RELATION OF MARKETING AND PROFITIBALITY OF KAZAKHSTAN BANKS

***Maya KATENOVA*[1]**
***Bulent DUMLUPINAR*[2]**
***İlhan EGE*[3]**

Abstract

Currently, there are 38 commercial banks operating in Kazakhstan. Being competitive enough, they promote themselves by proper advertising campaigns. This paper is devoted to the issue of advertising campaign and explores whether or not it significantly affects profitability in the banking industry of Kazakhstan. Net incomes of the twenty largest banks in Kazakhstan are studied for the period of 2005 until 2012 consisting of 32 quarterly observations. Unit root test was employed to check marketing expenses, earnings before interest and taxes and net income. Regression analysis was conducted using marketing expenses from previous period and current profitability. Income was measured by Earnings Before Interest and Tax and Net Income of the largest twenty banks of Kazakhstan. Marketing expenses of previous periods were analyzed as well.

***Key words*:** Marketing, profitability, banking sector, regression analysis

Jel Codes: *G20, C30, M31*

KAZAKİSTAN BANKALARINDA PAZARLAMA VE KARLILIK İLİŞKİSİ

Özet

Kazakistanda, şu anda faaliyet gösteren 38 ticari banka bulunmaktadır. Onların uygun reklam kampanyalarıyla kendilerini tanıtmaları oldukça rekabetçidir. Bu çalışmada, reklam kampanyalarının Kazakistan'ın bankacılık sektörünün karlılığında etkili olup olmadığı araştırlmaktadır. Kazakistanda faaliyet gösteren 20 büyük bankanın net gelirleri 2005'ten 2012 yılına kadar 32 çeyrek dönem periyodunda gözlemlenmiştir. Birim kök testi, faiz ve vergi öncesi net gelir pazarlama giderlerini denetlemek için kullanılmıştır. Regresyon analizi, önceki dönem pazarlama giderleri ve cari karlılıkları kullanılarak gerçekleştirilmiştir. Kazakistanın en büyük 20 bankasının geliri, faiz ve vergi öncesi net kar ile ölçülmüş ve önceki dönemlere ait pazarlama giderleri de analiz edeilmiştir.

Anahtar Kelimeler: *Pazarlama, Karlılık, Bankacılık sektörü, Regresyon analizi*

Jel Kodları: *G20, C30, M31*

---

[1] MPA, PFM, DBA student, Bang College of Business, KIMEP University, Kazakhstan
e-mail: mayak@kimep.kz
[2] Assistant Professor, Bang College of Business, KIMEP University, Kazakhstan
e-mail: bulentd@kimep.kz
[3] Associate Professor, Faculty of Economics and Administrative Sciences, Business Administration Department, Mersin University, Mersin
e-mail:ilhanege2005@hotmail.com

INTRODUCTION

Banks play an important role in ~~a~~ society by transferring money from those who have a surplus of funds to those who have a shortage. Banks in Kazakhstan play an important role by lending to large corporations, small and medium size businesses as well as individuals. The banking sector is one of the most important sectors of Kazakhstan's economy. The main industries of the Republic of Kazakhstan include major industries such as chemical processing, copper smelting, forging and pressing machines, instruments, iron and steel, mineral processing, mining, oil refining, rolling equipment, sugar refining, textiles and banking.[4]

I. LITERATURE REVIEW

Banks acquire commercial intelligence from long-term relationships with customers (Gray and Gray, 1981). A poorly developed banking system may be viewed as a market imperfection, yet this variable has not been systematically incorporated into prior international banking models. Miller and Parkhe (1998) marketing thinking and practice have been gradually moving into service industries. Its role in service industries is still limited, however. It has achieved some utilization in banks and airlines, to a lesser degree in insurance, brokerage, and public transportation, and still less in law, accounting, management consulting, medicine, architecture, and engineering. Even marketing research firms and advertising agencies tend to under apply marketing concepts to the marketing of their own services (Kotler and Connor, 1977).

