

# CORPORATE GOVERNANCE OF BANKS, PERFORMANCE, MARKET AND CAPITAL STRUCTURE

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## Abstract

Many scholars have linked Corporate Governance (CG) and performance or CG, capital structure of banks or market structure. The decision to use the capital market or debt in order to obtain the necessary capital to finance firms' operations is a critical factor for the formulation of corporate environment, because it contributes to the ownership concentration or diffusion and to corporate risk exposure level. The paper's goal is to link all these three dimensions and to address the issue of whether performance and capital structure are the decisive factors of good corporate governance or vice versa and whether these dimensions are the drivers of banks' financial health, strategic robustness and survival effectiveness. Furthermore, the paper is seeking to detect the differences (if any) among banking systems across Europe. To do that a double sample is selected (covering the period from 2004 to 2013). The first sample is comprised by European banks that merged. The second sample is comprised by European banks that survived the last merger & acquisition wave and the systemic shock of the double crises of 2002 and 2008. A combined ratio of performance (ROAA or ROEA) and debt to equity (DE or debt aggravation) is used to determine if there is a connection between capital structure and CG quality of banks. Panel data methodology is used. The econometric results show that there are no significant differences between the strata that are used for this research. There is no common factor or driver between the banking systems of Europe. This is an indication that the convergence theory of corporate governance systems is yet confirmed.

## 1. INTRODUCTION

The main hypothesis of the paper is that corporate governance issues are not the same across Europe and between Europe and the Anglo-Saxon countries. Salim, et al. (2016) found a direct connection between corporate governance and banks' performance. The fundamental difference is ownership diffusion and the mix of own capital and debt. There is a relation between these two elements (ownership and capital mix). Especially for banks debt is both a mean of leveraging performance and mitigating risk and at the same time is a risk. It is no surprise that regulators have taken a special interest in controlling and supervising the level of leverage and risk taken by the banks. The frameworks of Basil II (2004) and Basil III (2010-2011) are a step to this direction. Policy makers and regulators – supervising authorities have an invested interest in bank performance because bank performance is correlated with economic growth (Ferreira, 2016). Pawlowska (2016) also argues that the size and market structure of the banking sector affect the stability of economic growth in Europe.

There are some empirical surveys that studied ownership concentration and performance investigate debt aggravation as a substitute or complement to equity ownership or as a fundamental element of capital structure (i.e. Jensen & Meckling, 1976 for the basic theory<sup>1</sup>). Aguilera and Jackson (2003) argue that lack of liquidity in capital markets in countries that have the characteristics of the Continental Europe system of corporate governance have the tendency to depend more on debt.

Debt aggravation and capital structure affects the decision-making process (Menicucci & Paolucci, 2016; Harris et al., 1988). If the firm depends on its profits to finance its growth, then in short-term the expected growth should not be a great one, due to the large amount of time needed to raise the necessary capital, to invest it and to obtain profits. Fahlenbrach, et al., (2017) connect loan growth with performance.

If the firm can raise capital through issuing new shares for current stockholders, then this increases the commitment or risk of the current shareholders on the firm. If the firm can raise capital through issuing new shares for new stockholders, then the percentage of equity holdings of the old shareholders is decreased and the possibility of power and control loss is increased (this option has the same effects as the Mergers and Acquisitions (MA)). Of course there is the problem of size. MAs do not have the same gains for all. Regional banks may have more efficiency gains from MAs (Halkos et al., 2016) and so the regional banks of South Europe have more to gain. Kuriakose and Paul (2016) argue that there is an adverse impact on the post-merger performance.

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<sup>1</sup> See as well Schauten and Blom (2006); Piot and Missonier-Piera (2007); Chan-Lau, Jorge A., (2001); Jiraporn and Kitsabunnarat (2007).

Debt – liability increase does not create directly monitor and control rights on management or limitations for the decision making process. Hence, the dominant group can select and implement the strategy, organizational scheme and asset allocation that they see fit to their expectations and goals. Furthermore, debtors don't have the same legal mechanisms to influence or to determine the decisions made by the board of directors or other managerial mechanisms.

