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Banking Competition, Switching Costs and Customer Vulnerability

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Abstract

The aim of this paper is to analyze the impact of the emotional factors on the decision taken by current account holders to switch from their own principal bank. For this purpose we use some survey data which enlighten the banking-customer relationship. The questionnaire is composed of two parts: the first one consists of a psychometric test aiming on investigating the individuals' behavioural attitude; the second one includes some questions on the economic determinants of the bank choice. Cross-tabulations and multiple regression analysis are performed in order to find a relation between the psychology of each interviewee and the acquired economic information on the duration of the deposit.

We find that factors affecting the fiduciary relations with intermediaries and banking location seem to be relevant in explaining the choice not to switch to another bank. Another interesting result is that the customers who declare themselves unsatisfied with their own bank don't search for better banking services. This appears more evident when customers have a pessimistic attitude. The above results imply that when consumers are characterized by relevant switching costs and are pessimistic, the banking strategy to set prices lower or higher than competitors is not effective in inducing customers to change bank.

Key words: Depository institutions, switching costs, psychology

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1. Introduction

The aim of this paper is to analyze customer behaviour in the decision of whether or not to switch banks, that is, to move away from the bank where the customer first opened an account.

The analysis of the degree of customer mobility and the factors causing this migration process is important if we consider the implications for the competitiveness of the banking market.

The economic literature on switching costs highlights the role that switching costs may play in the ability of a bank to attract new customers and prevent the loss of already acquired customers, with the consequent gain in its market power.

In accordance with the behavioural finance approach, we assume that another factor relevant to the decision to change banks and therefore indirectly to the market share of the single bank is that of the subjective evaluation of switching costs.

Each subject gives a different weight to switching costs according to his own personal degree of risk aversion.

This paper is the first to carry out microeconometrics analysis on individual current-account holder behaviour and to evaluate the impact of emotional factors, measured by means of an indicator, on the customer's decision to change his/her own principal bank.[1]

The data was collected through a questionnaire based on the bank-customer relationship. It is subdivided into two parts and it was administered to a sample of individual current-account holders. The first part consists of a psychometric test whose aim is to measure the customer's dispositional state.

The aim of the second one part was to collect data in order to identify the length of the bank-customer relationship and the reasons, other than emotional factors, that are relevant to the decision to switch banks.

We then connected the psychological aspect with the economic aspect.

The methodology consists of cross-tabulations and multiple regressions. The four regression models estimate the connection between the length of the customer's relationship with his own principal bank and socio-economic variables, geographic variables (bank location), fees and switching costs.

[1] Dalla Pellegrina and Masciandaro (2006) carried out an empirical analysis on the banking customer migration effect. The paper takes into account both the traditional approach of economic analysis and the new behavioural finance approach. However the results are not relevant because of the unavailability of micro data.
Kiser (2002) examined the decision to change banks by using the data collected in a questionnaire administered to families of bank savers. The analysis however takes no account of emotional factors that may influence families' decision-making.

The possible relation between the customer's dispositional attitude and the weight given to the switching costs was then examined through a regression analysis.

The paper is organized as follows. In the second section the economic theory on switching costs is explained. It is based on the individual rationality assumption. The third section introduces the irrationality hypothesis which later explains the results achieved with the questionnaire. The fourth section puts forward the methodology used for the sample choice and the analysis carried out. The results are presented in the fifth section. Finally in the last section the conclusion is presented.

2. Switching costs and market power: the economic analysis

The economic theory on switching costs, that Klemperer (1987a, b, c; 1989; 1995) developed in depth, pointed out that such costs affect the choices made by economic agents, distorting the competition level and increasing each individual firm's market power.[2]

In a market with switching costs the customer's decision to change firms is based on cost-benefit analysis. He decides to switch between different firms if the benefit gained as a result of the move is high enough to compensate the relative cost.

So the firms face a trade off: to cut prices, increasing their own market share or to fleece the customers already 'captured'. Given a time horizon of two periods the strategy adopted by each individual firm will depend on the market share controlled at time zero.[3]

In many markets consumers face switching costs when they change firms. In the specific banking market, which is characterized by asymmetric information, it is easier to find switching costs.