The question facing professional firms is not whether to do marketing. They are doing market- ing. The question is how to do it effectively. As the firm's competitors resort increasingly to installing organized programs for business development, the professional firm can no longer remain indifferent to the discipline of marketing (Kotler and Connor, 1977).

Management science techniques have been applied in bank marketing to the analysis of market segments, bank image, and the effects of advertising on the demand for deposits and loans and the characteristics of users/nonusers of bank services (Cohen, Maier and Vander, 1981).

The marketing profession is being exhorted from within and without to be more socially relevant, while at the same time broadening its purview to nontraditional areas, and looking more critically at its past performance. The call for critical review has traditionally been directed toward marketing practitioners (Andreasen, 1978).

Joshi and Hanssens (2010) mention the fact that advertising spending has positive, long-term impact on own firms' market capitalization. Also, they mention that advertising has direct effect on valuation.

[4] http://www.atlapedia.com/online/countries/kazakh.htm

Many studies have found that foreign banks in the United States are less efficient than domestic ones, perhaps because of linguistic or cultural barriers (Chang et.al. 1998; DeYoung and Nolle, 1996; Hasan and Hunter, 1996; and Mahajan et.al. 1996).

But recent cross-country research and country case studies suggest that the opposite is true in developing economies: in these countries foreign banks appear to be more efficient than their domestic counterparts, and foreign entry seems to improve the efficiency of domestic banks (Barajas et.al. 2000; Claessens et.al, 2000; Denizer, 2000; and Kiraly et.al. 2000). So if policymakers in developing economies rely primarily on the evidence from developed economies, they might underestimate the potential benefits of foreign entry, to the detriment of development the banking sector. Considering itself as a developing country, Kazakhstan should recognize that foreign banks are more efficient in Kazakhstan.

Studies show that foreign entry does exert competitive pressure on domestic banks. This appears to force domestic banks to lower their costs and in some cases appears to reduce their profitability. Moreover, because foreign banks do not necessarily enter all domestic market segments, domestic banks face different degrees of pressure (though the areas where pressure is applied probably vary across countries). The evidence on how foreign entry affects the quality of domestic banks' loan portfolios is mixed, suggesting that this issue requires further investigation (Peria and Sanchez, 2003).

With yields on deposits down, bank customers are going to turn to mutual funds and other higher yielding financial services in a global way. The trend in profit on traditional banking is downwards. Therefore, banks have to offer new high yielding financial services, on a large scale. In view of the above, it is high time that bankers realize the need to create new financial services, to improve banker- customer relationships, and to anticipate, identify, reciprocate and satisfy their needs efficiently, effectively and profitably. For the above purposes, banks must: (1) utilize relevant marketing concepts to promote a marketing orientation in planning, operations, and communication, and (2) modify existing strategies for attracting deposits on one hand and quality borrowers and users of services on the other Bhattacharyay and Ghose (1989).

The movement toward freer markets in China, Vietnam, the former Soviet Union, Poland, Hungary, the Czech and Slovak Republics, and others (the so-called "transitional economies," or TEs) has led to great interest in the marketing challenges and issues unique to these economies. Some of this interest comes from multinational corporations (MNCs), who see the growth and leadership potential in these emerging markets, as the household penetration of durables and other goods in these countries grows rapidly from very low base levels (Nakata and Sivakumar 1995).

Marketers would also argue that the marketing concept is both a philosophy and a practical guideline. For example, Bennett (1979) argues that the more a company has adopted the concept, the more "the gap between a company's strategic plan and its marketing plan narrows" (Bennet, 1979) Strategic management issues often entail trade-offs between the short and long run, between financial and market performance, between private and public goals. The marketing concept provides a clear, if somewhat utopian, direction for resolving these trade-offs: in favor of the customer and the long run.

Consequently, marketing has a perspective that is critical to strategic management. This perspective is captured by the marketing concept, which provides strategic management students with both a philosophy and an operational method for resolving strategic management issues and for integrating the activities of the business: make "the businesses do what suits the interests of the customer" (McKitterick, 1957).