The complex issue of studying performance and capital structure is addressed by constructing a combined ratio ( $CI\_ROA = ROA/DE$ ). The main hypothesis is that high performance and high leveraged banks is the outcome of the corporate governance system, operational and cost optimization, and optimal product expansion.

The first section of the paper is dedicated presenting the mergers and acquisition (MA) activity in Europe generally. In the second section there is a description of the sample and methodology used to study the MA activity in the European banking sector. Using the data obtained and stratified in the third section the MAs activity is analyzed. The fourth section of the paper tries to present the two approach and the optimal methodological solution in order to answer the research questions. The econometric results (statistical tests and variables selected) are presented in the fifth section of the paper. Research results are discussed in the sixth section and finally conclusions drawn from the analysis of both bibliography and research are presented in the seventh section of the paper.

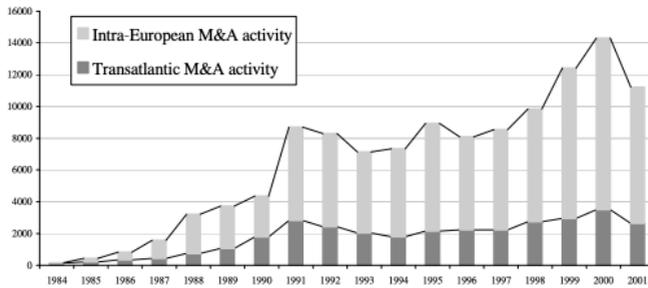
## **2. MERGERS AND ACQUISITIONS IN EUROPE**

The banking sector in Europe during the last three decades has been through turbulent times. The sector has been formulated through a series of market driven and regulation driven changes. Both drivers of changes are interlocked.

A significant factor in formulating the sector is the market drivers or the market for corporate control. The most significant is mergers and acquisitions (MA). The sector in Europe has gone during the last three decades through two waves of MAs. The following graph shows the first wave of MAs in Europe. The graph shows that the MA activity in Europe is high all through the 1990's and this is an indicator of the trend for corporations to increase their size and of the competition level in Europe.

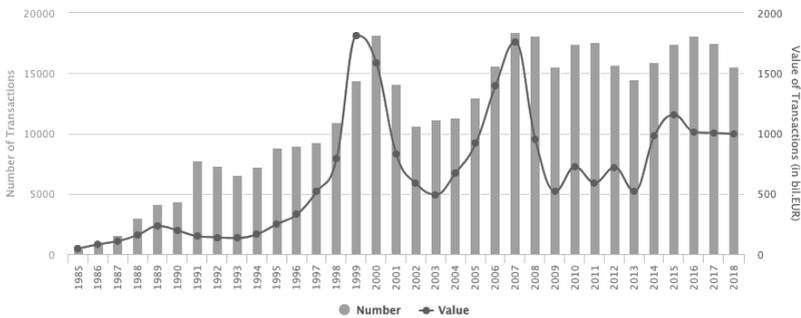
The fact that the MA wave covers the whole decade (from 1991 to 2000) and their number is increasing through time shows that the strategy of size has a momentum and is considered to be a good response to environment challenges. Figure 2 shows that following the '90s wave a second wave has taken place (from 2004 until now). The difference is that through this wave the value of MAs is decreasing.

**Figure 1.** Mergers and acquisition in Europe (1984-2001)



Source: Martynova and Renneboog (2006), p. 46

**Figure 2.** Mergers and acquisition in Europe (1985-2018)



Source: <https://imaa-institute.org/mergers-and-acquisitions-statistics/>

### 3. SAMPLE AND METHODOLOGY

The sample was taken from Bankscope<sup>2</sup>. The data collected cover the period from 2004 to 2013. There was a selection of commercial and cooperative banks only. Investment or other types of banks were not selected due to their special characteristics (regulation, operation, etc.). One problem that needed to be addressed is the missing values. Many variables (i.e. Tier1, Total Capital Ratio, etc.) have a large percentage of missing values. These variables were omitted from analysis even though many scholars and theories use them. A second problem is the correlation of many variables (see Appendix). Variables that have a strong correlation with other are used as substitutes one of the other in order to avoid methodological issues.

