

The determinants of the foreign banks' expansion in South Eastern Europe

Do Greek banks still follow their customers abroad or not?

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Abstract—The paper deals with the factors that led to the great penetration of Greek banking sector in South Eastern Europe during 2000-2007. We investigate the validity of the follow the customer hypothesis. Based on the eclectic theory, after controlling for ownership advantages, we found that host country conditions, opportunities in the host financial markets and risk conditions are proved to be significant determinants. Our findings indicate that although follow the customer hypothesis does exist, the utilization of location advantages can better explain Greek banks' expansion.

Keywords: *Eclectic Theory; International Banking; Transition Economies*

I. INTRODUCTION

The fall of the communist regime introduced a new era for South Eastern European economies (SEE) which became part of a new globalized financial system. Banks' role was crucial for the process of transition of the economies like of Albania, Bulgaria, FYROM, Romania and Serbia. State-owned banks gradually took the path of privatization while foreign banks started investing heavily in the banking sectors of these economies. Greek banks were among the first to invest into these economies since early 90's and exhibited a remarkably high penetration during 2000 -2007.

The aim of this study is to identify the determinants of the Greek banks' expansion in the 5-SEE economies. We believe such an advent is of great importance since Greek banks hold a substantial market share in the banking markets of the 5-SEE. In addition, banks' operations in these economies signify the importance of the cross borders process as well as banks' profitability and viability. We investigate period 2000-2007 due to the large-scale mergers and acquisition that took place in that region. Furthermore we demonstrate that factors such as host market conditions, host banking sectors' opportunities and risk convergence between Greece and the respective host countries can explain better the expansion of Greek banks in the SEE than the follow the customer hypothesis. The rest of the paper is organized as follows; Section 2 reviews the literature, section 3 sets up the model and the data utilized. Study results are discussed in section 4 and section 5 concludes the paper.

II. LITERATURE REVIEW

The literature on the determinants of banks' internalization mainly is divided into two major theories. On

the one hand, the follow the customer hypothesis supports that banks expand abroad following the internalization of other home non-financial enterprises. On the other hand, a more recent strand of literature claims that the above expansion theory cannot sufficiently explain banks' internalization by itself.

Brimmer and Dahl (1975) supported that banks seek to internalize existing bank-client relationship so as to avoid being supplanted by other banking relationships either domestic or foreign, while the importance of the bank-client relationship was underlined by Fieleke (1977) and Khoury (1979). The researchers observed the above relationship as a well developed information network which banks seek to maintain and utilize. The need of a bank to expand in order to follow its customers abroad was stressed in the empirical studies of Nigh et al. (1986) and Goldberg and Johnson (1990) who found a positive relationship between US banks' foreign activities and the size of the US FDIs. The authors claimed that banks' internalization can be best discussed within the theoretical framework provided by follow the customer theory since they conclude that the choice of FDI of US banks does not depend on local (host) banking opportunities.

While all the above researchers offered a well-documented explanation for banks' expansion based on defensive motives, others argued that the follow the customer hypothesis cannot explain by itself the above phenomenon. The addition of other motives more aggressive, along with the traditional internalization ones, resulted into the application of the eclectic theory to international banking (Gray and Gray, 1981). Though accepting the follow the customer hypothesis they attribute banks' expansion abroad to the growth prospects of the destination countries. In line with the above, Goldberg and Saunders (1981) stressed the role of interest rate differentials as a key determinant for a bank's expansion abroad. Cho's (1986) empirical study - focusing mainly on banks' ownership advantages - concluded that no internalization advantage factors were found to be significant while a rejection of the follow the customer hypothesis was also offered by Seth et al. (1998).

Lastly, Sabi (1988) and Seth et al.(1998) introduced country-specific advantages, including institutional characteristics of the domestic economy, profit opportunities and local market conditions as the key determinants of the foreign banks' penetration in USA. Supporting evident can be found in Mutinelli and Piscitello (2001), Focarelli and

Pozzolo (2008), Buch (2000) and Moshirian (2001) among others.