Dominant banks also provide a higher level of quality than do fringe banks: they advertise more, have larger branch networks with bigger staffs that operate over larger geographic areas, and pay higher salaries (after controlling for various bank characteristics such as product mix, as well as local factors) (Dick, 2007).

II. METHODOLOGY

Net Incomes and Earnings before interest and tax of twenty Kazakhstani banks were obtained from certain websites. There are thirty two observations from January, 2005 till December, 2012 quarterly.

The purpose of this paper is to analyze whether marketing expenses affect profitability of Kazakhstani banks.

The regression analysis applied to time series will be reliable only for the time series that are stationary, that is, by definition stationary time series have a mean and variance that are constant over time and covariance between two time periods depend on a lag between two time periods and does not depend on the actual period under consideration. Unfortunately, nearly all time series exhibit non-stationarity when tested. In most of the cases financial time series data are assumed to be non-stationary (Maysami, 2004).

III. RESULTS

For non-stationary series the results of regression analysis, including t-statistics, F-statistics and others, will yield misleading results. In this case all considerable times series were checked on stationarity. To do so the Augmented Dickey - Fuller Unit root test was used. Augmented Dickey - Fuller Unit root tests is a very popular test for examining the stationarity of a time series.

Table I. Unit root test

Unit root and stationarity	ADF (1%)	ADF (5%)	PP (1%)	PP (5%)
Critical values	-3,48	-2,88	-3,48	-2,88
Marketing expenses	1,34		2,08	
Net Income	-1,21		-1,05	
EBIT	-1,00		-1,07	

The null hypothesis for ADF cannot be rejected both at 1% and 5% level of significance for all three variables. From the table above, it is noticeable that time series of all variables are not stationary; therefore, it needs to be transformed. The log values of variables were taken. However, data appears to be nonstationary again. Differences were obtained and unit root test was performed again for transformed data, which is presented in the table below.

Table 2. Unit Root Test

Unit root test	**ADF (1%)**	**ADF (5%)**	**PP (1%)**	**PP (5%)**
Critical values	- 3,48	-2,88	-3,48	-2,88
CPI	-4,11		-3,91	
Exchange rate	-10,13		-10,28	
Money supply	-10,71		-11,09	
KASE index	-4,63		-4,71	

Only after this step was performed, all data showed stationarity at both significance levels.

The least square method (LS) was applied to check relationship between dependent variables EBIT and NI and independent variable – Marketing expenses. Two variables linear regression model was constructed. The basic regression models have the following form:

1. $NIt = \beta_0 + \beta_1 \times ME_{t-1} + u_t$

2. $EBIT_t = \beta_0 + \beta_1 \times ME_{t-1} + u_t$

where

NI_t – Total Net Income of 20 largest banks of Kazakhstan,

$EBIT_t$ - Earnings Before Interest and Taxes,

ME_{t-1} – Marketing expenses of previous period

u_t - stochastic error term

Net Income = 8.71 + 19.57*Marketing Expenses$_{t-1}$

Obtained coefficient has an expected “plus” sign, which implies positive influence on Net Income. The regression results show that change of Marketing Expenses in the prior period by one unit will lead to increase of the Net Income value by **19.57** units.

Table III. The LS model results. Net Income and Marketing Expenses

Dependent Variable: Net Income
Method: Least Squares
Date: 04/16/13 Time: 09:24
Sample: 2005q01 2012q4
Included observations: 32

	Coefficient	Std. Error	t-Statistic	Prob.
NI	1957111.	602827.6	3.246551	0.0018
C	8.70E+09	7.10E+08	12.26016	0.0000

R-squared	0.210868	Mean dependent var	1.08E+10
Adjusted R-squared	0.118452	S.D. dependent var	2.54E+09
S.E. of regression	2.38E+09	Akaike info criterion	46.05018
Sum squared resid	3.98E+20	Schwarz criterion	46.11342
Log likelihood	-1655.806	Hannan-Quinn criter.	46.07536
F-statistic	9.54010	Durbin-Watson stat	0.079219
Prob(F-statistic)	0.000174		

