The differential effects of Switching Costs and Attractiveness of Alternatives on Customer Loyalty

by

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ABSTRACT

There is an increasing recognition among marketing scholars and practitioners of the importance of the influence of switching costs and attractiveness of alternatives in the relationship between customer satisfaction and customer loyalty. To date, however, there is a lack of research about the process through which these variables influence the satisfaction-loyalty relationship. This dissertation aims to evaluate the importance of switching costs and attractiveness of alternatives in explaining customer loyalty. Using a revised model of the European Customer Satisfaction Index (ECSI), applied to the banking industry, this study intends to include switching costs as perceived by customers and the attractiveness of alternatives as independent antecedents of customer loyalty and as moderators of the impact of satisfaction on loyalty. Both direct and moderating effects of switching costs and attractiveness of alternatives are tested, using a methodology based on structural equation models. The main findings of this study indicate that both constructs influence loyalty directly and the strength of the satisfaction-loyalty relationship.

Keywords: European Customer Satisfaction Index, Switching Costs, Attractiveness of Alternatives.
**RESUMO**

Existe hoje um reconhecimento crescente, quer por parte dos académicos quer dos gestores, da importância crucial que os custos de mudança e atratividade das alternativas assumem na relação entre a satisfação e a lealdade do cliente. Todavia, até à data, existem poucos estudos empíricos sobre as condições através das quais estas variáveis influenciam a intensidade da relação satisfação-lealdade. Esta dissertação pretende avaliar a importância dos custos da mudança e da atratividade das alternativas na explicação da lealdade do cliente. Utilizando um modelo adaptado do Índice Europeu de Satisfação do Cliente (ECSI), aplicado ao sector da Banca, este estudo tem como objectivo a inclusão dos custos de mudança percepcionados pelo cliente e da atratividade das alternativas, como antecedentes da lealdade e, ainda, como moderadores da relação entre a satisfação e a lealdade. Tanto os efeitos directos, como os efeitos moderadores dos custos da mudança e da atratividade das alternativas são testados, recorrendo a uma metodologia baseada em modelos de equações estruturais. Os principais resultados deste estudo indicam que ambas as variáveis influenciam directamente a lealdade, bem como a intensidade da relação entre satisfação e lealdade.

**Palavras-Chave:** Índice Europeu de Satisfação do Cliente, Custos de Mudança e da atratividade das Alternativas.
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CONTENTS

Abstract ....................................................................................................................................................................... iii
Resumo ....................................................................................................................................................................... iv
Acknowledgements ..................................................................................................................................................... v
Contents ...................................................................................................................................................................... vi
List of Figures ............................................................................................................................................................ vii
List of Tables ............................................................................................................................................................. vii
Abbreviation List ...................................................................................................................................................... viii
1. Introduction .............................................................................................................................................................. 1
2. Switching costs and attractiveness of alternatives in the ecsi model ............................................................... 4
3. Framework of switching costs and attractiveness of alternatives on customer loyalty ..................................... 7
4. Research methodology ......................................................................................................................................... 11
   4.1 Data collection .................................................................................................................................................. 11
   4.2 Operational measures ...................................................................................................................................... 12
5. Results ................................................................................................................................................................... 14
   5.1 Descriptive analysis .......................................................................................................................................... 14
   5.2 Exploratory factor analysis ............................................................................................................................... 15
   5.3 Measurement reliability and validity ................................................................................................................ 16
6. Discussion and Conclusions ............................................................................................................................... 21
7. Limitations ............................................................................................................................................................. 23
8. References ............................................................................................................................................................. 24
LIST OF FIGURES

Figure 1. Conceptual framework ................................................................................................................................... 7
Figure 2. Structural model path coefficients and significances.................................................................................... 19

LIST OF TABLES

Table 1. Indicators of the measurement model ..................................................................................................... 13
Table 2. Means, standard deviations and standardized loadings of manifest variables .............................................. 15
Table 3. Factor analysis loadings ................................................................................................................................ 16
Table 4. Reliability and validity measures........................................................................................................... 17
Table 5. Correlations between latent variables and square roots of average variance extracted............................... 18
Table 6. Direct, total and size of effects on loyalty ...................................................................................................... 20
ABBREVIATION LIST

ACSI – American Customer Satisfaction Index
AVE – Average Variance Extracted
CATI – Computer Administered Telephone Interviewing
ECASI – European Customer Satisfaction Index
KMO – Kaiser-Meyer-Olkin
PLS – Partial Least Squares
RDD - Random Digit Dialing
SET – Social Exchange Theory
1. INTRODUCTION

The definition of customer loyalty has been frequently discussed among scholars but remains ambiguous in nature (Dick & Basu, 1994; Oliver, 1999). From a strictly behavioral point of view (Schultz & Baley 2000 In Kumar & Shah, 2004), customer loyalty has developed towards a more psychological and attitudinal meaning, one that implies true commitment despite competitive offerings or potential switching costs (Oliver, 1999; Ball, et al. 2006). Moreover, several studies corroborate the positive effects of customer loyalty on customer retention and on the overall profitability of the firm (Burnham et al., 2003; Beerli et al., 2004; Yang & Peterson, 2004; Vilares & Coelho, 2005; Ball et al., 2006). In addition, loyal customers not only increase the firm’s stock value, but they also enable them to maintain costs lower than those related to attracting new or recovering old ones (Rosenberg & Czepiel, 1984; Peppers & Rogers, 1993; Patterson & Smith, 2003; Beerli et. al., 2004; Vilares & Coelho, 2005). Accordingly, many companies enhance their managerial strategies towards customer loyalty as a source of a sustainable competitive advantage (Sudhahar et al. 2006). Thus, exploring the properties that play an important role in the development of customer relationships is sought to increase the effectiveness in sustaining profitable customer loyalty (Kumar & Shah, 2004).

Over the past decades, mainstream theories have postulated customer satisfaction to be the cornerstone of customer loyalty (Anderson & Mittal, 2000; Lam et al., 2004). In other words, high levels of satisfaction were sought to lead, undeniably, to customer retention. However, although empirical evidence has suggested that customer satisfaction has a positive effect on customer loyalty (Fornell, 1992; Jones et al., 2000), satisfied customers do defect for several other reasons and, simultaneously, dissatisfied customers may stay in a business relationship (Jones & Sasser, 1995; Reichheld, 1996; Lee et al., 2001). In this sense, there has been a growing recognition among marketing scholars and practitioners that the impact of customer satisfaction on customer loyalty is complex and might vary under different conditions (Sharma & Patterson, 2000; Sharma, 2003; Walsh et. al., 2008). Moreover, other constructs such as perceived switching costs or attractiveness of alternatives are thought to play a vital role in explaining customer loyalty and also influence the satisfaction-loyalty relationship as emphasized in prior research (Sharma & Patterson, 2000; Burnham et al., 2003; Sharma, 2003; Verhoef, 2003; Beerli et al., 2004; Min & Wan, 2009).

Switching costs are sought to explain why customers have to stay in a relationship. Switching costs may include financial burden, but also involve time and effort that customers face when switching from one provider to another. Hence, as the magnitude of switching costs varies, costumers with identical satisfaction levels may present different loyalty levels. On the other hand, attractiveness of alternatives relates to clients’ awareness and perception of alternatives while compared with the current relationship. Theoretically founded on the Social Exchange Theory
(Thibaut & Kelley, 1959), the underlying assumption is that people stay in relationships if there is a valued expected return contingent upon it (Emerson, 1976). This supposition is accentuated in highly competitive industries and repeat-transaction businesses such as the retail banking market, in which customer loyalty is highly valuable. As with switching costs, different attractiveness of alternatives will lead, *ceteris paribus*, to different levels of loyalty.