<sup>2</sup> BvD's Bankscope contains detailed financial information for approximately 30,000 public and private banks in Europe, North America, Japan, and Russia, in addition to other major banks and supranational organizations. Types of information available may include: Stock data for listed banks, Directors, Detailed bank structures, etc. Financial data for companies within Bankscope is retained for a rolling period of 16 years.

The third problem was that the sample was not ready to be used with panel data regressions. So, the sample was transformed. 81.140 records for 8.115 banks were collected as an initial sample (see Table 1). Two dummy variables were used to stratify the sample. The first one is the corporate governance system (Wang & Chen, 2006) of each country (variable CGsysQ Anglo-Saxon (8.070 records) and Continental Europe system (73.070 records)) and the geographical one (variable NS: North (65.000 records) and South (16.140 records)). Finally, the sample was divided using a dummy variable (variable ACTIVE: Active (51.960 records) and Merged (21.500 records)).

**Table 1.** Sample distribution

<i>Country</i>	<i>Exit</i>	<i>Active</i>	<i>Total</i>	<i>Country</i>	<i>Exit</i>	<i>Active</i>	<i>Total</i>
North	2823	3678	6501	European-Continental	3260	4048	73080
AT	148	278	426	AT	148	278	426
BE	107	70	177	BE	107	70	177
BG	12	27	39	BG	12	27	39
CZ	29	36	65	CZ	29	36	65
DE	1169	1764	2933	DE	1169	1764	2933
DK	81	96	177	DK	81	96	177
EE	11	10	21	EE	11	10	21
FI	21	41	62	ES	171	160	331
FR	423	374	797	FI	21	41	62
GB	286	452	738	FR	423	374	797
HR	33	35	68	GR	28	15	43
HU	39	34	73	HR	33	35	68
IE	71	39	110	HU	39	34	73
LT	7	10	17	IE	71	39	110
LU	115	92	207	IT	484	608	1092
LV	12	21	33	LT	7	10	17
NL	84	82	166	LU	115	92	207
PL	49	47	96	LV	12	21	33
RO	20	28	48	NL	84	82	166
SE	69	101	170	PL	49	47	96
SI	19	22	41	PT	40	39	79
SK	18	19	37	RO	20	28	48
South	757	857	1614	SE	69	101	170
CY	25	19	44	SI	19	22	41
ES	171	160	331	SK	18	19	37
GR	28	15	43	Anglo-Saxon	320	487	807
IT	484	608	1092	CY	25	19	44
MT	9	16	25	GB	286	452	738
PT	40	39	79	MT	9	16	25
Total	757	857	1614	Total	3580	4535	8115
North	43,42%	56,58%	100%	European-Continental	50,15%	62,27%	1124,13%
South	46,90%	53,10%	100%	Anglo-Saxon	4,28%	6,26%	10,53%

A combined ratio was calculated using the data from Bankscope as the dependent variable.

The combined ratio is:

$$CI\_ROA = \text{Return on Assets (ROA)} / \text{Debt to Equity (DE)} \quad (1)$$

Due to sample structure OLS was not an optimal choice. Panel data regressions are more suitable for this kind of data. Two models are used. One for active banks and one for merged banks. Baltagi (2005) argues that panel data have significant advantages (i.e. more information, less collinearity, more degrees of freedom, etc.). Their main advantage is that there are able to locate the effects that usually are not recognizable when using other approaches. The stratifying variables are the bank itself. Each bank is considered as a different stratum in order to identify if there is a difference of behavior amongst banks.

#### 4. THE BANKING SECTOR IN EUROPE

Dissolves, Liquidations, Mergers and Bankruptcies are the ways of exiting the sector. The banking sector in Europe has known all these during the time period of the study. From the initial size of the study, 2.919 (36%) have exited the sector using one the previously mentioned methods. This means that during the study period a significant restructuring of the sector has taken place.

