

THE ANALYSIS OF LOCALIZED COMPETITION AMONG ORGANIZATIONS AND A RESEARCH IN BANKING SECTOR

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1. Introduction

This study aims to reveal companies basic inclinations concerning local level competition. Especially for this issue using the models formerly exposed in literature a detailed analysis covering the basic characteristics of companies about competition and opportunities is taken in local level market.

2. Relevant studies about the subject

It is seen that there are lots of variables orientating the foundation and activities of organizational system. Ecologic theory is a theoretical approach that has developed the most considerable models for the analysis of this issue. In this frame, Messallam (1998) indicates that there are basic variables, which orientates the organizations' foundations and activities. The primary variables are the ones about the process of organizational ecology. These include; intensity of population, the organizations that were founded previously, and the relations among the population. The secondary set of variables includes; the government policies about the sectors, legal regulations and the collaborative and competitive strategies of the organizations. The primary and secondary sets of variables are all considered as orientating the competition among the organizations. The most

important factors affecting the competition among organizations are intensity of organizational population, legalization and the institutionalizing of the organizations. In this context, it is noticed that there is high level of competition among the organizations that give service for the same customer group and use the same sources when giving service. Having the same niches is the most considerable factor affecting the localized competition among the organizations. If the organizations have the same niches, a violent competition appears. Particularly, this high level of competition appears among the neighbor organizations.

This situation is caused because that the organizations operate in the same geographic field. Operating in the same geographic field is one of the main factors affecting the competition (Baum & Haveman, 1997). Particularly, the studies indicated that the organizations mostly compete with neighbor organizations. Consequently, the competition level of the organizations is low when they compete with the distant ones (Baum & Singh, 1994; Lomi, 1995; Hannan et al., 1995).

According to ecology theory, the analysis of localized competition depends on the activities of organizations towards the same markets. Hannan and Freeman (1977) implied that one of the main factors of localized competition among the organizations is the size of the organizations. According to their study,

the competition strategies and structures of organizations having different sizes are different in the market. Although these organizations operate in the same market, their use of the sources is different. The research also implies that the organizations having the same size are in stronger competition. Hannan, Ranger-Moor and Banaszak-Hool (1990) have analyzed the localized competition among the the organizations in banking and insurance sector. Moreover, there are studies that are executed in health sector and indicate the factors affecting localized competition. Baum and Mezias (1992) have pointed out the relationship between localized competition and variables such as geography, prices and size in their research in hotel and tourism sector.

According to the model of source using, the competition is higher among the organizations having the strategy of getting the whole market and as a result the failure is higher among the organizations. There are some specific studies supporting this issue. In beer sector Carroll and Swaminathan (1992), in journalism sector Carroll (1995) and in Italy in banking sector Freeman and Lomi have found out data that support this issue.

Another model analyzing localized competition is the level of niche similarity. (Baum & Singh, 1994) In this study, the core competition between two organizations is evaluated according to the level of similarity of the common sources that they use. The level of that similarity measures the potential competition. The entrepreneurs may have difficulties and failure when they enter the markets that have high level of niche similarity. Because it is difficult to carry on in those fields. Despite, operating in the fields that have low level of niche similarity is more advantageous. The localized competition is an important subject for the development of sectors. The level of localized competition determines the diversity among the organizations. The organizations that cannot adapt the environment are

removed from the market. The organizations that loose the market try to change both in functional and regional areas. Thus the organizations try to find the ways of changing, adapting and finding new geographic fields that they can compete in.

Davis finds that there is a statistically significant relationship between the geographic distribution of movie theaters in a market and the admission prices that they are able to charge (Davis, 2005). The research explores aspects of broadband access as a function of market demand and provider competition (Grubestic and Murray; 2004). Data set comprising central office switches permits analysis of the location and the type service provision by the new telecommunications competitors in American cities (Malecki, 2002).

It is argued that the introduction of new market restructuring initiatives, such as local loop unbundling, requires a larger involvement by regulators, particularly in the early stages, rather than just a reliance on general competition rules (Michalis, 2001). Using a unique survey database of Canadian small business loans, it is found that a negative and statistically significant relation between the number of local competitors and small business loan rates. This result is robust to the presence of a wide variety of covariates intended to proxy the effects of both loan specific details and individual characteristics. These findings further suggest that the local markets definition applied to small business loans is still relevant, despite recent technological innovation such as internet banking (Mallet and Sen; 2001).

