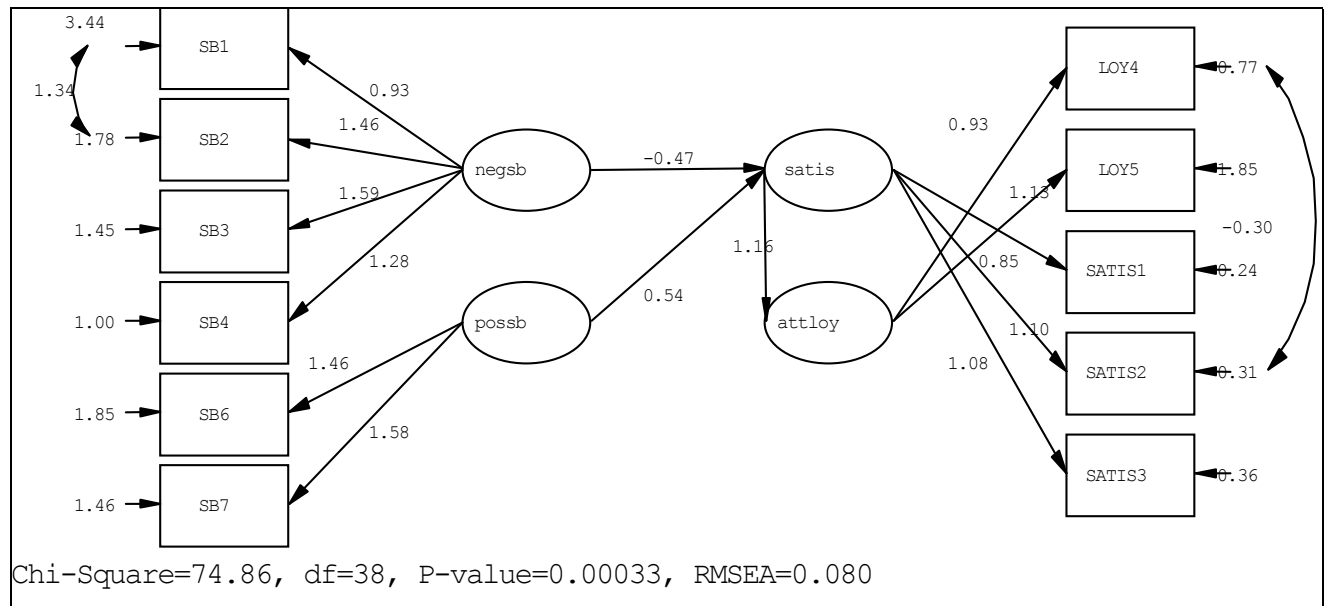
Hypothesis H1a stated that negative switching barriers would have a negative effect on attitudinal loyalty, and H2a that positive switching barriers would have a positive effect on this variable. H1b posits that the effect of satisfaction on attitudinal loyalty will be decreased by negative switching barriers, and H2b that positive switching barriers and satisfaction will reinforce each other in their effect on attitudinal loyalty. In the path model (Figure 2) we find that negative switching barriers has a direct negative effect on satisfaction and the positive switching barriers a positive effect. However, in this model we have no significant direct effect from the switching barrier variables to attitudinal loyalty. Thus the hypotheses are confirmed but only as indirect effects on attitudinal loyalty. However, in the reduced form equations we find the expected relationships (not reported here).

These results occur again in the regression analyses with latent scores. However, only the interaction between satisfaction and positive switching barriers shows the

expected effect. The expected significant interaction effect between satisfaction and negative switching barriers on attitudinal loyalty does not occur.

These analyses partially confirm the hypotheses. However, the main difference is that the switching barrier variables main impact is indirect (through satisfaction) on attitudinal loyalty. Also, only the interaction with positive switching barriers is statistically significant. The multiple regression analysis explains a substantial share of the variance in attitudinal loyalty, but again the fit measures for the path model varies. The Chi-square measure is significant, which is not positive for the fit of the model, while the RMSEA=0.080, GFI=0.92, AGFI=0.86 and NFI=0.92 are quite good results.

**Figure 2.** The relationships between attitudinal loyalty (attloy), customer satisfaction (satis), negative switching barriers (negsb) and positive switching barriers (possb).