There may be '*transaction costs*' in closing an account with one bank and opening another with a competitor (direct costs). Similarly, the banking customer sustains indirect costs (which will be defined '*learning costs*' in the empirical analysis) determined by the interruption of the relationship of trust between banking intermediary and banking customer. This relationship might be influenced by personal acquaintance with the operator or knowledge through others.

Kim et al. (2003) estimated the impact and the relevance of switching costs in the banking market making use of aggregate data. The basic theoretical model created by the authors is useful to describe part of the decision making process that our interviewees went through.

We assume that there are a lot of firms and in every period each customer has to decide whether to switch between firms or to remain with the same firm from which he has previously bought. This

[2] Assuming that firms charge the same price in every period and that the customers' future tastes are uncertain, Von Weizsäcker (1984) obtains results opposed to those of Klemperer (1987b).
[3] Beggs and Klemperer (1992) studied the strategic behaviour adopted by firms in a dynamic context.

choice depends on the future expected prices fixed by one's own firm and by the competitors, to which will be added the switching cost.

The customer will decide to change banks if the difference in the fees of the two firms is (we assume that there are only two firms: one's own firm and the competitor) high enough to compensate switching costs.

In the econometric analysis we define as switching costs the learning costs and the transaction costs. The fees are the contractual terms.

The probability that a customer will switch to a different bank therefore decreases when switching costs increase and rises when fees fall. In other words it is directly linked to the advantageousness of contractual terms. The duration of the bank-customer relationship can however be expected to depend on other factors apart from switching costs and fees, such as the location of the bank and the kind of service offered.[4].

3. Mobility and customer vulnerability

The traditional economic analysis theory on switching costs assumes the rationality of the customer. Nevertheless the new behavioural finance approach has shown that the individual's decision-making process seems to have little or nothing to do with rationality.[5]

Behavioural finance is an alternative approach to traditional financial theory. It suggests that the classical expected utility theory, which assumes that agents are rational, have well-behaved preferences and maximize the expected utility, is not very realistic. A new expected utility theory has therefore been put forward, the so-called *Prospect Theory*. This theory developed when two psychologists, Kahneman and Tversky (1974, 1979, 1984, 1991), observed that in a state of uncertainty a subject who has to take a decision, resorts not to rationality but to mental short-cuts, so-called heuristics.

In particular they showed that in a state of uncertainty, people made different choices according to whether the risky gamble consists of a probability of gains or a probability of losses.

In other words, this is unlike the traditional expected utility theory which argues that an agent faced with two "lotteries" of equal expected value chooses one lottery or the other indifferently; here the authors find the agents' choice differs depending on whether the two alternatives with equal expected value entail the possibility of gaining or the risk of losing. In the first case they will prove risk adverse, i.e. given two alternatives with equal expected value, of which one is certain to

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[4] See, for example, Gondat, Larralde and Nier (2004); Kiser (2002).
[5] See Barone (2003) for a review essay.

return a profit and the other is uncertain but may possibly give a better return, individuals generally choose the first option.

On the other hand, in the second case the player can choose between two alternatives of equal expected value but of which one is associated with a sure loss and the other is uncertain but runs the risk of a greater loss. In this case the second alternative will be chosen. Therefore in a losing situation the agent will show an attitude of risk propensity.

The degree of aversion or propensity to risk will depend on the subject's pessimistic or optimistic nature. In general optimists tend to overestimate the probability of gaining and to underestimate the probability of losing (Anolli, 2005).

Prospect Theory can be used to explain two effects that violate standard decision-making theory: *sunk cost* and *endowment effect*.

The *sunk cost* effect, demonstrated by Arkes and Blumer (1985), concerns individuals' tendency to base their decisions on what has been chosen in the past.

According to the *endowment effect,* individuals prefer to remain in the position they are in, even though they are aware that a change would bring improvements. This applies even more if the subject has a pessimistic attitude to life.