The option to merge is not an easy one. It's a challenge or a bet. Not all MAs are success stories. Usually a merger is followed by a string of attempts to minimize operational costs, optimal resource allocation and synergies (wherever and whenever possible). The ultimate goal is to achieve a competitive advantage. Performance and capital structure quality are the two factors through which the competitive advantage is achieved.

Table 2 shows that the main method of exiting the sector is MA. Bankruptcies and dissolves are located mainly in European – Continental and North countries (the main economic powers of Europe). On the other hand MAs and liquidations are more common (as a percentage of the sector and not as a number of MAs) in Anglo-Saxon countries. The last exit methods are expected to be more common because the market for corporate control is more active in these countries (Yener & Marqués, 2008).

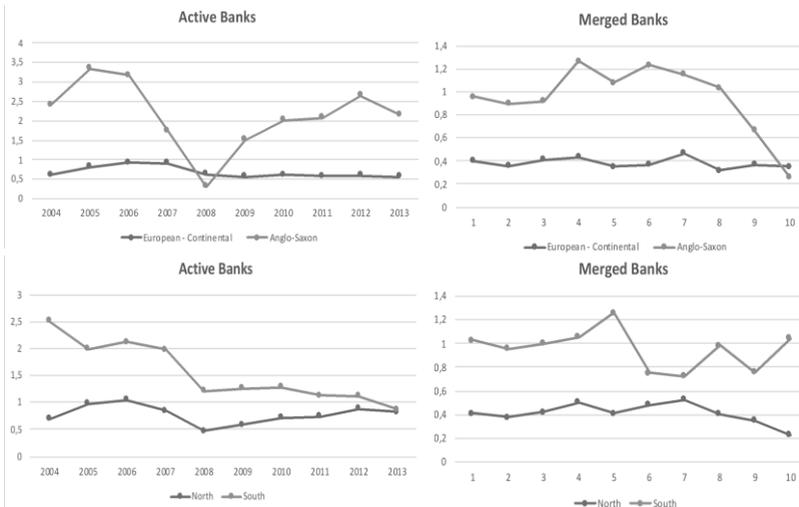
**Table 2.** Exits

<i>Exit method</i>	<i>North</i>	<i>South</i>	<i>European - Continental</i>	<i>Anglo-Saxon</i>	<i>Total</i>
Bankruptcies	24		24		24
Dissolves	469	78	445	102	547
De-Merger	1		1		1
Merger	1633	518	2086	65	2151
Liquidations	140	27	118	49	167
Not defined	26	3	24	5	29
Total	2293	626	2698	221	2919

The majority of the exits are done through MAs (73,7%). 24% of MAs are located in the South countries and only the 3% (the percentage is high having in mind that only 3 countries (United Kingdom, Malta, Cyprus) have this system in Europe) in countries with Anglo-Saxon system.

One of the main stream theories is that there is a convergence in Europe (Brau, Dahl, Zhang, & Zhou, 2014; M., Casu & Girardone, 2010; Heugens & Otten, 2007; Murinde, Agung & Mullineux, 2004; Schmidt, Hackethal & Tyrell, 2001; Carati & Tourani, 2000). The corporate governance system is an indicator of the convergence. Because it takes into account many micro and macro-economic (i.e. the adoption of the Euro as the common currency) as well as the legal and political factors. The study of BIS (201) shows that there is a cross-ownership relationship and cross-ownership of assets and this is an indicator of convergence. The same trend is observed in USA, where from 16.000 banks in 1980, only 8.000 remained in 2003 (Yener & Marqués, 2008). Rughoo and Sarantis (2014), Gibson and Tsakalotos (2013) and the EUROPEAN CENTRAL BANK (2012) argue that the convergence trend is weak and that there are still two distinct systems in Europe (Moschieri & Campa, 2009). Pawlowska (2016) suggests that the banking sectors within European Union are not homogeneous and also that there is asymmetry between the performance of EU-15 (i.e., large banking sectors) and EU-12 banking sectors (i.e., small banking sectors).