However, the impacts of attractiveness of alternatives and switching costs may manifest themselves in yet another way. It is possible that not only these constructs affect customer loyalty directly but also by having an impact in the elasticity of customer loyalty with respect to consumer satisfaction. These effects are referred in the literature as moderator effects and have been suggested in previous work regarding switching costs (Anderson & Sullivan, 1993; Hauser *et al.*, 1994; Jones *et al.*, 2000, Sharma & Patterson, 2000; Lam *et al.*, 2004; Yang and Peterson, 2004, Chen & Wang, 2009). Moreover, moderator analysis may provide additional insight into the relationship between customer satisfaction and loyalty. Hence, by identifying under which situations the satisfaction-loyalty link is affected, managers are able to invest in particular variables and, therefore, enhance customer loyalty (Walsh *et al.*, 2008).

While customers of the retail banking market have formed the subject of several empirical analysis carried out in the relational marketing literature, many attempts have focused on a range of direct antecedents and mediators to explain variations in customer loyalty (Ball *et al.*, 2004; Ball *et al.*, 2006). This study distinguishes from this previous research by seeking the moderating influence of switching costs and attractiveness of alternatives on the relationship between satisfaction and loyalty. It also distinguishes from most of the previous research, which suggests that switching costs and attractiveness of alternatives are part of a single construct, designated as switching barriers (Jones *et al.*, 2000, Patterson & Smith, 2003). In fact, the need of treating both categories as separate constructs is supported by Thibault and Kelly (1959) and more broadly by social exchange theory given that both constructs may display different outcomes or impact the future course of a current relationship in opposite directions. This argument is also supported in the divorce literature and has been emphasized in particular by Lewis and Spanier (1982) that analyze the influence of switching costs and attractiveness of alternatives on marital stability. The moderating influence of these two independent constructs in the development of customer relationships has been recognized by Sharma and Patterson (2000). However, rather than exploring the effects of switching costs and attractiveness of alternatives with respect to customer loyalty as a proxy of future behavior, the main purpose of the previous study is to investigate whether the effects of satisfaction and trust on relationship commitment are contingent on the level of the moderators. Additionally, the results are drawn upon sub-group analysis and specific to the context of financial planning services. Moreover, although attractiveness of alternatives has been object of previous research, there is a lack of research that account for switching costs and attractiveness of alternatives in an integrated approach. Furthermore, the link between switching costs and retention has long been recognized in the business-to-business literature (Jackson, 1985; Patterson & Smith, 2003). Moreover, as acknowledged so far, perceived switching costs, from a consumer perspective, have only once been discussed in the satisfaction index literature (Anderson,
Whilst Anderson suggests potential effects of switching costs, the results are limited because the switching costs are estimated on an aggregate level according to expert judgment. To overcome this deficit, the present dissertation approaches this problem on an individual customer level instead. Results obtained in previous research also disagree on the nature of switching costs effects on loyalty, with both direct and moderating effects of switching costs being disputed by some authors (Anderson & Sullivan, 1993; Hauser et al., 1994; Jones et al. 2000, Sharma & Patterson, 2000; Lam et al., 2004; Yang & Peterson, 2004, Chen & Wang, 2009). In short, although switching costs and in a less degree attractiveness of alternatives have been approached in the literature, much remains unknown about the discrimination of these constructs and the nature of their effects on relational variables and mainly on customer loyalty.

The overall aim of the present dissertation is to offer some light over these open questions, through a comprehensive empirical analysis on the effects of switching costs and attractiveness of alternatives in explaining customer loyalty as an extended model of the original European Customer Satisfaction Index (ECSI). As argued by Johnson et al. (2001) the related constructs used in the satisfaction index are open to improvement. Therefore, this study intends to follow Vilares and Coelho (2003), Ball et al. (2004) and Ball et al. (2006) development of a further understanding of the interrelationships encountered in the ECSI model. A theoretical grounded model that describes how both constructs influence customer loyalty is developed. Given this, the specific objectives of the study are:

- Firstly, to understand if switching costs and attractiveness of alternatives are different constructs. Additionally, to access the differential effects of switching costs and attractiveness of alternatives on customer loyalty.
- In second place, the relationship marketing literature is enriched by illustrating how perceived switching costs and attractiveness of alternatives influence the creation of customer loyalty. Moderating effects of both constructs will be introduced in the original ECSI model and tested.
- A third objective consists on revealing how perceived switching costs and attractiveness of alternatives can contribute to increase the predictive validity of the European Customer Satisfaction Index, thus providing companies with the opportunity to get a more precise estimate of their customers’ loyalty.

The structure of the paper is organized as follows. The next section presents a review of the main research carried out in the marketing literature. In the subsequent section the main hypotheses of the study are introduced, while reasoned by theory. Aspects related to the research methodology are regarded in the fourth section, while the empirical results are presented in the fifth section. The final two sections discuss the main findings, acknowledge the limitations of the present study and suggest areas for future research.
2. Switching Costs and Attractiveness of Alternatives in the ECSI Model

This dissertation proposes an extension of the ECSI model, resulting from the inclusion of two moderator variables in the satisfaction-loyalty link, namely switching costs and attractiveness of alternatives. Switching costs and attractiveness of alternatives are thought to improve the understanding on the dynamics underpinning customer loyalty.

The current research is grounded in the relationship marketing paradigm, which has developed from the 1990s on, as well as in social-psychological theory (Thibaut & Kelley, 1959; Morgan & Hunt, 1994). Relationship marketing refers to all marketing activities directed toward establishing, developing, and maintaining successful relational exchanges (Morgan & Hunt, 1994). However, in the context where the customer is one of the exchange participants in the relationship, a more restricted definition may be used: "relationship marketing concerns attracting, developing, and retaining customer relationships" (Berry & Parasuraman, 1991 in Morgan & Hunt, 1994: 21). Drawn on the social exchange theory, customers stay in a relationship as long as the current offer is more attractive than the combination between attractiveness of alternatives and the cost of switching implied in the exchange process (Thibaut & Kelley, 1959).

At its broadest level, switching costs may be defined as "the onetime costs that customers associate with the process of switching from one provider to another " (Burnham et al., 2003: 110). Additionally, Liu et al. (2005) refer that those costs are continuously being developed and evaluated. In other words, switching costs may be understood as some of the drives that explain why customers stay in a relationship when facing the possibility of switching from one provider to another. Accordingly, switching costs are identified in the marketing literature as a factor that contributes to the continuance of current relationships (Morgan & Hunt, 1994). While Morgan and Hunt (1994) defend that switching costs are economic in nature, Dick and Basu (1994) argue that both monetary expenses and nonmonetary costs are involved in the deliberation process of switching. Consequently, perceived switching costs are consumer perceptions of the time, money, effort and risk associated with changing provider (Ping, 1993; Lam et al. 2004), which Jones et al., (2002) also characterize as sunk costs. Also, Beerli et al. (2004) identify switching search costs and risks as two components of switching costs.

Moreover, while Burnham et al., (2003) state that the economic risk, evaluation, learning and setup costs may be categorized as procedural switching costs, other scholars defend that each of these costs represent a single category (Jones et al., 2000; Jones et al., 2002; Patterson & Smith, 2003). The loss of benefits and other financial privileges gain throughout a continued relationship with the current provider is mentioned in the literature as financial switching costs (Burnham et al., 2003) or continuity costs (Jones et al., 2002). Finally, relational switching costs, as designated by Burnham et al., (2003) consist of personal and brand relationship costs. In addition, attractiveness of
alternatives has been considered in the marketing literature also as a switching barrier (Jones et al., 2000; Colgate & Lang, 2001; Patterson & Smith, 2003). In brief, switching costs can be economical, psychological or emotional in nature (Yang & Peterson, 2004).