The pessimist remains a prisoner of the sense of distrust that assails him/her, adopting an attitude of surrender and resignation which leads him/her to remain anchored to the familiar existing situation and to reject any change. The optimist, on the other hand, is more open to the new and is able to capture the positive aspect of uncertainty, seeing the obstacles that arise throughout the decision-making process as challenges and taking the opportunities that the surroundings offer[6].

In view of this, in order to estimate the weight emotional factors can have in an individual's decision on whether or not to change his/her principle bank, the indicator of the single customer's degree of emotivity that we have identified in this paper is the level of optimism or pessimism characterising his/her personality.

This indicator was assessed by using the Lot-R test produced by Scheier *et al*. (1994).[7]

4. Sampling Methodology

The sample used to carry out the field study in the area of operation of the bank that gave us access to its customer data bank was constructed following the same method adopted by ISTAT to analyse Italian family structure and attitudes (ISTAT, 1985).

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[6] Seligman (1990).

[7] This test was initially produced in 1985 by Scheier and Carver and then refined in 1994 by Scheier et al.

The sample extracted was defined ‘complex’: it was in fact a two-stage probabilistic sample with stratification of the first stage units.[8]

More specifically, the units in the first stage (UPS) are made up of the municipalities in the area where the bank operates, while those in the second stage (USS) are made up of single customers that have opened an account with the bank. After this initial clarification, let us look more closely at the stratification procedure used for the primary units; as we know, the aim of stratification is to form groups of statistical units characterised by:

- maximum homogeneity of the characters sought within the strata;
- maximum difference in behaviour of the characters between the different strata.

In statistical terms, achieving this objective implies gaining precision in the estimates, i.e. a reduction of sample error, numbers being equal.

From this viewpoint, the stratification was done by the concatenation of the following characters:

1. Geographical division:
    - lower Salento (branches of Casarano, Minervino, Santa Cesarea, Alliste, Leuca, Tricase, Melissano, Racale, Ruffano, Supersano, Taurisano, Corsano, Taviano, Ugento, Poggiardo, Matino and Uggiano)
    - mid Salento (branches of Collepasso, Tuglie, Alezio, Parabita, Maglie, Melendugno, Carpignano, Aradeo, Neviano, Gallipoli, Otranto, Martano, Martignano, Cannole, Nardò, Galatina, Soleto and Galatone)
    - upper Salento (branches of Guagnano, Lizzanello, Veglie, Campi Salentina, Cavallino, Copertino, Surbo, Lecce, Leverano, San Donato, Vernole)
    - Brindisi--Taranto (branches of Ceglie, San Pancrazio, Manduria, Villacastelli, Brindisi, Torre S. Susanna, Taranto, San Vito dei Normanni, Fasano, Avetrana, San Pietro V., San Donaci, Torchiarolo, Tuturano, Francavilla, Cellino, Mesagne, Martina F., Mottola, Scanzano and Pisticci)

[8] Stratification is the most direct procedure to increase the efficiency of a sampling plan since it enables the sampling error to be reduced without increasing the sample size. In extreme synthesis, the population is subdivided into a set of sub-populations (or strata) each less heterogeneous than the global population. From each stratum a simple random sample is extracted and there are therefore as many samples as there are strata; these samples are independent of each other and can be of different sample sizes. Due to the way it is carried out, stratification makes it possible to obtain improved estimates, sample sizes being equal, or to contain the sample sizes, efficiency being equal (Cochran, 1962).
A further advantage is the possibility of analysing the various strata with different degrees of precision and through operations of oversampling or undersampling, which respectively increase or decrease the numbers in the strata which it seems advisable to examine more thoroughly and specifically (Frosini, 2003).

- Bari--Foggia (branches of Bari, Bisceglie, Bitonto, Barletta, Polignano, Noicattaro, Locorotondo, Alberobello, Cassano M., Casamassima, Foggia, Biccari, Apricena, Vieste, S. Marco in Lamis, Torremaggiore and Termoli)

2. Branch
3. Demographic size of different municipalities

The municipalities were divided into four groups: the first, indicated by *Small*, is made up of those with a population of up to 10,000 inhabitants; the second, indicated by *Medium*, by those with a population of between 10,000 and 25,000; the third, indicated by *Medium- Large*, includes all the municipalities with a population of between 25,000 and 35,000; and lastly the fourth, indicated by *Large*, includes municipalities with a population over 35,000 inhabitants.