**Figure 3.** ROA of European banks (2004-2013)



The above graph shows that there are differences amongst the various stratum of the sample. In the Anglo-Saxon countries

performance is higher than the one in the European – Continental corporate governance system countries. During the last three years a convergence is observed for the merged banks. For the active banks only during the year 2008 a sudden collapse of performance is observed for the Anglo-Saxon corporate governance system countries.

Using the geographical stratum and for the active banks the hypothesis of convergence seems to correct. On the contrary, for the merged banks performance seems to diverge. This difference can be attributed to the different causes or motives for the MAs from North to South.

## 5. ECONOMETRIC APPROACHES

There are two approaches of this issue. The first approach is the event study (Beitel & Schiereck, 2006; Amihud, De Long, & Saunders, 2002; Piloff & Santomero, 1998). The goal of this approach is to detect whether MAs have positive results (performance). The second approach tries to measure the financial integration of performance. Usually performance is measured with ratios like ROA, ROW, Tobin's Q, etc. The most common of which is ROA. Performance is viewed as the result of the quality decisions made (Vander Vennet, 2002; Berger, DeYoung, Genay, & Udell, 2000; Berger, Demsetz, & Strahan, 1999; Piloff, 1996).

The second approach is more suitable for the research questions of the study. Studies (Beitel & Schiereck, 2006; Diaz, Garcia Olalla, & Sanfilippo Azofra, 2004) show that the MAs are not connected with performance and there are other reasons – causes for the MAs.

The basic model is:

$$CI\_ROA = a + enl + el + cfta + cfdsf + cfl + sdcf + nim + nira + nieaa + ptoiaa + \text{noitaa} + \text{interb} + nlta + u \quad (2)$$

## 6. ECONOMETRIC RESULTS

Both models (active and merged banks) are tested for the assumptions of random or fixed effects. The random effects assumption (made in a random effects model) is that the individual-specific effects are uncorrelated with the independent variables. The fixed effect assumption is that the individual-specific effects are correlated with the independent variables. The Hausman test was used to determine which assumption is correct.

The test shows that the random effects assumption cannot be made. So, the fixed effects model's assumption is more suitable for the models designed. The test autocorrelation (Durbin Watson for the active banks is 2,3 and for the merged is about 1,24) show that no determination can be made about autocorrelation.

**Table 3.** Hausman tests

<i>Time - Bank</i>	<i>Model</i>	
	<i>Active</i>	<i>Merged</i>
Bank - Time	Chi-square(10) = 1448.86 with p-value = 2.78717e-305	Chi-square(10) = 113.182 with p-value = 1.21549e-19
Bank	Chi-square(10) = 1330.17 with p-value = 1.17722e-279	Chi-square(10) = 112.724 with p-value = 1.50432e-19

The Wald tests for the importance of time variable shows that in active (Chi-square(9) = 132.113 with p-value = 4.35913e-24) banks time variable has a significant impact. On the contrary in the model for merged banks the Wald test (Chi-square(9) = 7.44416 with p-value = 0.590979) shows that the time variable doesn't have a statistical effect. The test for the statistical significance of the independent variables show that all variables are statistical significant for the model for active banks (Table 4), whereas only a few are statistical significant for the merged banks (Table 5).

**Table 4.** Independent variable (Active)

<i>Variable</i>	<i>Without time variable</i>					
	<i>Coefficient</i>	<i>p-τιμῆ</i>		<i>Coefficient</i>	<i>p-τιμῆ</i>	
const	0.511962	<0.0001	***	0.402074	<0.0001	***
enl	-0.00120304	<0.0001	***	-0.00105610	<0.0001	***
el	-0.0218211	<0.0001	***	-0.0238373	<0.0001	***
cfta	0.0210993	<0.0001	***	0.0120617	<0.0001	***
cfl	0.0132312	<0.0001	***	0.0153448	<0.0001	***
sdcf	-0.0251807	<0.0001	***	-0.0230905	<0.0001	***
nieaa	-0.0167514	<0.0001	***	-0.00825900	0.0233	**
ptoiaa	0.100567	<0.0001	***	0.115919	<0.0001	***
noitaa	0.199907	<0.0001	***	0.222468	<0.0001	***
interb	-0.000172565	0.0001	***	-0.000141182	0.0015	***
nlta	-0.00218817	0.0028	***	-0.00154527	0.0337	**
	P-value (F)=2,4e-143			P-value (F)=1,4e-130		