III. DATA AND METHODOLOGY

In our study we employ a model based on the application of the Eclectic Paradigm (Dunning, 1977) to international banking (Blandon, 1998; Cho, 1986; Gray & Gray, 1981; Sagari, 1992). The Eclectic theory or OLI theory views the foreign direct investment decision to be a combination of three factors; Ownership (O), Location (L) and Internalization (I), (Dunning, 1973). Or

Banks' decision = $f(\text{Ownership, Internalization, Location})$.

Based on the above the econometric model takes the following format:

$$GrBAssets = f(O, NBFDI, CSpecific, FC, RC) \quad (1)$$

Where GrBAssets are Greek Banks Assets and denotes the penetration of Greek banks in the 5-SEE economies. (Goldberg and Johnson, 1990; Moshirian and Van der Laan, 1998). Data is taken from Banks' balance sheets.

O stands for Ownership and is a matrix of variables capturing the ownership advantages that Greek banks seek to internalize. Initially, we employ the size of the home Greek banking sector. Alternatively we use the log of the variable Int.Experience(-1) trying to capture Greek banks' intangible assets. The latter variable measures Greek banks' international experience in terms of the number of foreign countries that a Greek bank is present in a given year.

NBFDI is the Greek non Bank FDIs capturing the follow the customer hypothesis and therefore the internalization advantages. We use the lagged Greek non-banking FDI in the 5-SEE economies as in Goldberg and Saunders, 1981; Buch, 2000. Data is taken from Bank of Greece, the Central Banks of the 5-SEE countries, the Greek Embassies in the 5-SEE countries and in some cases their Offices for Economics and Commercial Affairs.

CSpecific captures Country specific conditions and is a matrix of the host country market conditions. Real GDP per capita and real GDP are used in order to capture the growth prospects in the host countries (Brealey and Kaplanis 1996; Focarelli and Pozzolo, 2008). Alternatively, we employ the log of population (Mutinelli and Piscitello, 2001).

FC is a matrix containing host financial market conditions that are captured by the banking sector's characteristics. Profit opportunities are proxied by the previous year's spread in the host markets (Sabi, 1988; Mutinelli and Piscitello, 2001). We also use the spread differential between Greece and the five host economies respectively lagged one year (Budzeika, 1991), while alternatively we use the log of the total claims of the host banking markets as a percentage of the real GDP as a way in capturing the depth of the financial market. All financial variables are taken from International Monetary Fund's International Financial Statistics.

Lastly, RC stands for risk variables capturing risk and governance conditions in the host countries. Firstly, we employ a governance indicator taken from the World Bank's Worldwide Governance Indicators (Levine 1998; La Porta, et

al, 1998). Apart from this, and based on risk similarities between Greece and the host countries - in terms of rule of law, voice and accountability of governance, corruption and especially the control effectiveness - we constructed a new set of risk variables denoted as gap variables. The gap variables indicate the difference between the values of governance and risk, between Greece and the respective host countries. We expect the gap variables to be negatively related to the dependent one. The gap generated variables include the Rule of Law(-1), the Voice(-1) capturing the voice and accountability of the government and Government Effectiveness(-1) capturing the degree of government's effectiveness. Also, alternatively we used the Corruption Perception Index taken by the Transparency International in order to construct the gap CPI variable. All risk variables are lagged since banks have to observe the previous value of the variable in order to decide whether the operational environment is favorable or not.

All variables are expressed in logs except the Rule of Law. Data is compiled from various sources and to our knowledge this is the first attempt in constructing such a database of the Greek Banks cross border activities and operations.