Although most of previous research include in switching costs/barriers some components that can be confounded with attractiveness of alternatives, some authors have identified this latter term as a different concept. Attractiveness of alternatives is defined by Jones et al., (2000) as the customers’ perceptions regarding the various alternatives available in the marketplace, distinguishing this concept from interpersonal relationships and switching costs. Ping (1993), within the marketing channel literature, found that a supplier should strive to reduce the attractiveness of alternatives among customers’ perceptions, given that attractiveness of alternatives is positively associated with exiting. Accordingly, drawn upon the exchange social theory, people remain in relationships when apparently no other alternatives exist or as long as the existing alternatives are perceived as less attractive than the current relationship (Thibault & Kelley, 1959; Emerson, 1962).

Different findings on the relationship between switching costs, attractiveness of alternatives and loyalty are found in previous studies. Whilst Yang and Peterson (2004) indicate that the direct effects of switching costs upon customer loyalty are positive but insignificant, the majority of the empirical studies on switching costs find a significant direct effect on customer loyalty (Sharma & Patterson, 2000; Burnham et al., 2003; Beerli et al., 2004; Lam et al., 2004). Also, conceptually switching costs have been regarded as moderators of the satisfaction-link (Fornell, 1992; Oliver, 1999; Lee et al. 2001). Empirically, Sharma and Patterson (2000), find that switching costs act as moderators between satisfaction and customer loyalty, supporting the findings of Hauser et al. (1994) and Anderson & Sullivan (1993). Accordingly, Jones et al. (2000) and Chen & Wang (2009) state that as perceived switching costs increase, the strength of the relationship between satisfaction and loyalty will diminish. These results are nevertheless controversial. According to Yang and Peterson (2004) the moderating effects of switching costs are significant only when the level of satisfaction is above average, finding an opposite pattern with higher switching costs leading to a stronger effect of satisfaction on loyalty. Both Burnham et al. (2003) and Lam et al. (2004) find significant effects of switching costs on customer loyalty but no evidence of moderating effects over the satisfaction-loyalty relationship. On the other hand, the empirical results also support the moderating effect of attractiveness of alternatives on the relationship between satisfaction and customer retention (Jones et al. 2000; Sharma, 2003). For Sharma and Patterson (2000) the impact of satisfaction on commitment is weaker under conditions of high switching costs than under alternative situations, given that results show a stronger moderating effect from switching costs than from attractiveness of alternatives.

Accordingly, as less satisfied customers may not sever the current relationship in a situation of low competitive attractiveness, as alternatives become more attractive costumers will tend to switch provider. In other words, as a
consequence of low perceived attractiveness of alternatives, less satisfied customers are less likely to recommend the current provider to family and friends, suggesting that the effect of satisfaction on loyalty is likely to diminish (Wang, 2009). Thus, as suggested by the marketing literature the link between satisfaction and loyalty may be contingent on the level of switching cost and attractiveness of alternatives.

The European Customer Satisfaction Index in its original form relies solely on customer satisfaction and image as drivers of customer loyalty, however particularly in competitive and repeat-transaction businesses (such as telecommunications, banking, and so forth) a further understanding of the related constructs of customer loyalty has been suggested by recent studies. Accordingly, the modified ECSI model is expected to increase the predictive validity of the ECSI model and identify eventual overestimations of the effects of corporate image and customer satisfaction, consistent with Vilares and Coelho (2003), Ball et al. (2004) and Ball et al. (2006) findings.
3. FRAMEWORK OF SWITCHING COSTS AND ATTRACTIVENESS OF ALTERNATIVES ON CUSTOMER LOYALTY

In order to empirically support the theorized effects of switching costs and attractiveness of alternatives on customer loyalty, a revised model of the European Satisfaction Index is shown in Figure 1. The ovals represent latent variables, which are inferred from a number of manifest variables that are observed directly and measurable through administering the questionnaire. The arrows indicate causal relationships between one construct upon the other (i.e., the effect of image on customer loyalty). While the basic ECSI model includes a group of related variables such as image, customer expectations, perceived quality, perceived value, satisfaction and customer loyalty, the extended model includes eight interrelated latent variables with three exogenous variables: image, switching costs and attractiveness of alternatives. Moreover, introducing the switching costs and attractiveness of alternatives as moderators of the satisfaction-loyalty link, indicates in what extent the effect of satisfaction on customer loyalty is influenced by each of these two constructs. Drawn from customer satisfaction literature (Fornell, 1992; Anderson, 1994), relationship marketing (Morgan & Hunt, 1994) and social exchange theory (Thibaut & Kelley, 1959; Emerson, 1976), the extended model is discussed in further detail.

Figure 1. Conceptual framework

Note: The dotted lines represent moderating effects
As mentioned above, switching costs and attractiveness of alternatives are mostly mentioned in the marketing literature as part of a single construct, i.e., switching barriers. However, as Social Exchange Theory (SET) emphasizes, individuals perceive whether to continue a social relationship based on the attractiveness of the current relationship, the attractiveness of alternatives and by assessing the costs of remaining in the social bond (such as time and effort spent). Accordingly, the success of a relationship is contingent upon an individuals’ evaluation of costs and rewards associated with it. To better understand the dynamics between relationship commitment and switching barriers, an interesting conceptualization is found in the divorce literature. SET was applied for the first time to marital relationships by Levinger (1965). Lewis and Spanier (1982), conceptually frame the success or failure of marriage as a combination of high/low satisfaction and high/low stability. In addition, different levels of attractiveness of alternatives or perceived switching costs may influence marital stability. Therefore, given a scenario in which the attractiveness of the relationship (satisfaction) is low and the switching costs are also low, divorce could be expected as the most likely outcome. However, *ceteris paribus*, if the attractiveness of alternatives decreases as perceived by the spouses then the number of divorces is expected to decrease. Thus, the impact of each construct on stability is far from clear and perceived barriers as a single construct can have little effect on subsequent divorce, given that switching costs and attractiveness of alternatives may impact stability in opposite ways (Knoester & Booth, 2000).

Previous research in the field of relational marketing also present empirical results that support the existence of different effects of switching costs and attractiveness of alternatives on customer loyalty (Sharma & Patterson, 2000; Sharma, 2003; Min & Wan, 2009). Therefore, given that switching costs and attractiveness of alternatives may themselves be different constructs and also produce different impacts on customer loyalty, by adapting SET to the satisfaction index literature the following hypotheses are expected:

\[ H_{1a}: \text{Switching costs and attractiveness of alternatives are different constructs} \]

\[ H_{1b}: \text{Switching costs and attractiveness of alternatives have effects of different size on customer loyalty} \]