Following what is done in ISTAT surveys, in the context of each geographical division, all the municipalities situated in the area of a single branch were divided into two groups: the first (indicated by *Area 1*) is made up of municipalities with a population of up to 35,000 inhabitants and the second (indicated by *Area 2*) by those with over 35,000 inhabitants. The 20 municipalities with more than 35,000 inhabitants are all present in the sample and therefore constitute a stratum in themselves; the other 348 municipalities were further divided by branch and demographic size. In total there were 93 strata.

For each of the 73 strata formed for *Area 1,* two or more municipalities were extracted so as later to have the opportunity to make an estimate of the variability internal to the single strata; in this way, 196 municipalities were considered. For the choice of these sample-municipalities a procedure was adopted (Rao, 1962 and Cochran, 1966) which, in extreme synthesis, consists of subdividing the municipalities of every stratum into as many random groups as there are sample municipalities of the stratum itself, and of extracting one single municipality with a probability proportionate to its demographic weight in the group.

Overall, the sample-municipalities in the study were 20 + 196 = 216; in each of them, the bank customers to be interviewed were identified by means of a systematic choice of the name from the company data-bank, also taking into consideration the occurrence of the two modalities of the character ‘sex’ compared to the overall number of bank customers.

Within each stratum, in order to approximate the equiprobability of all the customers being extracted, the numbers were then equally distributed among the municipalities extracted.

As a result of this process, the study involved 676 customers with a final sampling rate of 1,33%.

5. Analysis of the results

From an initial analysis describing the individuals belonging to the sample, it appeared to be well balanced also in relation to the age variable and to the educational qualification.

After the calculation of the pessimist/optimist score for each customer, it became clear that the subjects were almost all (about 83%) individuals of the first type; in relation to this fact, it does not seem that the characters of sex, age and educational qualification can have any effect on the interviewee's attitude to life.

Only 30% of the customers have more than one current account and in nearly all cases this was held at the same bank; also in this case there are no particular distinctions in relation to sex, age and educational qualification in the units sampled.

About 75% of the interviewees have had an account with the same bank for at least 5 years and in 25% of the cases the customer also has a savings book at the bank; this is linked particularly to those with a higher average age and to women.

The main factors that led customers to choose this bank basically seem to stem from the direct acquaintance with some of the staff-members (25%), advice from relatives and friends (18.2%)[9] and the location of the branches (24.7%); this point would seem to suggest, consistently with the individual's psychological attitude, a high degree of distrust for those one does not know and who are not known by people one trusts.

87.5% of the interviewees have not taken out a mortgage in recent years; from the responses of those who have, however, it does not emerge that the bank was chosen for this reason, since they were generally already customers of the bank when they signed the loan contract.

The answers given to some questions in the questionnaire are very interesting for the assessment of the propensity to switch to another bank; 43% of the interviewees have closed a current account in the last five years, but of these only 12.5% did so in order to change banks. Among the reasons for closing the account there was the offer of better contractual conditions by a rival bank and the existence of causes beyond control such as being transferred to another city for work or other reasons; moreover, in the first case they were the same individuals who later opened an account elsewhere, i.e. the 12,5% mentioned above.

The decision not to switch banks is mainly due to the convenient location of the branches (41%) and to the feeling that the switch would create problems[10](27.8%), more than to satisfaction with

[9] These reasons can be considered an adequate *proxy* for learning costs, components of switching costs, as underlined above.

[10] This reason can be considered an adequate *proxy* for transaction costs, components of switching costs as mentioned above.

the conditions and services offered to customers; this all seems to denote a degree of intellectual laziness – interesting for our study – which might correlate to the pessimistic nature of the subjects involved.

The correlations between the reasons that lead banking customers belonging to the sample not to change their main bank were analysed more extensively by means of the construction of the variance-covariance matrix shown in Table 1[11].