IV. EMPIRICAL RESULTS

A. Baseline results

The baseline results of our model are shown in table 1. In line with previous studies the results in equations (1) – (5) illustrate strong evidence in favor of the utilization of internalization and location advantages by the Greek banks in the 5-SEE. Ownership advantages, captured by home banks' size seem not significantly to affect Greek banks' decision to expand. In all equations the coefficient of the ownership variable is statistically insignificant. On the other hand, the coefficients of all other variables have the expected sign and are statistically significant. As the conditions, like size and infrastructure of the host country financial market improve, so do the size and the assets of the Greek banks. Also, the attractiveness of the host country market, captured by the country conditions, affects positively the increase of the Greek Banks assets. It seems that economic growth and implementation of economic policies that lead to economic growth certainly attract more foreign capital and increase the size of the assets.

TABLE 1: BASELINE ESTIMATION RESULTS

Dependent Variable: log GreekBanks' Assets					
OLS					
	(1)	(2)	(3)	(4)	(5)
OWNERSHIP					
logHomeBankSize (-1)	0.475 (0.575)	1.000* (0.560)	-0.408 (0.740)	-0.735 (0.460)	-0.788 (0.523)
INTERNALIZATION					
logGreekNonBankFDIs (-1)	0.833* (0.424)	0.915** (0.386)	0.979*** (0.349)	0.681*** (0.221)	0.714*** (0.249)
LOCATION					
(Financial Market Conditions)					
log Spread (-1)		4.154** (1.614)	4.041** (1.455)	3.903*** (0.900)	4.239*** (1.019)
(Country Specific Conditions)					
log GDPpc (-1)			4.784** (1.837)	3.027** (1.169)	2.847** (1.340)
(Risk Conditions)					
RuleOfLaw (-1)				2.836*** (0.450)	
log GapRuleOfLaw (-1)					-8.026*** (1.573)

Note: The symbol *** indicates a significance level of 1% or less; ** between 1 and 5%; * between 5 and 10%, while standard errors are indicated in the parentheses.

According to the baseline results location advantages constitute the most significant determinants for Greek banks' expansion into the 5-SEE. Note that in all four equations the coefficient of location advantages is higher than that of the respective internalization variable.

In the last two specifications we deal with the host risk conditions and their ability to significantly affect Greek banks' decision to penetrate in the 5-SEE economies. In specification (4) we employ the RuleofLaw(-1) along with all the previous ownership, internalization and location variables. The risk coefficient appears to have significant impact on the depended variable. The ownership variable still remains insignificant, while the internalization variable and the rest location ones do not loose their significance at all. The significance of the risk coefficient indicates the positive relationship between risk conditions and Greek banks' penetration in the region.

Since we believe that it is not only the progress achieved in the governance of the transition economies but also the similarities of this governance to the Greek one, we added in equation (5) alternatively a variable capturing the risk similarities; logGapRuleOfLaw(-1). The negative sign of the coefficient indicates the expected relationship between similarities between home and host risk conditions and Greek banks' penetration. Note that, as one can see in the above table, the value of the logGapRuleOfLaw(-1) coefficient is remarkably high compared to the previous risk variable RuleOfLaw(-1). This relatively high value confirms our claim regarding the significant role that risk gap plays on Greek banks' penetration decisions.

Up to this point our baseline results indicate that the eclectic theory and not the internalization one fits best to the case of Greek banks expansion into South East Europe during the period we study.

But as far as the ownership advantages are concerned the baseline results are ambiguous. Though, an interesting argumentation about ownership advantages and the specific proxy we used is given below. The coefficient of the

logHomeBankSize(-1) is the only one which is not statistically significant. A possible explanation for the weak performance of the variable logHomeBankSize(-1) may arise if the size of a bank implies economies of scale as a consequent advantage. Economies of scale are not regarded as important ownership advantages in multinational banking, as they appear to be exhausted in banking at a size below that attained by most banks prior to multinationality [Williams, 1998]. In addition, as Dunning (1988) points out, the ownership of a particular asset or assets explains why one firm is a multinational rather than another. So, maybe size, as an ownership advantage, would fit better in the case in which we would deal with a comparison between Greek banks themselves while Contractor and Kundu (1998) supported that in the case of several service sectors the advantages of size may equally derive from a global network of partnerships and alliances.