Lam *et al.* (2004) describe switching costs as a common strategy used by firm’s to increase customer loyalty in a Business to Business context and, according to Jones and Sasser (1995), high switching costs discourage costumers from changing from a current provider, also leading to a decrease of the intensity of competition. Nevertheless, economists have argued that the impact of switching costs on loyalty can be conditioned by an opposing force, given that competitors build strategies upon incentives to overcome these barriers (Jones *et al.*, 2000; Colgate & Lang, 2001; Yang & Paterson, 2004). A typical example of the incentives for switching service provider in the retail banking sector are the cash premiums given to new customers. Accordingly, switching from one supplier to another will depend on the net utility, which is the result of switching benefits made available by the alternative providers minus switching costs erected by the current one. Reasoning for this may be found by both cost-benefit theory and prospect theory cost (Kahneman & Tversky, 1979).
Empirically, although Yang and Peterson (2004) cannot find a direct effect of switching costs on customer loyalty, which is consistent with Fornell (1992) and Lee et al. (2001), most of the literature indicates a significant direct effect on customer loyalty (Sharma & Patterson, 2000; Burnham et al., 2003; Beerli et al., 2004; Lam et al., 2004, Min & Wan, 2009). Consequently, according to several scholars, as these costs increase customers are more prone to stay with the same supplier (Jones et al., 2000; Hellier et al., 2003). For Burnham et al., (2003) and Sharma (2003) the effect of switching costs on loyalty is larger than the impact of satisfaction. This is also corroborated by Lam et al., (2004) but only towards the patronage dimension of loyalty. Moreover, for some authors customer satisfaction may decrease as switching costs increase (Anderson & Sullivan, 1993; Hauser et al, 1994). Further, Jackson (1985) and Ping (1993) examine not only the impact of switching costs but also the effects of attractiveness of alternatives on relationship behavior. As Ping (1993) conceptualizes the attractiveness of alternatives can be understood as the clients’ estimate of the likely satisfaction available in an alternative relationship. In this sense, when customers are unaware of viable alternatives or do not perceive them as more attractive than the current relationship, they may stay with the same provider, regardless of how satisfied they are (Sharma & Patterson, 2000). Nevertheless, according to Ping (1994) attractiveness of alternatives is positively associated with exiting only at lower levels of satisfaction. For Yim et al., (2007) attractiveness of alternatives have both a negative effect on satisfaction and loyalty, however the effect is only significant on commitment rather than on repatronize and, with the relationship being weaker when self-image congruity with the service is high. On the other hand, several authors find no direct effect between attractiveness of alternatives and loyalty (Jones et al. 2000; Sharma & Patterson, 2000; Sharma, 2003; Min & Wan, 2009). Also the social exchange theory offers support to the idea that people tend to stay in relationships when alternatives are seen as less attractive than the current one (Thibault & Kelley, 1959; Emerson, 1962).

Thus:

$H_{2a}$: Higher switching costs leads to a higher customer loyalty

$H_{2b}$: Lower attractiveness of alternatives leads to a higher customer loyalty

With regard to Morgan & Hunt (1994), relationship commitment develops as a result of direct and mediating variables. However, current research trends have suggest the importance of developing empirical studies towards examining under what conditions the impact of the association between satisfaction and loyalty varies. In fact, both Burnham et al. (2003) and Lam et al. (2004) analyze the interaction effects between switching costs and satisfaction on customer loyalty, but no significant effects were found. Also, Min and Wan (2009) didn’t find a moderating effect between the previous variables nor did they find a moderating effect between attractiveness of alternatives and satisfaction on loyalty. The significant results are nevertheless debatable and present two main streams. On one hand, according to Yang and Peterson (2004) higher switching costs strengthen the effect of satisfaction on loyalty, as long as satisfaction is above average. Moreover, whilst the study indicates an overall lack of a significant
moderating effect for switching costs when combined with satisfaction, this may result from not considering attractiveness of alternatives as a moderating variable. On the other hand, some researchers find a negative effect between perceived switching costs and the strength of the satisfaction-loyalty link with higher switching costs leading to a weaker effect of satisfaction on loyalty (Jones et al. 2000; Chen & Wang, 2009). Also, for Jones et al., (2000) and Sharma (2003), as attractiveness of competing alternatives decrease, the relationship between core-service satisfaction and repurchase intentions will diminish. This second stream is consistent with Sharma and Patterson’s findings (2000) that consider both switching costs and attractiveness of alternatives as moderators of the relationship, with the impact of satisfaction on commitment being weaker under conditions of high switching costs than under alternative situations.

This is accentuated by the proposition that dissatisfied customers tend to resist the dissolution of the relationship, as perceived switching costs of changing to an alternative service provider are increasingly higher than the perceived benefits of switching or in a situation of low competition (Sharma & Patterson, 2000). As a result, many customers might feel “trapped” in a less than satisfying relationship, postponing exiting due to high switching costs or a lack of alternatives in the market (or awareness of such). However, according to Jones and Sasser’s (1995) typology, these customers might be viewed as “hostages” rather than committed loyal and will quickly defect as switching costs decrease or alternatives become available and appealing. Moreover, due to the risk associated towards investing in a new relationship and the difficulty of making a decision, Ping (1993) highlights how a situation of low attractive alternative offerings may turn out be a favorable situation for customers.

In this sense, and considering that the banking sector is highly competitive, it is expected that the impact of satisfaction on loyalty is weaker when switching costs are high and, on the other hand, stronger when perceived attractiveness of alternatives is high. Specifically, it is suggested that:

- **H3a**: The relationship between customer satisfaction and customer loyalty is weaker the higher the switching costs
- **H3b**: The relationship between customer satisfaction and customer loyalty is weaker the lower attractiveness of alternatives
4. **Research methodology**

4.1 **Data collection**

Data was gathered from a survey of retail banking customers applied within the European Customer Satisfaction Index framework and regards the 2007 wave of this study.

The questionnaire used in the 2007 survey queries the overall experience and satisfaction of the participant and includes a set of standard issues regarding the constructs of the original ECSI model (image, expectations, perceived quality, perceived value, customer satisfaction and customer loyalty), plus some specific questions with respect to the new constructs of switching costs and attractiveness of alternatives.

The population of interest is therefore defined as adult consumers (18 years of age or over) who have an overall experience with the banking sector of at least six months and that reside in national territory.

The selection of the respondents meets the criteria defined in the ECSI Technical Committee. The sampling design is based on the random selection of households using random digit dialing (RDD). A resident in each household is then also selected randomly. Moreover, in the banking sector, the potential respondent cannot be a minor, must have a minimal overall experience in the banking sector for at least 6 months and mustn't be an employee of the industry in study. Thus, once considered eligible, the succeeding questions throughout the questionnaire are specific to a particular bank, identified by the respondent as the main provider. Following pre-testing, the survey was conducted resorting to phone interviews supported by CATI to a sample of 1755 bank customers.

Both the base model and the extended model is estimated with the use of Partial Least Squares (PLS) Path Modeling (Tenenhaus et al. 2005). Originally PLS was first established in 1966 by Herman Wold and completed in 1977. PLS is a robust estimation technique which allows the estimation of complex path models, also taking into account measurement errors. PLS is particularly suited for this research, because it is prediction-oriented and tends to maximize the explanatory power of customer loyalty. Additionally, PLS has been the standard estimation method in the framework of the ECSI and in the ACSI (American Customer Satisfaction Index). This option is also due to the nature of the data, given that most of the variables are measured using interval numerical scales with an unknown distribution. As Anderson et al., (2004) state “PLS is an iterative procedure for estimating causal models that does not impose distributional assumptions on the data and that accommodates continuous and categorical variables” (2004: 176).
In particular, recently discussed guidelines for the use of PLS and further techniques to model moderating effects within PLS were considered (Henseler and Fassott, 2006; Henseler et al. 2009). The estimation and data manipulation was done using PLS Graph and SAS System. Both models were estimated based on the whole data set of banking industry.