The regression above has the right functional form that confirms F-statistic coefficient (9.54010) with small p-value (0.000174). At the same time R-squared, this measures the proportion of the variation in the dependent variable – net income accounted for by the explanatory variable marketing expenses, equals to 0.210868. This means that regression model describes around 11% of the pattern in the net incomes. The regression also has positive autocorrelation in residuals according to Durbin-Watson statistic (0.079219). Residuals of the regression have no normal distribution with Kurtosis 3.0 and Skewness -1.11. Although the obtained coefficient is statistically significant in keeping with large t-statistic 3.246551 and small p-value it cannot be reliable because of autocorrelation in residuals.

The next step in the study was to analyze the relationship between EBIT as dependent variable and Marketing Expenses as explanatory variable. The equation of simple linear regression has the following form:

$$\mathbf{EBIT = 29.02 + 66.28*ME}$$

The regression results showed positive influence of Marketing Expenses change on EBIT – an increase of Marketing Expenses in the prior period by one unit will raise EBIT value by 66.28 units.

Table IV. The LS model results. EBIT and Marketing Expenses

Dependent Variable: EBIT
Method: Least Squares
Date: 04/16/13 Time: 10:26
Sample: 2005q 01 2011q4
Included observations: 32

	Coefficient	Std. Error	t-Statistic	Prob.
EBIT	3628495.	492928.0	7.361105	0.0000
C	79023539	1.48E+09	0.053532	0.9575

R-squared	0.436329	Mean dependent var	1.08E+10
Adjusted R-squared	0.428276	S.D. dependent var	2.54E+09
S.E. of regression	1.92E+09	Akaike info criterion	45.61715
Sum squared resid	2.58E+20	Schwarz criterion	45.68040
Log likelihood	-1640.218	Hannan-Quinn criter.	45.64233
F-statistic	54.18587	Durbin-Watson stat	0.890701
Prob(F-statistic)	0.000000		

The results of the second regression are fully consistent with the results of the first. The regression has the right functional form with large F-statistic – 54.18587 and zero p-value (0.000000). The coefficient of determination R^2 equal 0.436329. The value of this coefficient characterizes the fraction of variance in the dependent variable EBIT that can be explained by regression, i.e. of the independent variable Marketing Expenses in prior period. Accordingly, the value of $1 - R^2$ characterizes the proportion of variance of the variable EBIT, caused by the influence of all the others taken into account in the econometric model explanatory variables. The calculation showed that the proportion of unaccounted for in the resulting econometric model of explanatory variables is approximately 1 - 0.436329 = 0.56371, or 56.3%. Such a low ratio of the determinant shows a marginal statistical significance of the model. The regression also has got positive autocorrelation of residuals that confirms small Durbin – Watson statistics (0.0890701). Therefore, we cannot rely fully on the results of the regression.

IV. CONCLUSION

In conclusion, it should be mentioned that marketing expenses in the prior period (with a quarter lag) positively affect profitability of banks in the current period. More money spent on advertising in the previous quarter will push profitability up in the current quarter. Banks attract clients by advertising their services. More advertising campaigns bring more clients, more depositors and more borrowers as well to banks in Kazakhstan.

REFERENCES

Andreasen A.R., (Feb., 1978) "The Ghetto Marketing Life Cycle: A Case of Underachievement", Journal of Marketing Research, Vol. 15, No. 1, pp. 20-28

Barajas, A. R., Steiner, and Salazar N., (2000) "Foreign Investment in Colombia's Financial Sector," in Claessens, S. and Marion Jansen, (eds.) The Internationalization of Financial Services: Issues and Lessons for Developing Countries, Boston, Mass.: Kluwer Academic Press.

Bennett, P. D., (1979) "Review of Strategic Planning and Policy by William R. King & David I. Cleland". Journal of Marketing, 43(2), 131-132.