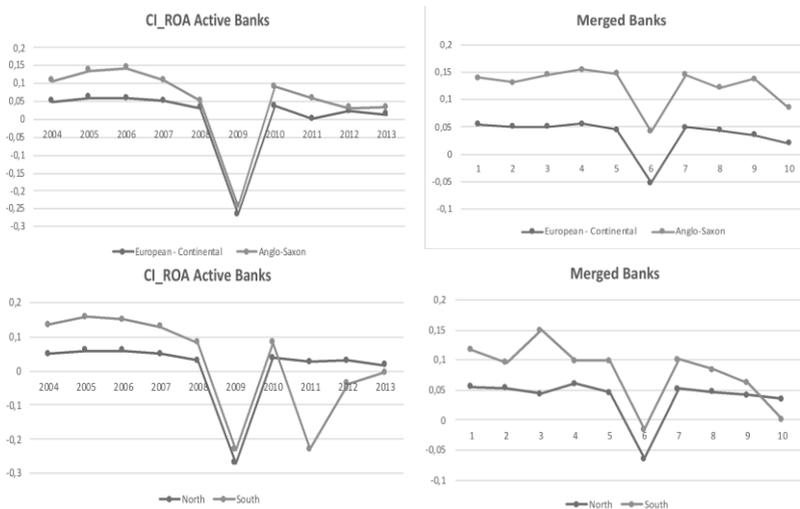
**Table 5.** Independent variable (Merged)

<i>Variable</i>	<i>With time variable</i>			<i>Without time variable</i>		
	<i>Coefficient</i>	<i>p-τιμῆ</i>		<i>Coefficient</i>	<i>p-τιμῆ</i>	
const	-0.466074	0.0402	**	-0.493990	0.0216	**
enl	0.000210435	0.8177		0.000249014	0.7847	
el	-0.0275383	0.0693	*	-0.0273411	0.0708	*
cfta	0.0267137	0.0237	**	0.0265653	0.0243	**
cfl	0.00324281	0.7905		0.00369701	0.7618	
sdcf	0.0162178	<0.0001	***	0.0162856	<0.0001	***
nieaa	0.00647372	0.2846		0.00625339	0.2996	
ptoiaa	0.234721	<0.0001	***	0.233454	<0.0001	***
noitaa	0.129651	0.0001	***	0.129584	0.0001	***
interb	4.89399e-05	0.8150		3.01915e-05	0.8849	
nlta	0.00171428	0.6217		0.00178861	0.6059	
	P-value (F)= 4,05e-06			P-value (F)= 3,28e-06		

## 7. RESEARCH RESULTS

The dependent variable is a combined ratio of performance (Return on Assets) and capital structure (Debt to Equity ratio). High leveraged banks that are successful should have also high performance. The Anglo-Saxon countries have higher values of the ratio and among the south countries Cyprus (also an Anglo-Saxon country) has very different behavior than the other south countries. The comparison of the two Figures (3 and 4) reveal that ROA and CI\_ROA have a quite different behavior. ROA drops at the year 2008 while the same happens during 2009 for the combined index. This may be due to the reaction of banks to the crises effects and the regulator and monitoring agencies pressure to correct their leverage levels.

**Figure 4. CI\_ROA of European banks (2004-2013)**



The econometric results show a plethora of findings. The fixed effects assumption is an indication that each bank behaves differently in both cases (active and merged). The fact that the time variable is not significant for the merged banks shows that the merged banks are targeted regardless their financial structure (liquidity, credit risk, etc.).