4.2 Operational measures

All constructs in the proposed model are based on reflective multi-items scales. Indicators of image, expectations, perceived quality, perceived value, customer satisfaction and customer loyalty are analogous to the ones used in the original ECSI model. The original ECSI (European Customer Satisfaction Index) model is well-established as a tool for measuring and explaining customer satisfaction and its antecedents and related constructs (Cassel & Eklof, 2001: 840; Vilares & Coelho, 2005: 321) and has been validated across a number of European countries and many industries, such as insurance, mobile phones, fixed phones, carbonated soft drinks, public transportation, retail banking, cable TV, supermarkets, electricity, petrol stations, postal services, food products and public services (Ball et al., 2006). Scale items for assessing switching costs and attractiveness of alternatives were adapted from prior studies’ validated measures.

Given the conceptualization of switching costs, it is essential that its measure captures various subdimensions of the construct, commonly characterized in the literature as sunk costs. Accordingly, the indicators \( x_{11} \) - “It would take me a lot of time if I changed bank”, \( x_{12} \) - “It would take a lot of money if I changed bank” and \( x_{13} \) - “It would take me a lot of effort if I changed bank” are drawn from Beerli et al., 2004, Lam et. al, 2004 and Jones et al., 2000. Additionally, two indicators, \( x_{14} \) - “I would loose a lot if I switched bank” and \( x_{15} \) - “I would risk having a worse service if I switched bank”, were developed by the combination and modification of switching cost scales of Jones et al., (2000) and Patterson and Smith (2003), representing loss of specialization and risk perception.

As for the construct of attractiveness of alternatives, a two-item scale is used. These indicators were adapted from Jones et.al (2000) four-item scale, and measure perceptions regarding the existence of attractive alternative service providers.

For each item, ten-point numerical scales, starting from 1 meaning the lowest level and 10 the highest level were adopted. Moreover, this scale has been compared with a five-point numerical scale. Globally the results tend to support the choice of a ten-point scale. Additionally, Coelho & Esteves (2007) indicate that no effects of socio-
demographic characteristics are found on the ability of respondents to use each scale. Table 1 presents a detailed list of indicators used in the measurement model.

Table 1. Indicators of the measurement model

<table>
<thead>
<tr>
<th>Latent Variable</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Switching Costs</strong></td>
<td>$x_{11}$ It would take me a lot of time if I changed “bank” (very little to very much)</td>
</tr>
<tr>
<td></td>
<td>$x_{12}$ It would take e a lot of money if I changed “bank” (very little to very much)</td>
</tr>
<tr>
<td></td>
<td>$x_{13}$ It would take me a lot of effort if I changed “bank” (very little to very much)</td>
</tr>
<tr>
<td></td>
<td>$x_{14}$ I would loose a lot if I switched “bank” (very little to very much)</td>
</tr>
<tr>
<td></td>
<td>$x_{15}$ I would risk having a worse service if I switched “bank” (very little to very much)</td>
</tr>
<tr>
<td><strong>Attractiveness of Alternatives</strong></td>
<td>$x_{21}$ If I needed to change “bank”, there are other good “banks” to choose from (reversed - very many to very few)</td>
</tr>
<tr>
<td></td>
<td>$x_{22}$ Compared to this “bank”, there are other “banks” with which I would probably be equally or more satisfied (reversed - very many to very few)</td>
</tr>
<tr>
<td><strong>Image</strong></td>
<td>$x_{31}$ It is a reliable bank relatively to what it says and does (very little to very much)</td>
</tr>
<tr>
<td></td>
<td>$x_{32}$ It is steady and perfectly implanted in the market (very little to very much)</td>
</tr>
<tr>
<td></td>
<td>$x_{33}$ It contributes positively for the society (very little to very much)</td>
</tr>
<tr>
<td></td>
<td>$x_{34}$ It is worried about its customers (very little to very much)</td>
</tr>
<tr>
<td></td>
<td>$x_{35}$ It is innovative and capsized for the future (very little to very much)</td>
</tr>
<tr>
<td><strong>Expectations</strong></td>
<td>$y_{11}$ Expectations relatively to the global quality of “your bank” (very low to very high)</td>
</tr>
<tr>
<td></td>
<td>$y_{12}$ Expectations on the capacity of the bank to offer to products and services that satisfy the necessities of the customers (very low to very high)</td>
</tr>
<tr>
<td></td>
<td>$y_{13}$ Expectations relatively the reliability (very low to very high)</td>
</tr>
<tr>
<td><strong>Quality</strong></td>
<td>$y_{21}$ Quality of products and services (very low to very high)</td>
</tr>
<tr>
<td></td>
<td>$y_{22}$ Reliability of products and services (very low to very high)</td>
</tr>
<tr>
<td></td>
<td>$y_{23}$ Diversity of products and services (very low to very high)</td>
</tr>
<tr>
<td></td>
<td>$y_{24}$ Clearness and transparency of information provided (very low to very high)</td>
</tr>
<tr>
<td></td>
<td>$y_{25}$ Global quality of the bank (very low to very high)</td>
</tr>
<tr>
<td><strong>Value</strong></td>
<td>$y_{31}$ Evaluation of price given quality (very low to very high)</td>
</tr>
<tr>
<td></td>
<td>$y_{32}$ Evaluation of quality given price (very low to very high)</td>
</tr>
<tr>
<td><strong>Satisfaction</strong></td>
<td>$y_{41}$ Overall satisfaction (very dissatisfied to very satisfied)</td>
</tr>
<tr>
<td></td>
<td>$y_{42}$ Fulfillment of expectations (falls short of expectations to exceeds expectations)</td>
</tr>
<tr>
<td></td>
<td>$y_{43}$ Distance to an ideal bank (very far from the ideal to very close to the ideal)</td>
</tr>
<tr>
<td><strong>Loyalty</strong></td>
<td>$y_{61}$ Probability to choose “my bank” again when buying a new product or service (very unlikely to very likely)</td>
</tr>
<tr>
<td></td>
<td>$y_{62}$ Probability to recommend “my bank” to a friend or a colleague (very unlikely to very likely)</td>
</tr>
</tbody>
</table>
5. Results

5.1 Descriptive analysis

The following descriptive analysis is based on a sample of bank customers, in which approximately 53.3% of the respondents are females. These customers spread over all age classes and show similar structure in each category range: 25.9% are less than 30 years old; 27.2% between 30 and 39 years; 21.9% between 40 and 49 years and 25.0% are 50 years or older. With respect to the socio-professional profile of the respondents, approximately 70% are employed, in which nearly 80% are employees, against 14.2% of independent professionals and 6.8% of employers. Of the remaining 30% of respondents that aren’t employed, 10.6% are retired, 7.1% unemployed, 6.8% are students and 4.7% housewives. Regarding the educational level, 46.8% have only basic education (9 or less years); 24.6% have secondary education (between 10 and 12 years) and 28.5% have at least a bachelor degree. Moreover, the characteristics of these respondents were similar to the profile presented in other waves of the ECSI applied to the banking sector.

Given this, the means and standard deviations of the original variables can be observed in Table 2. The highest means are found in image indicators, followed by the perceived quality indicators. On the other side, the lowest means can be observed in the attractiveness of alternatives construct. In fact, the lowest mean of the indicator variables is 4.50 ($x_{21}$ – “If needed to change “bank”, there are other good “banks” with which I would probably be equally or more satisfied” – reversed) and consists of an indicator of attractiveness of alternatives. The highest mean is 8.52 ($x_{32}$ – “It is steady and perfectly implanted in the market”), and indicator of the image construct. The means for several of the measures are two scale points or more to the right of the centre of the scale suggesting a left skewed distribution.

