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The Impact of Corporate Governance on the Market Value of Financial Institutions - Empirical Evidences from Italy

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*The impact of Corporate Governance on the market value of financial institutions:
empirical evidences from Italy*

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ABSTRACT

This paper analyses how the quality of the corporate governance system impacts on the market value of the financial institutions listed on the Italian Stock Exchange. Implementing a good corporate governance is costly, therefore verifying whether the investment is worth its cost is a relevant issue. Despite the central role that financial institutions play in the real economy, there are few studies that focus specifically on the financial industry; filling this gap in literature is especially relevant to Italy, where the enterprises are highly dependent on the banking system for their financing needs.

The first step of the present study is the assessment of the corporate governance quality of the sample companies through the Corporate Governance Index (CGI). CGI is a scoring model that analyses four different macro-areas of governance: Board, Compensation, Shareholders' and Stakeholders' Rights, and Disclosure. A Cross-sectional data regression is then used to study the relationship between the corporate governance quality and the market value of financial institutions. The analysis, using 2010 data, proves that there is a positive and statistically significant correlation between corporate governance and performance: this finding supports the hypothesis that governance creates value for companies and that investments to implement effective governance systems give net positive benefit and should therefore be pursued. Hence financial institutions should be encouraged to improve their corporate governance systems.

KEYWORDS: Corporate Governance, Corporate Governance Index, Banks performance, Governance of financial institutions

JEL Classification: G21, G32, G34

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1. INTRODUCTION

The Corporate Governance is defined by OECD (2004) as the *procedures and processes according to which an organisation is directed and controlled*. Hence the corporate governance structure specifies the distribution of rights and responsibilities among the different participants in the organisation – such as the board of directors, managers, shareholders and other stakeholders – and lays down the rules and procedures for decision-making.

The increasing interest dedicated to corporate governance can be explained in light of the recent financial scandals like Enron, Worldcom, Cirio. Both investors and shareholders are interested in corporate governance, the former in order to invest with greater awareness and fewer risks, the latter in order to exploit the positive effects of a good governance on the firm value : several studies (*Gompers et al. (2003), Drogbetz et al.(2004), Beiner et al. (2006)*) prove the existence of a positive relationship between corporate governance and firm value.

The relevance of the governance systems adopted by banking firms emerges clearly after the financial crisis of the last two decades, in particular the Asian crisis of the '90s and the recent global financial crisis, which have pointed out with dramatic clarity that the banks can be an important factor in the amplification of systematic risk. The importance of corporate governance for banking systems has been clearly emphasized also by the Basel Committee, which in 1999 issued a document urging the adoption by banks of 'modern' corporate governance structures in order to ensure a sound and prudent management.

As implementing an effective corporate governance system is costly, it is important to verify if the market recognizes a premium to the firms which make higher investments to improve their systems. The research question addressed by this work is whether an effective corporate governance leads to higher market value. To answer this question it is essential to measure the quality of the Corporate Governance systems. Although many studies address this question in a generic manner, without distinguishing between financial and non-financial firms, the literature on the value of corporate governance in financial firms is scarce.

The peculiar characteristics and the importance of the banking sector justifies the need for a sector-specific study. In fact, the governance of banking firms may be different from that of unregulated, nonfinancial firms for several reasons. First, banks assume a crucial role in the real economy. Second, banks are heavily regulated and it is important to highlight that the objectives of regulators and those of banking firms may not coincide (*Quint,1992*). Third, the number of parties with a stake in an institution's activity complicates the governance of financial institutions; in fact, in addition to investors, other subjects, as depositors and regulators, have a direct interest in bank performance. Fourth, banks are generally more opaque than nonfinancial firms (*Furfine, 2001*).

In this paper the Corporate Governance Index (Aboav et al.) is used to measure the quality of the corporate governance of the Italian financial listed companies for the year 2010.

The paper is organized as follow: section 2 is a literature review of the recent and most important studies about the relationship between Corporate Governance and value for financial and non-financial firms; section 3 describes the target population, the sample and the model used in the analysis and the results; finally, in section 4 we conclude the work and discuss the implication of the findings.