Though the above, regarding banks' size as a determinant of internalization, offer a well documented argumentation against the validity of the specific variable, size has been proved to be the key ownership-advantage variable in many empirical studies (e.g. Ball and Tschoegl, 1982; Ursacki and Vertinsky, 1992; Tschoegl, 1983). This partially justifies our choice to test the specific variable. Yet, according to our results, in the case of the Greek banks, their size did not seem to have played an important role to their decision to internalize.

The opposite views regarding size are reconciled by Gray and Gray (1981). Their views may explain the weak performance of size as ownership advantage. According to Gray and Gray, net ownership-specific advantages are not needed in a supranational market; As supranational market they define the one in which multinational banks generate supranational branches or subsidiaries. In that market of keen competition such ownership advantages are not necessary since there are no indigenous banks to compete.

Taking into account all the above, we claim that for the period we study the size of the Greek banks did not catalytically play an important role regarding their internalization. Their size was a precondition for internalization the first time they crossed the borders - that happened prior to the period we study - rather than an incentive for further expansion during the period 2000-2007.

Robustness

The results presented in the previous section give support to the eclectic theory. Location advantages seem to play a significant role as well as the internationalization advantages. On the other hand, the impact of the ownership advantages is giving no support to a direct impact on Greek banks' penetration in the 5-SEE economies.

In order to reinforce the above results we perform a robustness test. As can be seen in table 2, replacing the variables with alternative ones do not alter the baseline results. In the first specification we test the robustness of the risk variables. We substitute our initial risk gap variable with an alternative; logGapVoice (-1). The new variable offers a different approach of the risk conditions since it captures the voice and accountability of the 5-SEE governments. We

believe that the more accountable the host government, the

TABLE 2: ROBUSTNESS TEST I – ESTIMATION RESULTS

Dependent Variable: logGreekBanks'Assets				
OLS				
	(1)	(2)	(3)	(4)
OWNERSHIP				
logHomeBankSize (-1)	-0.690 (0.594)	-0.543 (0.532)	-0.223 (0.535)	0.169 (0.346)
INTERNALIZATION				
logGreekNonBankFDIs (-1)	0.826*** (0.281)	0.885*** (0.252)	0.974*** (0.248)	1.291*** (0.226)
LOCATION				
(Financial Market Conditions)				
logSpread (-1)	3.679*** (1.165)			
logClaimsGdp (-1)		-3.126*** (0.728)	-4.712*** (0.764)	-1.836* (1.009)
(Country Specific Conditions)				
logGDPpc (-1)	2.728* (1.560)	2.500* (1.327)	2.772* (1.367)	
logPop (-1)				2.404*** (0.713)
(Risk Conditions)				
logGapVice (-1)	-5.181*** (1.350)			
logGovEffectiv (-1)				-2.730*** (0.803)
logGapRuleOfLaw (-1)		-6.160*** (1.595)		
logGapCH (-1)			-1.475** (0.579)	

Note: The symbol *** indicates a significance level of 1% or less; ** between 1 and 5%; * between 5 and 10%, while standard errors are indicated in the parentheses.

safer and consequently more intense is the foreign bank penetration. The coefficient appears to have the expected negative sign. As far as the rest of the coefficients, all referring to country and financial conditions are still statistically significant. The Internalization coefficient maintains its correct sign but its value is smaller compared to the coefficients of the location variables. Note that the ownership advantage remains still insignificant.

In addition, in specifications (2) – (3) we use two extra risk variables along with an alternative financial conditions variables. The risk variables logGapRuleofLaw(-1) and logGapCPI(-1) have the expected negative sign while the value of the coefficients are bigger than the coefficient value of the internalization variable.