On what standard deviations are concerned, the lowest value found was of 1.53 ($x_{32}$ – “It is steady and perfectly implanted in the market”) and the highest was 2.84 ($x_{13}$ – “It would take me a lot of effort if I changed “bank”) for the switching cost construct. The switching costs indicators are the ones that globally show highest standard deviations and the expectations and perceived quality constructs the ones with less variability.
Table 2. Means, standard deviations and standardized loadings of manifest variables

<table>
<thead>
<tr>
<th>Construct</th>
<th>Indicators</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switching Costs</td>
<td>x11</td>
<td>6.15</td>
<td>2.67</td>
<td>0.75**</td>
</tr>
<tr>
<td></td>
<td>x12</td>
<td>4.59</td>
<td>2.73</td>
<td>0.70**</td>
</tr>
<tr>
<td></td>
<td>x13</td>
<td>5.88</td>
<td>2.84</td>
<td>0.84**</td>
</tr>
<tr>
<td></td>
<td>x14</td>
<td>5.17</td>
<td>2.82</td>
<td>0.79**</td>
</tr>
<tr>
<td></td>
<td>x15</td>
<td>6.22</td>
<td>2.64</td>
<td>0.72**</td>
</tr>
<tr>
<td>Attractiveness of</td>
<td>x21</td>
<td>4.50</td>
<td>2.28</td>
<td>0.74**</td>
</tr>
<tr>
<td>alternatives</td>
<td>x22</td>
<td>4.88</td>
<td>2.35</td>
<td>0.97**</td>
</tr>
<tr>
<td></td>
<td>x31</td>
<td>8.10</td>
<td>1.70</td>
<td>0.83**</td>
</tr>
<tr>
<td></td>
<td>x32</td>
<td>8.52</td>
<td>1.53</td>
<td>0.73**</td>
</tr>
<tr>
<td></td>
<td>x33</td>
<td>7.59</td>
<td>1.93</td>
<td>0.80**</td>
</tr>
<tr>
<td></td>
<td>x34</td>
<td>7.72</td>
<td>1.98</td>
<td>0.85**</td>
</tr>
<tr>
<td></td>
<td>x35</td>
<td>7.94</td>
<td>1.72</td>
<td>0.83**</td>
</tr>
<tr>
<td>Image</td>
<td>y11</td>
<td>7.49</td>
<td>1.61</td>
<td>0.83**</td>
</tr>
<tr>
<td></td>
<td>y12</td>
<td>7.46</td>
<td>1.68</td>
<td>0.85**</td>
</tr>
<tr>
<td></td>
<td>y13</td>
<td>7.52</td>
<td>1.72</td>
<td>0.75**</td>
</tr>
<tr>
<td></td>
<td>y21</td>
<td>7.60</td>
<td>1.76</td>
<td>0.84**</td>
</tr>
<tr>
<td></td>
<td>y22</td>
<td>8.11</td>
<td>1.85</td>
<td>0.79**</td>
</tr>
<tr>
<td></td>
<td>y23</td>
<td>7.89</td>
<td>1.85</td>
<td>0.81**</td>
</tr>
<tr>
<td></td>
<td>y24</td>
<td>7.66</td>
<td>1.83</td>
<td>0.81**</td>
</tr>
<tr>
<td></td>
<td>y25</td>
<td>7.93</td>
<td>1.58</td>
<td>0.85**</td>
</tr>
<tr>
<td>Expectations</td>
<td>y31</td>
<td>5.74</td>
<td>2.15</td>
<td>0.90**</td>
</tr>
<tr>
<td></td>
<td>y32</td>
<td>6.56</td>
<td>1.89</td>
<td>0.93**</td>
</tr>
<tr>
<td></td>
<td>y41</td>
<td>7.84</td>
<td>1.64</td>
<td>0.86**</td>
</tr>
<tr>
<td></td>
<td>y42</td>
<td>7.32</td>
<td>1.78</td>
<td>0.87**</td>
</tr>
<tr>
<td></td>
<td>y43</td>
<td>6.95</td>
<td>2.03</td>
<td>0.85**</td>
</tr>
<tr>
<td>Perceived quality</td>
<td>y51</td>
<td>7.51</td>
<td>2.62</td>
<td>0.93**</td>
</tr>
<tr>
<td></td>
<td>y52</td>
<td>7.63</td>
<td>2.39</td>
<td>0.94**</td>
</tr>
<tr>
<td>Perceived value</td>
<td>y51</td>
<td>7.51</td>
<td>2.62</td>
<td>0.93**</td>
</tr>
<tr>
<td></td>
<td>y52</td>
<td>7.63</td>
<td>2.39</td>
<td>0.94**</td>
</tr>
</tbody>
</table>

**: significant at <0.01 level (two-tailed test)

5.2 Exploratory factor analysis

Exploratory factor analysis was conducted to assess the underlying factor structure of the scale items of switching costs and attractiveness of alternatives (Table 3). A common factor analysis with Varimax rotation was undertaken for the seven items in the retail banking survey. Evaluation of the Eigenvalues and screeplot indicated a two-factor solution, with all variables loading more than the cut-off of 0.5 (Hair et al., 1995). Tests suggested that the overall factor solution adequately accounted for the underlying structure of the data (Bartlett’s Test of Sphericity p-value =0.000, KMO statistic=0.713). The first factor relates to psychological and economical costs associated with potentially switching banks, and encompasses monetary and non-monetary losses, but also comprises time, risk and
effort. In light of this it was named “switching costs” as it relates with the costs incurred when a customer perceives switching from a current supplier to another. It is important to note, however, that $x_{15} – \text{“I would risk having a worse service if I switched bank”}$ was withdrawn from the estimated model in order to guarantee a higher reliability of the Switching Cost Construct. Moreover, factor analysis results didn’t suggest any further decomposition of factor 1 into different switching costs constructs, as additional factors reveal very low eigenvalues. This constitutes an important result, tending to suggest that although encompassing indicators associated with several types of costs, switching costs seems to be a single construct.

The second factor was labeled “attractiveness of alternatives”, given that the associated items regard customers’ perceptions towards viable alternative providers.

### Table 3. Factor analysis loadings

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>$x_{11}$</td>
<td>0.65</td>
<td>-0.06</td>
</tr>
<tr>
<td>$x_{12}$</td>
<td>0.67</td>
<td>-0.06</td>
</tr>
<tr>
<td>$x_{13}$</td>
<td>0.73</td>
<td>-0.03</td>
</tr>
<tr>
<td>$x_{14}$</td>
<td>0.69</td>
<td>0.14</td>
</tr>
<tr>
<td>$x_{15}$</td>
<td>0.52</td>
<td>0.16</td>
</tr>
<tr>
<td>$x_{21}$</td>
<td>-0.01</td>
<td>0.65</td>
</tr>
<tr>
<td>$x_{22}$</td>
<td>0.06</td>
<td>0.68</td>
</tr>
</tbody>
</table>

### 5.3 Measurement reliability and validity

The reliability and internal validity of the measurement model was accessed by calculating the Cronbach’s Alphas, composite reliability and average variance extracted (AVE) as shown in table 4. As observed, all of the values concerning Cronbach’s Alpha (Cronbach, 1951), exceed the threshold of 0.7 recommended by Nunnally and Bernstein (1994), varying from the lowest value of 0.72 for the Attractiveness of Alternatives construct, to 0.88, relative to Perceived quality. On what the composite reliability is concerned, every single value is equal or above 0.85, assuring a high internal consistency of indicators measuring each construct and confirming construct reliability. With regard to the average variance extracted (AVE), only one value is marginally below 0.6 (Fornell & Larcker, 1981) with the rest being significantly higher, implying that the variance captured by each construct is significantly larger than the variance associated with measurement error. This gives support to infer that the constructs are characterized by a high convergent validity. To test this result, the values for the standardized loading of the indicators were computed and Bootstrap t-statistics calculated (Anderson & Gerbing, 1988). As shown in table 2, all
values exceed 0.7, and are statistically significant at a 1% significance level, thus sustaining a high convergent validity of the measurement model. Furthermore, Table 4 also emphasizes the explanatory power of the structural equations concerning each of the endogenous latent variables (through $R^2$ statistics) in the extended model. The explanatory power for loyalty is higher in the extended model when compared with the basic model, representing an increase of 0.031 points. Globally, results indicate that in addition to the antecedents already in the basic model, attractiveness of alternatives and switching costs still add some explanatory power to customer loyalty.