There is an interesting aspect in the negative values recorded by the correlations between the response 'Too many problems' both with 'Satisfactory fees' and with 'Access to Internet services'. These negative relations, also emerging in previous studies found in the literature (Kiser, 2002), seem to suggest that the customer who answers that it is too complicated to switch banks is also the least sensitive to possible variations in the conditions offered by his own bank.

	Location	Fees	Internet Services	Too many problems
Location	1			
Fees	0.13 (0.021)	1		
Internet Services	0.34 (0.0001)	0.38 (0.0001)	1	
Too many problems	0.078 (0.018)	-0.24 (0.0001)	-0.054 (0.019)	1

Table 1. Correlations between the reasons that lead banking customers in the sample not to switch banks.

In other words, the negative correlation with the contractual conditions suggests that the switching costs lower sensibility towards variations in fees.

The subjects interviewed, 51% of whom however see themselves as being on average not very well informed about the best contractual conditions, state in 36 % of the cases that in order to obtain the best conditions, and therefore for their decisions on matters of saving and investment, they rely more on the experience of friends and relatives than on reading magazines and newspapers or on consulting the staff at their bank; the picture therefore seems to be quite consistent with what we have pointed out in relation to choosing a bank on the basis of what family and friends say and because of personal acquaintance with staff members.

Interesting data comes from the question in the questionnaire about the level of satisfaction given by the relationship with the main bank; about 34% is not very satisfied or even quite dissatisfied, but in spite of this they do not think of switching banks. In order to have more information about this aspect, cross-tabulations were made. An interesting result was obtained in relation to the

[11] The calculations carried out refer to customers who answered question "If you didn't change bank, you decide that because of: a) bank location; b) fees; c) internet services; d) too many problems" (question 11 of the questionnaire), giving more than one answer, expressing the reasons in order of priority. In brackets there are the P-values for the χ^2 test aimed at ascertaining, as we know, whether the coefficients obtained are significantly different from zero.

intersection of responses given by customers divided into optimists and pessimists on the basis of the score achieved with the data provided in the first part of the questionnaire and the reasons for the decision not to switch bank. This is shown in Table 2.

	Pessimists	Optimists
Location	0.38	0.07
Fees	0.16	0.03
Internet Services	0.04	0.01
Too many problems	0.26	0.05

Tabella 2. Distribution of the reasons for not switching banks in relation to the psychological attitude of the customers.

Although a strong reason for the decision to stay with the same bank is the location of branches, those who chose not to change banks because of the problems that this operation might have caused mainly have a pessimistic attitude in their vision of life.

As proof of these last results obtained, let us analyse what is shown in Tables 3, 4 and 5 which set out to study the importance of the relations existing between the level of satisfaction attributed by the individual to his relationship with his bank (question 14)[12] and the reasons given for the decision not to switch banks (question 11) respectively for the sample as a whole and for the subsets of optimists and pessimists.

	Very satisfied	Quite satisfied	Satisfied	Dissatisfied	Quite Dissatisfied	Very dissatisfied
Location	0.044	0.09	0.16	0.11	0.04	0
Fees	0.006	0.04	0.07	0.04	0.02	0.003
Internet Services	0	0.03	0.003	0.009	0.02	0
Too many problems	0.04	0.08	0.07	0.08	0.04	0

Table 3. Satisfaction attributed by the individual to relationship with his bank and reasons given for his decision not to switch banks: entire sample.

	Very satisfied	Quite satisfied	Satisfied	Dissatisfied	Quite Dissatisfied	Very dissatisfied
Location	0	0.013	0.028	0.016	0.013	0
Fees	0.006	0.006	0.013	0	0.003	0
Internet Services	0	0.006	0.003	0.003	0.003	0
Too many problems	0.009	0.009	0.018	0.009	0.009	0

Table 4. Satisfaction attributed by the individual to relationship with his bank and reasons given for not switching banks: optimists.