The selected independent variables were more than 25. Ten of them were found (Table 4) to be statistically significant for the active banks model. The majority of the variables are capital adequacy (enl, el, cfta, cfl, sdfc) and profitability (nieaa, ptoiaa, noitaa) ratios and only one liquidity ratio (interb) and one credit risk ratio (nlta). The fact is that the mix of statistically significant variables is concentrated on capital adequacy (the existence of capital to achieve loan growth and capital

market's trust) and profitability (mostly operation optimization and mix of revenue-products).

The two models show a quite different behavior and so the hypothesis that active banks have different financial structure from the merged ones. The combined index shows that the convergence hypothesis has some merit at the level of performance. The only exception is the year 2011 (the year that lead to the Cyprus bail in event). The same assumption can be made from the fact that both dummy variables (corporate governance and geography) were rejected as non-statistically important.

## 7. CONCLUSIONS

The papers goal was to find a link between corporate governance, market structure, performance and capital structure. The first dimension was encompassed using a dummy variable, the second by dividing the sample, the third as the dependent variable and the fourth as independent variables. The theory suggests that performance and leverage are the outcomes of market structure (MAs, liquidations, etc.), capital structure and macroeconomic factors like corporate governance. To test this hypothesis two econometric models have been designed.

The analysis of the data shows that the MA wave that took place during the period of 2004-2013 has created a new market structure. More than the one third of the banking sector is no more. The MA wave is not isomorphic. The MA activity is more intense (as a percentage of the number of banks before the wave) in the south regions of Europe. There are some other differences, mainly on the incentive-drive to merge, but the results are as expected (a drop in performance). Capital structure and the quality of income sources seem to be the decisive factors of performance.

The fact that merged banks show a different set of factors affecting the combined index than the ones in active banks indicates that merged banks have some characteristics that makes them a target for a merger. The effort to create a common political and regulating environment seems to have an effect due to the fact that the corporate governance variable has not been found as statistically significant. So, market structure of the banking sector in Europe is the result of performance / leverage, capital structure and the strategy to obtain more gains by merging with regional banks.

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## APPENDIX

**Table 6. Variables**

<i>Factors</i>	<i>Variables</i>
Asset quality	Loan Loss Provision/Net Interest Revenue (LLPNIR)
	Loan Loss Reserves/Impaired Loans (LLRL)
	Impaired Loans/Gross Loans (LGL)
	Net Charge Off/Net Income Before Loan Loss Provision (NCONIBLLP)
	Impaired Loans/Equity (ILE)
	Unreserved Impaired Loans/Equity (UILE)
Capital adequacy	Tier 1 Ratio (TR)
	Total Capital Ratio (TCR)
	Equity/Total Assets (CS)
	Equity/Net Loans (ENL)
	Equity/Liabilities (EL)
	Equity/Deposit & Short-Term Funding (EDSF)
	Capital Funds/Total Assets (CFTA)
	Capital Funds/Net Loans (CFNL)
	Capital Funds/Deposit & Short Term Funding (CFDSF)
	Capital Funds/Liabilities (CFL)
	Subordinated Debt/Capital Funds (SDCF)
Profitability	Net Interest Margin (NIM)
	Net Interest Income/Average Assets (NIRAA)
	Other Operating Income/Average Assets (OIAA)
	Non Interest Expense/Average Assets (NIEAA)
	Pre-Tax Operating Income/Average Assets (PTOIAA)
	Non Operating Items & Taxes/Average Assets (NOITAA)
	Return On Average Assets (ROAA)
	Return On Average Equity (ROAE)
	Dividend Pay-Out (DPO)
	Income Net Of Distribution/Average Equity (INODAE)
	Non-Operating Income/Net Income (NOINI)
	Cost To Income Ratio (CIR)
	Recurring Earning Power (REP)
	Net Profit Margin (NPM)
Credit risk	Net Charge Off/Average Gross Loans (NCOAGL)
	Provision for Loan Losses/Total Loans (PLLTL)
	Provisions for Loan Losses/Equity (PLLE)
	Loan Loss Reserve/Gross Loans (LLRGL)
	Reserve for Loan Losses/Total Equity (RLLE)
Liquidity	Interbank Ratio (IBR)
	Net Loans/Total Assets (LR)
	Net Loans/Deposit & Short-Term Funding (NLDSTF)
	Net Loans/Total Deposit & Borrowing (NLTDDB)
	Liquid Assets/Deposit & Short-Term Funding (LADSTF)
Liquid Assets/Total Deposit & Borrowing (LATDB)	
Interest rate risk	Interest Sensitive Gap Ratio (GR)