**Table 4.** The structural equations generated by the model depicted in figure 2.

$$\text{Satis} = -0.47\text{negsb} + 0.54\text{possb} \quad R^2 = 0.25$$

t-values    -3.80                      4.06

$$\text{Attloy} = 1.15\text{satis} \quad R^2 = 0.64$$

t-values      5.84

Table 5. Multiple regression with attitudinal loyalty (attloy) as dependent variable and customer satisfaction (satis), negative switching barriers (negsb), positive switching barriers (possb), the interaction between satisfaction and negative (satisnegsb) and positive switching barriers (satispossb) and the two switching barrier variables (negsbpossb). Latent scores.

$$\text{Attloy} = -0.0987 + 1.192\text{satis} - 0.0341\text{negsb} - 0.199\text{possb} + 0.0368\text{satisnegsb} + 0.161\text{satispossb} + 0.0254\text{negsbpossb}$$

t-values      ns      13.80      ns      ns      2.300      ns

$$R^2 = 0.66$$

## Discussion

### *Summary of results*

Our analyses suggest that it is fruitful to distinguish between negative and positive switching barriers. The results show that these two variables have different effects on repurchase intentions, and that negative switching barriers tend to attenuate the effect of customer satisfaction (if they are high) and that the effect of satisfaction is reinforced by high positive switching barriers. Furthermore, these two types of switching barriers also have different effects on customer satisfaction.

The results for attitudinal loyalty provide a more mixed picture than those for repurchase intentions. However, the effects of negative and positive switching barriers were in the expected directions. Positive switching barriers are significantly and positively correlated with attitudinal loyalty, and the interaction between the positive switching barriers and customer satisfaction is also positive.



The results confirm those found by Jones et al (2000) in that switching barriers also in this study are found to have a positive effect on customer retention. In contrast to the Jones et al (2000) results we find main effects of negative switching barriers on customer retention.

The proposed distinction between positive and negative switching barriers seems to be important. Negative switching barriers have a negative relationship with customer satisfaction and attitudinal loyalty, while positive switching barriers show a positive relationship. The results confirm the theoretical distinctions made by Bendapuri & Berry (1997) regarding the differential effects of constraints and dedication in relationship marketing.

#### *Limitations and further research*

Despite the fact that hypotheses were tested and confirmed this study must be considered as exploratory regarding the role of switching barriers for repurchase intentions as well as attitudinal loyalty. Further studies should for example put much more care into trying to define and operationalize positive and negative switching barrier (cf. Jones et al. 2002).

The use of theories regarding social relationships as a background for studying switching barriers seems fruitful. However, we would like to warn for drawing the comparisons too far – a business relationship can hardly be put on a similar basis as a romantic relationship.

The empirical study used a convenience sample which limits the generality of the results. The results, however are strengthened by the fact that many different industries were represented, and some relationships concerned consumer goods suppliers and other industrial goods. Subgroup runs of the analyses do not alter our main findings.

Few empirical studies have explored the effects and interplay between switching barriers and customer satisfaction and these variables' effects on attitudinal loyalty and customer retention, and thus there is a need for an increased number of empirical

studies in which both these important groups of variables are studied. For example, a strategy could be used to sample individuals that are in environments with varying degrees of negative switching barriers. Also, one could in further studies explicitly ask respondents whether they stay in business relationships because they have to or because they want to. This would further clarify the relative effect of switching barriers (positive and negative) and customer satisfaction on customer retention. Perhaps we would find that switching barriers are more important for the binding of a customer to a supplier than customer satisfaction.

### *Managerial implications*

From a management viewpoint it should be important to incorporate positive and negative switching barriers and not only customer satisfaction in studies of customer retention and defection, and segment the customer base using these variables. If negative switching barriers are low, and thus few constraints exist to defect, a strong emphasis on service to create customer satisfaction should be important. On the other hand, when switching barriers are high and can be expected to remain so, less emphasis on customer retention programs should be needed.

### Appendix 1. Items used to measure the different concepts in the study

Scale	Scale items	Alpha
Customer satisfaction	<ul style="list-style-type: none"> <li>- I am satisfied with the supplier</li> <li>- The supplier meets all the requirements that I see reasonable.</li> <li>- The supplier satisfies my need</li> </ul>	.94
Purchase intentions	<ul style="list-style-type: none"> <li>- I intend to continue to be customer of this supplier</li> <li>- Next time I shall need products/services of the supplier I will buy it from him</li> </ul>	.69
Attitudinal loyalty	<ul style="list-style-type: none"> <li>- I am ready to make an extra effort to buy from this supplier</li> <li>- It means a lot to me to continue to use this supplier</li> </ul>	.78
Negative switching barriers	<ul style="list-style-type: none"> <li>- There are few other suppliers that are realistic alternatives for me</li> <li>- It is difficult for me to use other suppliers</li> <li>- It would be complicated for me to change supplier</li> <li>- I feel locked to this supplier</li> <li>- It takes a lot of time to get information about other suppliers</li> </ul>	.80
Positive switching barriers	<ul style="list-style-type: none"> <li>- I feel uncertain about whether other suppliers can give the same service as this one</li> <li>- If I were to choose another supplier I do not know what I will get</li> </ul>	.73