The purpose of this paper is to consider the effect of the composition of economic activity on innovation. We test whether the specialization of economic activity within a narrow concentrated set of economic activities is more conducive to knowledge spillovers or if diversity, by bringing together complementary activities, better promotes innovation.

The evidence provides considerable support for the diversity thesis but little support for the specialization thesis (Feldman, 1999). This paper studies collusive behavior in a repeated oligopoly with localized competition. Private information about the rivals' past actions naturally arises from this market structure. The resulting communication problems imply that firms should adopt strategies with sufficiently lenient punishments (Verboven, 1998). A recent empirical literature has shaken economists' confidence in the value of aggregate (industry-level) data to illuminate production relationships. But the statistical finding "you cannot aggregate," however well documented, is not an economic explanation. Plant-level relationships do aggregate in Depression-era blast furnace operations despite the presence of very substantial interplant heterogeneity, the most common economic cause of nonaggregability. The economic explanation of this lies in poor short-run substitutability of one plant's output for another's. Substitutability determines the importance of composition effects in understanding aggregate time series, constrains the potential cleansing effects of recessions, and therefore influences industry evolution quite broadly (Bertin, Bresnahan and Raff, 1996). Growth rates decline as a function of size, supporting the notion that the accrual of organizational inertia reduces the ability of organizations to capitalize on growth opportunities. We also test for an effect of size-localized competition (SLC) on organizational growth rates. Both a standard measure for SLC and an alternative measure that adjusts for population density show that competition between similarly-sized organizations decreases the rate at which organizations grow. Results indicate that the adjusted SLC measure should be used in future research that models first-order density dependence and size-localized competition (Rangermore, Breckenridge and Jones, 1995). The study investigates whether the

organizations in a population with more similar resource requirements compete more intensely (Baum and Mezias, 1992). Although rate structures that subsidize residential consumers may ultimately be threatened, viable local competition could solve many current regulatory problems. While it is difficult to assess the state of competition, it currently appears to be nascent rather than established (Teske and Gebosky, 2002).

Natural monopoly theory fails to provide a credible reason for regulation. Before regulation, competition in the US telephone industry performed its classic function of providing discipline on prices, profits and costs. Loop-conserving technological developments have now reduced the minimum efficient size of entry and made local competition a feasible substitute for regulation. A policy of open entry, mandatory non-discriminatory interconnection, and allowing resale would bring this about. Politically, such an outcome is most likely when the local carriers' capital-recovery problems have been resolved, the toll-to-local subsidy has disappeared, and parity is brought about between residence prices and costs (Wenders, 2002).

In this article a framework is formulated to analyze competition in the local exchange through a generalization of the concept of bypass. The objective is to develop a unified conceptual framework through which the new competitive structure for the local exchange can be understood. The key element of this structure is the appearance of a new intermediary agent who concentrates the usage of a group of otherwise unrelated end users and acts as their agent with respect to the conventional suppliers of telecommunications services. In the USA, the demand for this intermediary function has been stimulated by the increasing fragmentation of the telecommunications market which results in part from regulatory restrictions and the Modified Final Judgment (Fontenay and etl. 2002).

How do banks react to increased competition? Recent banking theory significantly disagrees regarding the impact of competition on bank orientation-i.e., the choice of relationship-based versus transactional banking. We empirically investigate the impact of interbank competition on bank branch orientation. We employ a unique data set containing detailed information on bank-firm relationships. We find that bank branches facing stiff local competition engage considerably more in relationship-based lending. Our results illustrate that competition and relationships are not necessarily inimical (Degryse and Ongena, 2007).

In this paper, the decision-based neural network (DBNN) learning algorithm is modified to stimulate local competition (Camps-Valls and etl. 2006).

In this study, we model local competition between Incumbent Local Exchange Carriers and Competitive Local Exchange Carriers and explicitly account for competitive effects from wireless service and high-speed connections. We develop and estimate a pooled model of local competition using both cross-sectional and time series data from published FCC and other governmental sources at the state level (Loomis and Swann, 2004).

3.The Design of the Empirical Study and the Variables

In this study, it is aimed to determine the factors that influence the localized competition by analyzing the competition behaviors of the organizations in local markets. We will particularly try to determine the factors, which the organizations consider to increase their competition power.

Optimal scaling method was used in the analysis of the data set of this study. Within the analysis, the columns and lines are compared as a descriptive method.

The acronym Homals is based on the abbreviations HOM, for analysis of homogeneity, and ALS, for alternating

least squares. The term will be used for the specific technique of multiple optimal quantification. The method has also been given many other names, best known of which is multiple correspondence analyses.