Also in the above specifications we employ total claims to GDP (logClaims/Gdp(-1)) in order to capture other aspects of the host financial conditions such as the depth of the host banking market. The variable used so far logSpread(-1) proxied the obvious opportunity that foreign banks seek to take advantage of. On the other hand, using to ratio of claims to GDP allows us to capture location advantages that are less obvious or direct. We claim that low levels of the ratio claims/GDP indicate opportunities deriving from a local non saturated banking market. The resulted coefficient of the claims/GDP ratio is significantly negative implying that the growth in GDP is greater than the growth in total claims in the five 5-SEE economies, which is translated into more opportunities and a lure for Greek banks.

Finally in the last specification we included the effectiveness of the government variable under the country risk specific conditions as well as the population variable in place of the GDP per capital in an attempt to capture the size of the host country and the size of the specific market. Even in this specification (4) the results are in line with the previous specifications and confirm our view that Greek

banks seriously considered the risk similarities between their country and the destination ones.

Lastly, due to the fact that Ownership advantages are not statistically significant we replace the previous variable with the international experience variable in order to capture the intangible side of ownership advantages. Following Bandon (1998) we measured the experience of a Greek bank in international banking. The significant positive coefficient of the variable in specification (1) of table-3 indicates that indeed international experience constituted a valuable asset necessary for Greek banks expansion into the 5-SEE economies. The significantly positive sign of the coefficient suggests that Greek banks felt more confident across their borders the more they expanded, while bankers used their previous international experience as know-how and their reputation continued. Note that in all specifications the variable remains significantly positive while the same happens with the internalization variables confirming simultaneously our previous findings regarding the follow the customer hypothesis. The later hypothesis remains robust even after proxying the country conditions with logGDP(-1) instead of logGDPpc(-1).

TABLE 3: ROBUSTNESS TEST II - ESTIMATION RESULTS

Dependent Variable: logGreekBanks'Assets				
OLS				
	(1)	(2)	(3)	(4)
OWNERSHIP				
logInt.Experience (-2)	6.589*** (2.111)	4.435** (1.998)	3.610** (1.642)	4.033** (1.784)
INTERNALIZATION				
logGreekNonBankFDIs (-1)	0.907*** (0.217)	0.886*** (0.193)	0.722*** (0.202)	0.761*** (0.219)
LOCATION				
(Financial Market Conditions)				
SpreadDiffer (-1)	-0.266*** (0.038)	-0.139*** (0.032)	-0.196*** (0.034)	-0.186*** (0.038)
(Country Specific Conditions)				
logGDPpc (-1)	4.646*** (1.044)		2.885** (1.032)	2.596** (1.245)
logGDP (-1)		2.044*** (0.368)		
(Risk Conditions)				
logGapVice (-1)				-3.381*** (1.203)
logGapRuleOfLaw (-1)			-5.300*** (1.427)	
logGapCPI (-1)	-1.845*** (0.565)	-1.084* (0.527)		

Note: The symbol *** indicates a significance level of 1% or less; ** between 1 and 5%; * between 5 and 10%, while standard errors are indicated in the parentheses.

V. CONCLUDING REMARKS

We investigate the determinants of the Greek banks expansion to 5-SEE economies. Testing simultaneously the three components of the OLI paradigm we try to shed light on the conflict between the internalization and the eclectic theory. Our results support the latter. Initially, the validity of the Internalization Theory for explaining Greek banks expansion for the period 2000-2007, based on the initial results derived, can not be dismissed. But by adding location and ownership advantages along with the internalization ones, the results are in favor of the Eclectic Theory. In other words, the internalization advantages do exist but have lost ground against the ones of the Eclectic Theory. Contrary to Nigh et al. (1986) and Goldberg and Johnson (1990) and in line with Focarelli and Pozzolo (2008), we claim that banks' expansion in the case of Greece, for the period at hand, can

be best described by the advantages provided by the Eclectic Theory.

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