[12] The question is: How much are you satisfied with your bank?: a)Very satisfied; b) quite satisfied; c) satisfied; d) dissatisfied; e) quite dissatisfied; f) very dissatisfied

	Very satisfied	Quite satisfied	Satisfied	Dissatisfied	Quite dissatisfied	Very dissatisfied
Location	0.044	0.08	0.16	0.09	0.03	0
Fees	0	0.04	0.06	0.04	0.0016	0.003
Internet Services	0	0.03	0	0.006	0.013	0
Too many problems	0.031	0.07	0.05	0.07	0.03	0

Table 5. Satisfaction attributed by the individual to relationship with his bank and reasons given for not switching banks: pessimists.

The percentage of customers who say they are dissatisfied, quite or very dissatisfied and at the same time do not leave their own bank because they think it would cause too many problems corresponds to about 22% of those who give the latter reason and 84% of them have a pessimistic attitude. Therefore the customers that are most sensitive to switching costs in our case seem also to be the pessimistic customers who are less satisfied.

In view of the fact that the previous descriptive analysis revealed that around 75% of the interviewees have had an account with their bank for at least 5 years, it was thought useful to carry out a multivariate analysis of the information available so as to try to shed light on the role that the presence of switching costs has on these long-term relationships.

We therefore proceeded by gradually regressing the duration (y) of the customer's stay with the bank alternately or simultaneously on the socio-economic information at our disposal (variables indicated with z_i, i.e. sex, age, residence, educational and qualification and occupation[13]), on the answers given to question 6[14] (indicated with the symbol c_i) and on the responses given about the reasons that made them not change banks (variables indicated with r_i, or the items of question 11 in the questionnaire). The following models were then gradually regressed:

1. $y = \alpha_i z_i + \varepsilon$
2. $y = \alpha_i z_i + \beta_i r_i + \varepsilon$
3. $y = \beta_i r_i + \varepsilon$
4. $y = \beta_i r_i + \delta_i c_i + \varepsilon$

using the OLS procedure for the estimation of parameters.

[13] As far as the 'profession' variable is concerned, it proved to be of particular importance for the purpose of attributing to each individual an average income level consistent with that of the working category belonged to.

[14] What are the reasons you chose your bank?: a) advice of friends-relatives; b) high interest rates; c) branch convenience; d) low fees; e) previous relationship; f) knowing staff; g) other.

Because of the poor values recorded by index R^2 and due to the contradictions revealed in the joint analysis of T and F tests related to the first model, it was decided not to show these results in detail but to conclude that the socio-economic information available were not able to adequately justify the customers' long term stay with the bank.[15]

The results recorded by the second model seem equally disappointing and contradictory, but at least they seem to suggest a specification of the model not unlike the model presented in the previous point 3). In Table 6 we therefore report the results obtained regressing the durations of the customer's relationship with the bank exclusively on the r_i variables.

Model: $y = \beta_i r_i + \varepsilon$	Estimates of parameters	Std. Error	Sig.	Estreme lower interval of confidence (95%)	Estreme upper interval of confidence (95%)
Location	1,397	,287	,000	,811	1,984
Fees	0,790	,373	,043	,026	1,553
Internet Services	0,246	,485	,616	-,746	1,238
Too many problems	1,846	,3	,000	1,232	2,461
R^2	0,866				

Table 6. Results provided by the regression of durations of the customer's relationship with the bank exclusively on the answers given to question 11 in the questionnaire

As well as the good *fit* of the model (about 87%), notice the high impact on the duration of the customer-bank relationship due to the location of bank's branches, but above all to the presumed problems involved in closing-opening the old-new relationship respectively.[16]

Model: $y = \beta_i r_i + \delta_i c_i + \varepsilon$	Estimates of parameters	Std. Error	Sig.	Extreme lower interval of confidence (95%)	Extreme upper interval of confidence (95%)
Location	1,112	,448	,021	,185	2,039
Fees	,434	,658	,516	-,928	1,795
Internet Services	0,263	,611	,671	-1,001	1,527
Too many problems	1,712	,419	,000	,846	2,578
Advice of friends-relatives	,552	,366	,146	-,206	1,309
High interest rates	,352	,823	,672	-1,35	2,055
Branch convenience	,083	,531	,877	-1,017	1,182
Low fees	-,173	,871	,844	-1,975	1,630
Previous relationship	-,712	1,113	,528	-3,014	1,589
Knowing staff	,041	,493	,935	-,98	1,062
R^2	0,883				

Table 7. Results provided by regression of durations of customer relationship with the bank on the responses given to questions 6 and 11 in the questionnaire.