2. LITERATURE REVIEW

Corporate governance is a pivotal subject in business literature, and the debate about the improvement of governance systems is of great interest. Both the theoretical issues regarding corporate governance and the potential benefits achievable through its improvement have been already deeply discussed in literature. The notion of corporate governance can be dated back to 1932, when *Berle and Means* argued about the separation of corporate control and ownership. According to the Agency Theory, the separation between ownership and control requires an 'agency relationship', that is an incomplete contract between a principal (the owners) and an agent (the manager).

Over time not only shareholders have been interested in value-maximisation but also all stakeholders, according to OECD corporate governance definition (*Cochran and Wartrick*, 1988; *Tricker*, 1996).

In the late '90s there was a greater efforts to summarize many variables into an index that could be used to assess the quality of the state of the governance in the enterprises and identify any relationship between the index value and the performance of the firm. The first to pursue this were *Gompers, Ishii and Metrick*, who in 2003 presented a governance index to analyze the relationship between Corporate Governance and value. Starting from the definition of a Governance Index based on information gathered from the Investor Responsibility Research Center (IRRC) they analysed 1500 American listed firms from 1990 to 1999. The index, that combined 24 governance provisions, was built in such a way that an increase o in the index led to a deterioration of investor's rights. They found that Corporate Governance is strongly correlated with stock returns during the 1990s: an investment strategy that purchased shares in the lowest-G firms ("Democracy" firms with strong shareholder rights), and sold shares in the highest-G firms ("Dictatorship" firms with weak shareholder rights), earned abnormal returns of 8.5 percent per year. Moreover they pointed out how to an increase in the governance index corresponds a significant decrease in firm's value (measured through Tobin's Q) and how the average coefficient on governance index is negative and significant for both the net-profit-margin and sales-growth regressions, and is negative but not significant for the return-on-equity regressions.

Following *Gompers, Ishii and Metrick's* study, *Drobotz et al.* (2004) constructed a governance index in order to assess for the year 2001, the governance quality of the German listed firms of the fourth segments of the German Exchange: DAX 30 (blue-chip stocks), MDAX (mid-cap stocks), NEMAX (index of growth firms) and SMAX (Small-cap stocks). In the first part of the study they replicated the

methodology of Gompers et al. on equity returns on German data and arrived at the same conclusions. In the second part they focused their attention on governance and value and they found a positive and statistically significant relationship between governance and firm's value.

Following *Drobtz et al.*'s approach (2004), *Cheung et al.* (2007) studied the relationship between corporate governance and value for the Hong Kong stock exchange listed firms in 2002. Using Market-to-Book ratio as a proxy of value, they arrived at the same conclusion of *Drobtz et al.*

Beiner et al. (2006) presented a development of previous works in order to overcome the endogeneity problem that plagues virtually all empirical studies in Corporate Governance (e.g., *Borsch-Supan and Koke*, 2000). They applied a system of simultaneous equation to detect potential simultaneity bias between governance and value. The study analysed 109 firms listed on Swiss Exchange in 2002, through a governance index, built on the same procedure of *Drobtz et al.* (2004), that was the results of the sum of 38 variables grouped in five categories: corporate governance commitment, shareholders' rights, transparency, management and supervisory board matters, and auditing. Their results supported the widespread hypothesis of a positive relationship between firm-specific Corporate Governance and Tobin's Q; in addition this result was statistically significant.

Following the previous work, *Aboav et al.* in 2010 through a multivariate cluster analysis showed the interaction between the quality of corporate governance, ownership structure and other firm specific characteristics during the crisis in order to assess the governance quality in the Italian Stock Exchange. The econometric model and the Corporate Governance Index that they used is explained in greater details in the next section (Section 3) because it is the index used in the present work.