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**Table 7.** Correlation matrix

	<i>eta</i>	<i>enl</i>	<i>ecstf</i>	<i>el</i>	<i>cfta</i>	<i>cfnl</i>	<i>cfdsf</i>	<i>cfl</i>	<i>sdcf</i>	<i>nim</i>	<i>niraa</i>	<i>boiaa</i>	<i>nieaa</i>	<i>ptoiaa</i>	<i>noitaa</i>	<i>cti</i>	<i>rep</i>	<i>interb</i>	<i>nlta</i>	<i>CI_ROA</i>	<i>CI_ROE</i>
<i>eta</i>	1,00																				
<i>enl</i>	0,50	1,00																			
<i>ecstf</i>	0,67	0,34	1,00																		
<i>el</i>	0,74	0,39	0,78	1,00																	
<i>cfta</i>	0,93	0,47	0,66	0,76	1,00																
<i>cfnl</i>	0,47	0,98	0,33	0,36	0,47	1,00															
<i>cfdsf</i>	0,66	0,33	0,97	0,75	0,69	0,33	1,00														
<i>cfl</i>	0,80	0,37	0,75	0,98	0,80	0,37	0,76	1,00													
<i>sdcf</i>	-0,17	-0,06	-0,03	-0,05	0,05	0,01	0,04	0,00	1,00												
<i>nim</i>	0,08	0,05	0,05	0,04	0,06	0,02	0,04	0,04	-0,04	1,00											
<i>niraa</i>	0,09	-0,01	0,05	0,03	0,11	-0,04	0,04	0,06	-0,10	0,40	1,00										
<i>ooiaa</i>	0,23	0,20	0,20	0,19	0,32	0,22	0,25	0,26	-0,03	0,00	-0,06	1,00									
<i>nieaa</i>	0,17	0,15	0,17	0,15	0,27	0,16	0,22	0,24	-0,03	0,07	0,17	0,90	1,00								
<i>ptoiaa</i>	0,21	0,15	0,18	0,15	0,26	0,13	0,18	0,16	-0,08	0,11	0,16	0,35	0,08	1,00							
<i>noitaa</i>	-0,04	0,00	-0,02	-0,01	-0,12	-0,03	-0,04	-0,07	0,03	-0,08	-0,12	-0,18	-0,21	-0,36	1,00						
<i>cti</i>	0,01	0,06	0,02	0,00	0,02	0,07	0,00	0,04	0,03	-0,01	-0,03	0,04	0,13	-0,32	0,09	1,00					
<i>rep</i>	0,20	0,13	0,15	0,14	0,25	0,10	0,18	0,18	-0,06	0,10	0,20	0,42	0,09	0,92	-0,35	-0,31	1,00				
<i>interb</i>	0,10	0,11	0,09	0,09	0,07	0,09	0,07	0,06	-0,08	0,00	0,01	0,05	0,03	0,03	0,00	0,06	0,01	1,00			
<i>nlta</i>	-0,23	-0,46	-0,15	-0,19	-0,21	-0,46	-0,14	-0,17	0,01	0,01	0,16	-0,17	-0,11	-0,07	0,01	-0,12	-0,03	-0,24	1,00		
<i>CI_ROA</i>	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	-0,02	0,00	0,00	-0,06	-0,06	-0,01	0,01	-0,02	-0,03	0,00	0,01	1,00	
<i>CI_ROE</i>	-0,01	0,00	0,00	0,00	0,00	0,00	0,00	0,00	-0,05	0,00	0,00	-0,02	-0,02	-0,02	0,00	-0,01	-0,01	0,00	0,01	0,98	1,00