Homals requires that successive solutions for object scores must be uncorrelated among each other. But this does not imply that successive quantifications of the same variable will be uncorrelated. There is an exception to this rule. If Homals is applied to a situation with only categorical variables, successive quantifications of the two variables will be uncorrelated.

In Homals, a binary variable (which has only two categories) can be quantified in only one way. Successive quantifications of such a variable therefore are perfectly correlated (unless such a variable obtains zero quantification on one or more dimensions). When all variables binary, results of homals will be the same as those obtained by classical Principal Component Analysis, no matter what a priori quantification was chosen for the variables.

Homals is useful when it produces interesting graphs of results. The graph contains n object points, with object scores as their coordinates. The graph contains for each category of the m variables an MC point. These points are defined as the center of gravity of objects within the category. The graph has two major characteristics. First, in a good solution, object points will be close to their MC points (more precisely, the sum of squares of distances between object points and their corresponding MC points is minimized). Second, category points will have large spread, because the solution maximizes the sum of squared distances between MC points and origin. In the graph it will be interesting to see for which variables the MC points have large spread. Categories discriminate between objects better to the extent that they are farther away from each other. This spread is indicated in the discrimination measure. A small

discrimination measure implies that on that dimension the category points of a variable are close to the origin, and therefore that distance between object points and their category points will be relatively large. On the other hand, if a discrimination measure is large, category points are far away from each other on that dimension, and object points are close to their category points. In this way the graph shows for each dimension which variables are effective and which is not.

The overall successive of a Homals solution is expressed in the eigenvalues. They give, for each dimension, the average value of the discrimination measures.

Homals solutions are nested. This means that a homals solution in p dimensions is the same as that for the first p dimensions in a Homals solution with more than p dimensions. In other words, increasing the number or dimensions does not require a revision of the quantification in preceding dimensions (Geer, 1993).

In the study, 4 variables were taken up for the evaluation of the banks' competition strategies. These variables are the age, the ownership structure, the regional activities and services of the banks.

Age: Age is defined as the time period of the bank's activities in that region. In this study, the banks under the age of 10 and the banks over the age of 10 are assessed.

Ownership structure: There are private and public banks in the market. In this study, the data analysis depends on the private and public banks.

The regional service network: In this context, the number of the branches of the bank in local market is considered. The wideness of the bank's service is another variable analyzed in the research.

The service structure: With this variable the market understanding of the bank and the perspective of the bank towards the customers are assessed. Particularly, the banks having and not

having strong customer services and an understanding of customer satisfaction were evaluated in this research.

These variables were analyzed with a homogeneous model. Homogeneous model can be defined as the comparison of the factors having three or more categorical variable. Besides, it is a graphical analysis that analyzes and evaluates the categorical variables with crosswise tables. Thus, this model can expose the similarities and differences among the variables.

When the number of the objects is n and the number of the variables is m , a multi variable data matrix as $n * m$ is obtained. When it is defined as $j = 1, \dots, m$, it shows the category number of

k_j j variable and $K = \sum_j k_j$ shows the category number of all variables.

4. The Results of the Research

The four factors of the banks and their situation are exposed as a result of detailed data analysis and interviews made with managers of the banks. The banks older than 10 years were evaluated as elder banks and the ones less than 10 years were evaluated as younger banks. Thus, the banks were examined in two categories for the age variable. The second variable is evaluated as whether the bank is private or public bank. The area of service variable is evaluated by considering how many branches the banks have in Çanakkale as the research was executed in Çanakkale. The highest number of the branches is 8 and the lowest number of the branches is 1. The banks having the branches more than 4 are evaluated as the service network is wide and the banks having the branches less than 4 are evaluated as the activity area is limited. Finally, the approaches of the banks towards customer satisfaction and customer service are evaluated. In order to evaluate this variable, 20 managers were asked to evaluate the customer services of the banks and analyzed

categorically as well-poor. As a result, the following data table is formed about

the banks operating in Çanakkale by the evaluation of all these variables.

Table 1. Correlations

			Ownership	Service Network	Service Structure	Age
Kendall's tau_b	Ownership	Correlation Coefficient	1,000	,600	-,775	-,775
		Sig.(1-tailed)	.	,050	,020	,020
	Service Network	Correlation Coefficient	,600	1,000	-,258	-,775
		Sig. (1-tailed)	,050	.	,247	,020
Service Structure	Correlation Coefficient	-,775	-,258	1,000	,500	
	Sig. (1-tailed)	,020	,247	.	,093	
Age	Correlation Coefficient	-,775	-,775	,500	1,000	
	Sig. (1-tailed)	,020	,020	,093	.	