Biggadike E. R., (Oct., 1981) "The Contributions of Marketing to Strategic Management», The Academy of Management Review, Vol. 6, No. 4, pp. 621-632

Bhattacharyay B.N. and Ghose B.K., (Feb. 25, 1989) "Marketing of Banking Services in the 90s: Problems and Perspectives", Economic and Political Weekly, Vol. 24, No. 8, pp. M27-M32

Chang C.E., Hasan I., and Hunter W.C., (1998) "Efficiency of Multinational Banks: An Empirical Investigation," Applied Financial Economics, 8(6): 1-8.

Cohen K.J., Maier S.F., and Vander Weide J.H., (Oct., 1981) "Recent Developments in Management Science in Banking", Management Science, Vol. 27, No. 10, pp. 1097-1119

Claessens S.A., Demirgüç-Kunt, and Huizinga H., (2000) "The Role of Foreign Banks in Domestic Banking Systems" in Claessens, S. and Marion Jansen, The Internationalization of Financial Services: Issues and Lessons for Developing Countries, Boston, Mass.: Kluwer Academic Press.

Clarke G., Cull R. M., Peria S.M., and Sanchez S.M., (Spring, 2003) "Foreign Bank Entry: Experience, Implications for Developing Economies, and Agenda for Further Research", The World Bank Research Observer, Vol. 18, No. 1, pp. 25-59

Cheryl, N., and Sivakumar K., "Factors in Emerging Markets and their Impact on First Mover Advantages." Working Paper No.

Denizer, C., (2000) "Foreign Entry in Turkey's Banking Sector, 1980-1997," in Claessens, S. and Marion Jansen, (eds.) The Internationalization of Financial Services: Issues and Lessons for Developing Countries, Boston, Mass.: Kluwer Academic Press.

De Young R. and Nolle D.E., (1996) "Foreign-owned banks in the United States: Earning Market Share of Buying it?" Journal of Money, Credit, and Banking, 28(4), 622-36.

Dick, A.A., (Feb., 2007) "Market Size, Service Quality, and Competition in Banking", Journal of Money, Credit and Banking, Vol. 39, No. 1, pp. 49-81

Gray J.M., & Gray H.P., (1981) "The multinational bank: A financial MNC?", Journal of Banking and Finance, 5: 33-63.

Hasan, I. and Hunter W.C., (1996) "Efficiency of Japanese Multinational Banks in the United States," in Andrew H. Chen, ed., Research in Finance, Volume 14, Greenwich, CT and London: JAI Press. 157-173.

Joshi A. and Hanssens D.M., (2010), "The direct and indirect effects of advertising spending on firm value", Journal of Marketing, Vol.74, pp. 20-33

Kotler P. and Connor R.A., 1 (Jan., 1977) "Marketing Professional Services", Journal of Marketing, Vol. 41, No., pp. 71-76

Kiraly, J.B., Majer L., Matyas, B., Ocsi, B., Sugar A. and Varhegyi E., (2000) "Experience with Internationalization of Financial Service Providers – Case Study: Hungary," in Claessens, S. and Marion Jansen, (eds.) The Internationalization of Financial Services: Issues and Lessons for Developing Countries, Boston, Mass.: Kluwer Academic Press.4

Mahajan Rangan A.N., and Zardkoohi A., (1996) "Cost Structures in Multinational and Domestic Banking," Journal of Banking and Finance, 20(2): 238-306.

Maysami, C.R., Koh S., (2000) "A Vector Error Correction Model of the Singapore Stock Market", International Review of Economics and Finance, vol. 9 pp.79–96

Miller S.R., and Parkhe A., (2nd Qtr. 1998) "Patterns in the Expansion of U.S. Banks' Foreign Operations", Journal of International Business Studies, Vol. 29, No. 2, pp. 359-389

Uppal R.K., (2010) "Marketing of bank products-Emerging Challenges and New Strategies", Journal of Management Research, pp.35-42

http://www.atlapedia.com/online/countries/kazakh.htm