The values for $R^2$ vary between 0.38 for perceived value and 0.72 for satisfaction. As expected, results show a good explanatory power for the key construct of the ECSI model, satisfaction, as for loyalty, thus providing a good support for the nomological validity of the proposed model.

In table 5, the discriminant validity of the constructs is assessed. Hence, how each construct shares variance with its own measurement and with other constructs is shown (Fornell & Larckel, 1981). As observed, without exception, all square roots of AVE (main diagonal values, highlighted in boldface) exceed the cross correlations between all other constructs, thus giving further assurance of the validity of the latent variables. Note that this is particularly true for switching costs and attractiveness of alternatives constructs. Therefore, results regarding convergent and discriminant validity of switching costs and attractiveness of alternatives fully support hypothesis $H_{1a}$.

**Table 4. Reliability and validity measures**

<table>
<thead>
<tr>
<th>Latent Variables</th>
<th>Cronbachs Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance extracted</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switching Costs</td>
<td>0.78</td>
<td>0.85</td>
<td>0.59</td>
<td>-</td>
</tr>
<tr>
<td>Atractiveness of alternatives</td>
<td>0.72</td>
<td>0.85</td>
<td>0.75</td>
<td>-</td>
</tr>
<tr>
<td>Image</td>
<td>0.87</td>
<td>0.90</td>
<td>0.66</td>
<td>-</td>
</tr>
<tr>
<td>Expectations</td>
<td>0.74</td>
<td>0.85</td>
<td>0.66</td>
<td>0.45</td>
</tr>
<tr>
<td>Perceived quality</td>
<td>0.88</td>
<td>0.91</td>
<td>0.67</td>
<td>0.46</td>
</tr>
<tr>
<td>Perceived value</td>
<td>0.82</td>
<td>0.92</td>
<td>0.84</td>
<td>0.38</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>0.82</td>
<td>0.90</td>
<td>0.74</td>
<td>0.72</td>
</tr>
<tr>
<td>Loyalty</td>
<td>0.86</td>
<td>0.94</td>
<td>0.88</td>
<td>0.64</td>
</tr>
</tbody>
</table>
Table 5. Correlations between latent variables and square roots of average variance extracted

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Switching costs</td>
<td>0.77</td>
<td>0.07</td>
<td>0.31</td>
<td>0.28</td>
<td>0.32</td>
<td>0.29</td>
<td>0.38</td>
<td>0.37</td>
</tr>
<tr>
<td>Attractiveness of alternatives</td>
<td>0.86</td>
<td>0.10</td>
<td>0.07</td>
<td>0.11</td>
<td>0.13</td>
<td>0.17</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>Image</td>
<td>0.81</td>
<td>0.67</td>
<td>0.81</td>
<td>0.54</td>
<td>0.78</td>
<td>0.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expectations</td>
<td>0.81</td>
<td>0.69</td>
<td>0.49</td>
<td>0.62</td>
<td>0.52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td>0.82</td>
<td></td>
<td>0.60</td>
<td>0.81</td>
<td>0.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td>0.92</td>
<td></td>
<td>0.61</td>
<td>0.57</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.86</td>
<td>0.78</td>
<td>0.94</td>
</tr>
<tr>
<td>Loyalty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Numbers shown in boldface denote the square root of the average variance extracted.

Figure 2 shows the estimates of path coefficients of the proposed model and respective statistical significances. With respect to the focal construct (loyalty), values range between -0.07 (satisfaction * attractiveness of alternatives) and 0.58 (satisfaction) all being statistically significant at a 0.01 significance level for a two-tailed test. The cross analysis between the empirical findings and the hypothesis formulated above are presented as follows:

**H2a: Higher switching costs lead to a higher customer loyalty**

The path coefficient for the direct effect of switching costs is of 0.09 and is statistically significant, hence validating the hypothesis.

**H2b: Lower attractiveness of alternatives leads to a higher customer loyalty**

The value for the path coefficient is 0.14 and is statistically significant; note however that since the scale is reversed the sign is positive instead of negative, confirming the hypothesis above.

**H3a: The relationship between customer satisfaction and customer loyalty is weaker the higher the switching costs**

The estimated coefficient is of -0.06 and is statistically significant. Hence, there is a moderating effect with the hypothesized sign of switching costs on the relationship between customer loyalty and customer satisfaction.

**H3b: The relationship between customer satisfaction and customer loyalty is weaker the lower the attractiveness of alternatives**

The path coefficient for the moderator effect of Attractiveness of alternatives on the relationship between satisfaction and customer loyalty is given by -0.07 and is statistically significant thus providing empirical support to the hypothesis.
H1b: The effects of switching costs and attractiveness of alternatives are different

The test to this hypothesis is formally equivalent to test that the two path coefficients switching costs-loyalty ($\beta_1$) and attractiveness of alternatives-loyalty ($\beta_2$) are equal. When we test $H_0: \beta_1 = \beta_2$ the null hypothesis is rejected at a 0.01 significance level, thus supporting the existence of different effects. Note that we estimate a stronger effect from attractiveness of alternatives than from switching costs, although the moderating effects are similar in size.

Figure 2. Structural model path coefficients and significances

In table 6 we can find the direct, total and effect sizes of the original constructs and interaction terms on customer loyalty. The effect sizes evaluate the predictive importance of each determinant in the structural equation. From all the constructs, satisfaction is the one that has the highest total impact i.e. 0.58 and, the most relevant predictor of customer loyalty. This is an interesting result showing that customer satisfaction plays an important role in explaining customer loyalty, with an effect that is larger than the joint effects of switching costs and attractiveness of alternatives. This contradicts some previous research that has found switching costs to be a more significant predictor than satisfaction (Burnham et. al, 2003; Sharma, 2003; Lam et al., 2004). The construct Image is the one with the second highest total impact (0.49) but the direct effect is only of 0.15. This is due to the fact that the construct Image manifests itself mainly through its indirect impact through customer satisfaction (direct effect of
The interaction effects satisfaction*switching costs and satisfaction*attractiveness of alternatives are of -0.06 and -0.07 respectively. These effects reveal the fact that although customer satisfaction has the highest effect on customer loyalty, this effect is contingent on the levels of satisfaction, switching costs and attractiveness of alternatives. If both switching costs are high and attractiveness of alternatives low the combined effect of increasing customer satisfaction will be significantly smaller. Note that if both switching costs and attractiveness of alternatives are two standard deviations above mean the effect of increasing customer satisfaction one standard deviation on loyalty is as low as 0.32. On the other hand, considering situations of low switching costs and high attractiveness of alternatives an increase in customer satisfaction may have a significantly larger effect on customer loyalty. If both constructs are two standard deviations below mean the same effect of increasing customer satisfaction will reach 0.84. Using the same reasoning, it is easy to conclude that changes in switching costs and attractiveness of alternatives will have larger effect on loyalty when customer satisfaction is low.