[15] The only strong tie worth any consideration, which is after all rather obvious, would seem to be the one which sees an increase in the stay with the same bank as the customer's age goes up.

[16] Actually the effect exerted by the "Fees" factor is also worth noticing although the linear tie with the dependent variable is clearly weaker.

As can be inferred from the results reported in Table 7, the inclusion in the model of the variables designed to quantify the learning costs leads to a slightly higher *fit*, but to results that are substantially identical to the previous ones since great faith cannot be placed in the medium-low influence exerted by the *proxy* for these new switching cost components on lasting customer-bank relationships.

In order to try to derive more extensive information about the possible link between emotional attitude and switching costs, the last model proposed was also regressed separately on the subsets related to optimistic and pessimistic subjects.

Although the results related to the first of these two sub-samples tend to show that the only movements able to explain the size of the dependent variable 'branch location' and the contractual conditions offered concerning the setting of interest rates (which are reasons unrelated to switching costs), the small size of the sample suggests that we should consider such results exclusively as an aspect worth a further, more detailed analysis. On the other hand, however, the results obtained from the multivariate analysis conducted on the subset of pessimistic customers (Table 8) would seem to support what emerged from the previous descriptive analysis: the pessimistic customer who switches would generally do so per causes beyond his/her control and is therefore strongly conditioned by the location of the bank's branches; instead, those who continue a relationship with their bank even if it is unsatisfactory would do so out of fear of possible inconvenience linked to the inevitable presence at least of transaction costs and loss of time.

Model: $y = \beta_i r_i + \delta_i c_i + \varepsilon$	Estimates of parameters	Std. Error	Sig.	Extreme lower interval of confidence (95%)	Extreme upper interval of confidence (95%)
Location	1,088	,474	,033	,185	2,080
Fees	,395	,723	,591	-,928	1,909
Internet Services	0,7	,913	,452	-1,001	2,611
Too many problems	1,713	,475	,002	,846	2,707
Advice of friends-family	,607	,428	,172	-,206	1,504
High rates	,301	1,03	,773	-1,35	2,458
Convenience of branch	,143	,573	,806	-1,017	1,342
Low costs	-1,102	1,562	,489	-1,975	2,167
Previous relationship	-,713	1,171	,550	-3,014	1,738
Acquaintance with staff	,069	,529	,898	-,98	1,175
R^2	0,892				

Table 8. Results provided by the regression of durations of customer relationship with the bank on responses to questions 6 and 11 in the questionnaire applied exclusively to information on pessimistic subjects.

6. Conclusions

In this paper we have addressed the issue of assessing the impact that the individual's personality can have on his/her economic choices. For this purpose an empirical analysis was carried out on a stratified sample of individuals.

After using a psychometric test to quantify the level of optimism or pessimism of every interviewee, we carried out cross-tabulations and multiple regressions in order to find the link between the individual's psychological attitude and the results obtained from the sample concerning information acquired for the same statistical unit about its relationship with its bank.

From an analysis of the results it emerges very clearly that, in accordance with the individual psychology, the decisive factors in the choice of bank are confidence in the intermediaries (deriving mainly from direct acquaintance with some bank employees or from the advice of family and friends) and the geographical variable (bank location).

Another interesting result that emerges is that the customers who state that they are not very or not at all satisfied with their bank, do not however intend to change banks. The main reason for this decision is the inconvenience caused by the inevitable presence of transaction costs and waste of time.

This situation seems to correlate strongly with those customers who show a pessimistic attitude.

This therefore seems to lend support to the idea that the banking strategy of setting higher or lower fees than their competitors has little effect in terms of the customer's choice of whether or not it is advantageous to leave the bank with which s/he has been banking for some time.

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