All these works have a commonality: they analysed a heterogeneous sample that includes both financial and non financial firms. A focus on the corporate governance of financial institutions and on its relationship with firm value is much less developed: this is yet more true in Italy. Most of the studies have focused on the relationship between single parameters of governance (the most debated theme referring to board of directors composition) and value, measured often through Tobin's Q: studies as highly structured as *Gompers et al.*'s or *Drobtz et al.*'s studies, but dedicated only to financial institutions, are not present in literature.

Belkhir (2004) analysed the relationship between board size and performance in a sample of banks and financial institutions and found a positive relationship between performance and size of the board.

Adams and Mehran (2005) found a non-negative relationship between board size and Tobin's Q, which is contrary to the evidence for non-financial firms (*Yermack* 1996, *Hermalin and Weisbach* 2003).

In contrast with earlier works, *Mayur and Saravanan* (2006) and *Bino and Tomar* (2007), argued that the size of the board has no effect on the performance of banks.

Mayur and Saravanan analysed the impact of corporate governance on the performance of Indian banks measured, alternately, by Tobin's Q and Market-to-Book ratio. The results of their work illustrate the absence of a dependency relationship between bank's performance and size of the board.

Bino and Tomar in their work examined the relationship between corporate governance and performance of a sample of fourteen Jordan listed banks on the Amman Stock Exchange measured either through Return on Assets and Return On Equity. The results showed that the ownership structure and composition of the board had a strong impact on the performance of banks, while the size of the board was neutral.

The first study that analyses the relationship between corporate governance and market value in banking sector dates back to 2007. *Love and Rachinsky* (2007) examined the relationship between bank ownership and information about governance in the Russian and Ukrainian banks and the relationship between governance and performance. The aspects of corporate governance were gathered through a questionnaire containing twenty-six questions grouped into five main categories: the commitment to corporate governance, shareholders' rights, controlling bodies, audit system and transparency, and information. The five categories together make up the Corporate Governance Index. The author used a regression analysis to study the relationship between governance and performance; he used several indicators of performance as dependent variables, including Return On Assets, Return On Equity, Non Performing Loans, Asset Growth, the Corporate Governance Index as independent variable , and a set of control variables. The results of the study is a significant relationship between governance and operating performance and a much weaker relationship between governance and value.

Grove et al. in 2010 examined multiple factors of corporate governance and their relationship with the bank's performance - in terms of quality of revenues, ROA, and Tobin's Q - and with the quality of loans. The factors that the authors identified captured different elements of corporate governance relating to the ownership of the shares, to the structure of the board, and to the leverage on executive pay. The results show a worse performance when board members are older, less independent, and the bank has a high degree of leverage. Furthermore, the quality of loans was associated with the presence of board members who also held jobs in other councils, and with incentives to remuneration. The authors argued also that a weak corporate governance played an important role in guiding risky financial decisions.

The more recent works deal with the relationship between the corporate governance and the performance of banks during the financial crisis. *Peni and Vahamaa* (2010), using data on large publicly-traded U.S. banks, found that banks with stronger corporate governance mechanisms were associated with higher profitability in 2008 and that banks with a strong corporate governance record had greater equity returns after the collapse of markets. This it is also an important signal of the benefits that a good corporate governance system can produce.

3. METHODOLOGY

In this section, the target population, the sample and the model used are presented, illustrating the variables that compose the CGI index, the areas they are grouped in and their relative weights used in the scoring model.

3.1 SAMPLING AND DATA COLLECTION

In order to study the effect of Corporate Governance on the market value of financial institutions in Italy, the target population is composed of all Italian financial institutions listed on the Borsa Italiana MTA market. Foreign shares whose only listing is on Borsa Italiana (*exclusive listing*) are considered as domestic; instead, those foreign financial institutions that are listed both in their domestic market and on Borsa Italiana are not included.

The initial dataset used for the analysis is composed of the 17 the firms making the *FTSE Italia All-Share Banks* Index and the 17 firms making *FTSE Italia All-Share Financial Services* Index, as of 30 June 2011, for a total of 34 financial institutions.