When we look at the descriptive statistics of the variables the relations among the variables can be seen as follows in Table 2. As it is seen in the table the correlation is high between the regional service network and organizational ownership.

The eigenvalues obtained in the table 2 are as $\lambda_1=0,717$ and $\lambda_2=0,207$. Eigenvalue gives the exact measure of the consistency between the real graph and two dimension graphs. Thus, the consistency (0,92) can be considered as good.

Besides, the relation between the age and customer service of the banks is meaningful.

As seen in the table there is no meaningful relationship between the age and service structure of the banks.

Table 2. Discrimination Measures

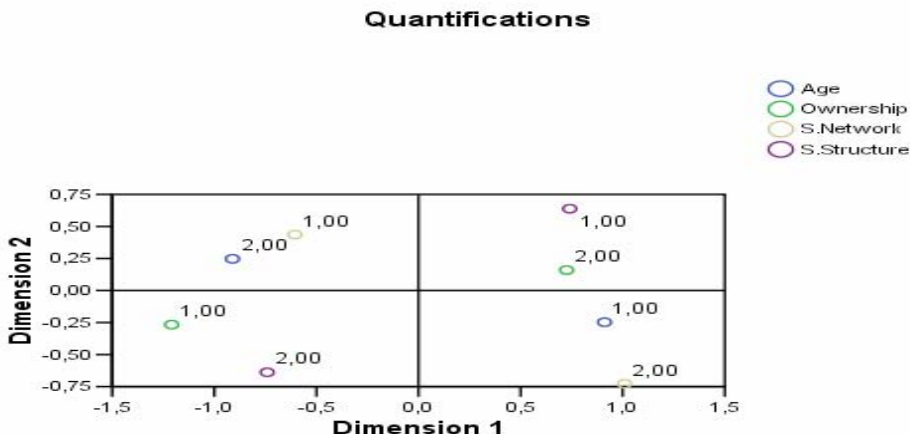
	Dimension	
	1	2
Age	,830	,061
Ownership	,877	,042
Service Network	,611	,317
Service Structure	,549	,407

When we look at the graph 1, the older banks' service network is in different

regions. The service structure of those kinds of banks is evaluated as poor. In

another group it can be seen that the network. younger banks have narrow service

Graph1. Category Quantifications



According to these evaluations, the main factors influencing the service network and service structure of the banks in local markets are ownership structure and age of the banks. It can be observed that the private banks give importance to customer services more than the public banks. Thus, it can be indicated that the banks determine their competition strategies according to their geographic settling and service structure in local markets. Consequently, it can be pointed that public banks create competitive power by opening new branches in different regions and the private banks strengthen their competitive power by improving their service structure the understanding of customer satisfaction.

5.Conclusion and General Evaluation

This study tried to determine the factors affecting the localized competition among the banks. When we look at the competition strategies of the banks it can be seen that the

competition is in global, national and local levels. In this study we particularly tried to determine the local level strategies of the neither banks nor global or national levels. Because it is known that the organizations have different investments and business approaches in the same geographic region. Hence, this is an important factor that affects the growth, market penetration and service structure of the banks. Moreover the answers were seek for the question of which other factors such as ownership, size and age affect the localized competition strategies of the banks. It was found out that private and public banks have different attitudes of competing in the market.

In this study, the main factors affecting the decisions of the entrepreneurs in the local markets. Is it important for the organizations being close to the other organizations' products and service network? Firstly, we see that new organizations are founded in distant places geographically. Secondary, the

organizations are founded in the set of organizations that are similar to themselves. It is seen that the dispersion of the banks in Çanakkale supports both of the findings. The most important point is that, the regions that the banks prefer to operate are usually the busiest points of the city. These central points are considered as factors affecting the decision of opening new branches in that points.

There are many factors affecting the localized competition among the organizations such as the size, age, and service network and service structure of the organizations. These factors have

great importance for the survival of the organizations in the changing environment and market. Çanakkale is a unique environment having different characteristics. In this region public banks have a longer past. However, it is observed that since there are many changes and development in Turkish economic system and banking sector, the private banks also try to increase their competitive power in different geographical regions. Thus, we see that private banks open new branches in different regions and increase their service quality in order to get localized competitive advantage.

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