## References

- Anderson, E. W., & Sullivan, M. W. (1990). The Antecedents and Consequences of Customer Satisfaction for Firms. *Marketing Science*, 12(2), 125-145.
- Bendapudi, N., & Berry, L. L. (1997). Customers' Motivation for Maintaining Relationships with Service Providers. *Journal of Retailing*, 73(1), 15-37.
- Boulding, W. A., Kalra, A., Staeling, R., & Zeithaml V. A. (1993). A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions. *Journal of Marketing Research*, 15(1), 7-27.
- Cronin J. J., & Taylor S. A. (1992). Measuring Service Quality: A Reexamination and Extension. *Journal of Marketing*, 56(3), 55-68.
- de Ruyter, K., Wetzels, M., & Bloemer, J. (1996). *On the Relationship Between Perceived Service Quality and Behavioral Intentions: a Cross-sectional Perspective*. Proceedings of the 25<sup>th</sup> EMAC Conference, Warwick, UK.
- Fornell, C. (1992). A National Customer Satisfaction Barometer: The Swedish Experience. *Journal of Marketing*, 56(1), 6-21.
- Hausknecht, D. R. (1990). Measurement Scales in Consumer Satisfaction /Dissatisfaction. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behaviour*, 3, 1-11.
- Hirschman, A. O. (1970). *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, MA: Harvard University Press.
- Jones, M. A., Mothersbaugh, D. L., & Beatty, S. E. (2000). Switching Barriers and Repurchase Intentions in Services. *Journal of Retailing*, 76(2), 259-74.
- 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 Service Outcomes. *Journal of Business Research*, 55(6), 441-50.
- Johnson, M. P. (1982). Social and Cognitive Features of the Dissolution of Commitment to Relationships. In S. Duck (Ed.), *Personal Relationships: Dissolving Personal Relationships* (pp. 51-74). London: Academic Press.
- Klemperer, P. D. (1987). Markets with Consumer Switching Costs. *Quarterly Journal of Economics*, 102(2), 375-394.

- Levinger, G. (1979). Marital Cohesiveness at the Brink: The Fate of Applications for Divorce. In T. L. Huston (Ed), *Divorce and Separation: Context, Causes, and Consequences* (pp. 99-120). New York: Academic Press.
- Lund, M. (1985). The Development of Investment and Commitment Scales for Predicting Continuity of Personal Relationships. *Journal of Social and Personal Relationships*, 2(2), 3-23.
- Morgan, R. M., & Hunt, S. D. (1994). The Commitment Trust Theory of Relationship Marketing. *Journal of Marketing*, 58(3), 20-38.
- Mägi, A., & Julander, C.-R. (1996). Perceived Service Quality and Satisfaction in a Store Profit Performance Framework - An Empirical Study of Swedish Grocery Retailers. *Journal of Retailing and Consumer Services*, 3(1), 33-41.
- Nilssen, T. (1992). Two Kinds of Consumer Switching Costs. *Rand Journal of Economics*, 23(4), 579-589.
- Ping, R. (1993). The Effects of Satisfaction and Structural Constraints on Retailer Exiting, Voice, Loyalty, Opportunism, and Neglect. *Journal of Retailing*, 69(3), 320-352.
- Ping, R. (1997). Voice in Business-to-Business Relationships: Cost-of-Exit and Demographic Antecedents. *Journal of Retailing*, 73(2), 261-281.
- Ping, R. (1999). Unexplored antecedents of Exiting in a Marketing Channel. *Journal of Retailing*, 75(2), 218-241.
- Ringold, D. J. (1988). Consumer Response to Product Withdrawal: The Reformulation of Coca-Cola. *Psychology & Marketing*, 5(3), 189-210.
- Rusbult, C. E., Johnson, D. J., & Morrow, G. D. (1986). Determinants and Consequences of Exit, Voice, Loyalty, and Neglect: Responses to Dissatisfaction in Adult Romantic Relationships. *Human Relations*, 39(1), 45-63.
- Rust, R. T., Zahorik, A. J., & Keiningham, T. L. (1995). Return on Quality (ROQ): Making Service Quality Financially Accountable. *Journal of Marketing*, 59(2), 58-70.
- Taylor, S. A., & Baker, T. L. (1994). An Assessment of the Relationship Between Service Quality and Customer Satisfaction in the Formation of Consumers' Purchase Intentions. *Journal of Retailing*, 70(2), 163-178.
- Yi, Y. (1990). A Critical Review of Consumer Satisfaction. In V. A. Zeithaml (Ed.), *Review of Marketing*, American Marketing Association, Chicago
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing*, 60(2), 31-46.