Table 6. Direct, total and size of effects on loyalty

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Direct</th>
<th>Total</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switching costs</td>
<td>0.09</td>
<td>0.09</td>
<td>0.02</td>
</tr>
<tr>
<td>Attractiveness of alternatives</td>
<td>0.14</td>
<td>0.14</td>
<td>0.05</td>
</tr>
<tr>
<td>Image</td>
<td>0.15</td>
<td>0.49</td>
<td>0.02</td>
</tr>
<tr>
<td>Expectations</td>
<td>-</td>
<td>0.24</td>
<td>-</td>
</tr>
<tr>
<td>Quality</td>
<td>-</td>
<td>0.31</td>
<td>-</td>
</tr>
<tr>
<td>Value</td>
<td>-</td>
<td>0.09</td>
<td>-</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>0.58</td>
<td>0.58</td>
<td>0.40</td>
</tr>
<tr>
<td>Satisfaction x switching costs</td>
<td>-0.06</td>
<td>-0.06</td>
<td>0.01</td>
</tr>
<tr>
<td>Satisfaction x attractiveness of alternatives</td>
<td>-0.07</td>
<td>-0.07</td>
<td>0.01</td>
</tr>
</tbody>
</table>

a Effect size measures the relevance of each predictor of a dependent latent variable and is based on the relationship of determination coefficients when including or excluding a particular predictor from the structural equation.
6. Discussion and Conclusions

Marketing researchers have increasingly recognized that the relationship between customer satisfaction and customer loyalty is not well-specified and remains to be further investigated. The linear relationship between satisfaction and loyalty although supported by several authors (Fornell et al., 1996) has been questioned (Dick & Basu, 1994; Jones & Sasser, 1995; Anderson & Mittal, 2000). In fact, several authors have emphasized the need to extend existing theories of behavioral intentions to incorporate contingency relationships (Jones et al., 2000; Sharma & Patterson, 2000; Walsh et al., 2008).

The current study proposes and tests a conceptual framework that results of an extension of the ECSI model in order to account for switching costs and attractiveness of alternatives in an integrated approach. In contrast with previous studies, which focus solely on direct and mediating variables, this study focuses on both direct and moderating effects of switching costs and attractiveness of alternatives on customer loyalty in the context of the retail banking sector. Moreover, rather than theorizing switching costs and attractiveness of alternatives as part of a single construct, commonly termed as switching barriers in previous research in the marketing literature, the proposed model suggests that both concepts are different constructs with different associated impacts.

The results indicate that switching costs and attractiveness of alternatives should be analytically treated as separate constructs as the coefficient estimates for both constructs within the proposed model, were statistically significant and also statistically different. The findings also suggest that both constructs influence loyalty directly, as loyalty increases with the increase of switching costs and loyalty increases with the decrease of attractiveness of alternatives, with the effect of attractiveness of alternatives being somehow stronger than the one originated by switching costs. Finally, as moderator variables, the empirical findings give support to the existence of both constructs as moderators with similar size effects. The strength of the satisfaction-loyalty relationship decreases with the increase of switching costs and with the decrease of attractiveness of alternatives.

The results of this study hold therefore implications for both theory and practice. In terms of theory the results add to the body of marketing literature, allowing a better understanding of the joint effects of several relational variables on customer loyalty. It also contributes to clarify some disputed results about the process through which switching cost and attractiveness of alternatives contribute to generate customer loyalty. Moreover, the empirical evidence supports the additional validity of the ECSI model by introducing these new constructs. In particular, the introduction of the new constructs reduces significantly the estimated effect from satisfaction on loyalty, but introduces no reduction on the effect from image on loyalty. This shows that previous studies by not explicitly considering switching costs and attractiveness of alternatives may have overestimated the importance of some relational variables, particularly the role of customer satisfaction in explaining customer loyalty. Although not hypothesized by theory, the effect of switching costs and attractiveness of alternatives on the image-loyalty relationship was also tested as inspired by
Yim et al. (2007) study, but no significant effect was found. The last conclusions may mean that the effect of image on loyalty is more attitudinal/affective and less affected by calculative evaluations.

From a managerial point of view, the inclusion of switching costs and attractiveness of alternatives in the European Satisfaction Index Model is of crucial importance. The results add value to the existing body of knowledge and may enable managers to develop effective customer retention strategies regarding switching costs, attractiveness of alternatives and satisfaction:

- Firstly, the findings suggest that creating switching costs may not be enough to retain customers if alternatives are perceived as attractive. In fact, the impact of attractiveness of alternatives on loyalty is higher than the one originated by switching costs;
- In the presence of high switching costs or low attractiveness of alternatives increasing customer satisfaction may have a weak effect on customer loyalty, indicating that strategies to increase switching costs may be more effective. In particular, in the presence of low attractiveness of alternatives, increasing switching costs may be a more effective strategy than investing in customer satisfaction;
- On the other hand, in the presence of high attractiveness of alternatives and low switching costs, suppliers should invest in satisfying their customers since the effect is maximum.

Failure to acknowledge these direct and multiplicative interaction effects may lead firm managers to neglect the conditions in which the satisfaction-loyalty relationship and loyalty itself is affected, leading to misallocations of customer retention resources. Moreover, this dissertation contributes to the marketing literature by empirically supporting Reichheld’s (1996) notion of “satisfaction trap”, a metaphor for a firm’s myopic belief that customer satisfaction is the only manageable tool towards enhancing customer loyalty. Managers should assess the individual client relationship to understand how various factors relate to customer loyalty in order to deal appropriately with their clients.
7. LIMITATIONS

Some limitations of this dissertation are worth noting. The findings are specific of the banking industry. It would be interesting to apply this extended proposed model in other industries and countries, given that the relative importance of switching costs and attractiveness may depend on the level of regulation and competitiveness of the market, as suggested by Jones and Sausser (1995) and Lee et al. (2001). It would be equally interesting to introduce other possible variables in the relationship between loyalty and its determinants such as consumer relationship proneness and trust. According to Bansal et al. (2005), a favorable attitude towards switching may act as a mooring effect or in other words as a moderator between loyalty and its determinants. Therefore, including a variable capable of reflecting a personal tendency to engage in relationships could enable a better understanding of the motivations that entice customers to stay with the same provider (Odekerken-Schröder et al., 2001). Also, the effects of trust have been well-conceptualized and well-researched in the marketing literature emphasizing the role of trust in increasing the predictive power of customer loyalty (Morgan and Hunt, 1994; Sharma and Patterson, 2000; Ball et al. 2006). In short, as adapted from the migration literature, a conceptual model that combines push variables such as trust, pull variables such as attractiveness of alternatives and mooring variables such as relationship proneness could help to explain customer loyalty (Bansal et al., 2005).

Furthermore, the lack of a longitudinal structure in the data prevents this study from analyzing and testing some dynamic interactions between the variables of interest and also certain environmental variables that could enrich the analysis and render conclusions more robust to changes in setting. Hence, given that the satisfaction index is a barometer that is estimated on a yearly basis, it would be interesting to analyze potential chronological effects in the findings. Also as a future recommendation and, in order to overcome the limitations associated with analyzing solely behavioral intention, a in-depth study of effective behavior concerning switching bank and consumer’s capability to identify market alternatives is highly suggested.
8. REFERENCES