[INSERT TABLE 1]

The cleaned dataset, excluding two financial institutions for which market data is not available, is made of 32 firms. Firms are included in the FTSE Italia indexes according to free float and liquidity criteria. At the cut-off date of 30 June 2011, the market cap of the constituents of the dataset represents the 98,33% of the total market cap of listed financial institutions, thus the sample is representative of the population.

The scoring model used for the assessment of the quality of the Corporate Governance system requires in input only data which is publicly available. The documents used to collect data are the annual report, the corporate governance report and the charter; in limited number of cases, also internal dealing report and the ethical code are used.

3.2 MEASURE

In order to study the relationship between corporate governance and value, the following cross-sectional econometric model has been used:

$$Q_i = b_1 * CGI_i + b_2 * OC_i + b_3 * ROA_i + b_4 * SG_i + b_5 * \ln(CAP)_i + b_6 * \ln(AGE)_i + b_7 * ET_i + u_i$$
$$u_i = a_i + \varepsilon_i$$

The model variables are hereinafter described.

index $i = 1, \dots, 27$ identifies the listed financial companies included in the FTSE Italia All-Share Banks Index and in the FTSE Italia All-Share Financial Services Index.

Q_i is Tobin's Q and it is the dependent variable of the model.

CGI_i is the Corporate Governance Index. Previous studies (*Gompers et al. 2003; Drobetz et al. 2004, Baghat et al. 2008*) have empirically proved the existence of a positive relationship between Corporate Governance, measured through indexes, and value; so $b_1 > 0$.

OC_i is the ownership concentration, its effect on the value is not clear; in fact, high concentration is expected to produce high monitoring exercised by the majority shareholders over the management (*Sheilfer and Vishny, 1986*), and therefore better performances, so $b_2 > 0$; but the ownership concentration could have also a negative impact on value because controlling shareholders could use their power damaging minorities (takeovers chance is low), so $b_2 < 0$.

ROA_i is Return on Assets. Because this parameter suggests how efficient management is at using its assets to generate earnings, a positive relationship between ROA and firm company could be expected, so $b_3 > 0$.

SG_i is the annual sales growth rate; a high sales growth rate can affect positively company value because it means the company has been able to catch better investment opportunities (*Lehman et al. 2000*), so $b_4 > 0$; but at the same time the company could incentivize managers to invest in projects that increase the dimension but not the profitability, so $b_4 < 0$.

ln(CAP)_i is the natural logarithm of market capitalization. Large size allows to exploit economies of scale (*Baumol, 1959*), so $b_5 > 0$, but could also produce worse performance due to organization inefficiency (*Leibenstein, 1966*), so $b_5 < 0$.

ln(AGE)_i is the natural logarithm of years since IPO. This variable allows to take into account the experience of the company on capital markets. A negative coefficient could be expected because more recently listed firms are likely to be faster-growing, and perhaps more intangible asset-intensive (*Black et al., 2003*), so $b_6 < 0$.

ET_i is the capital structure defined as Equity over Total Assets. Between this parameter and value there could be a negative relationship because financing with the debt could incentivize managers to operate in an efficient manner (*Grossman and Harte, 1982; Jensen, 1986*), so $b_7 < 0$.

u_i is the error term and is the sum of firm specific effect (a_i) and white noise (ε_i).

Three dummy variables are used to identify the segment (MIB, STAR, Mid Cap and Small Cap) which the company belongs.

3.3 VARIABLES

Different sources have been used to collect the value of all the variables cited in the previous section.

Bloomberg database has been used as a source for Tobin's Q (Q), which is evaluated as the ratio of the sum of equity market value and net debt (debts minus cash) over book value of the assets.

CGI is the Corporate Governance Index and it that includes 76 variables that have been selected on the basis of the Italian Corporate Governance Code of Best Practices released in 2006 by the Corporate Governance Committee sponsored by Italian Stock Exchange but also on the OCSE Corporate Governance principles and CalPERS Code of Corporate Governance (*Aboav et al.* 2010).

These variables can be grouped into three categories:

- “on/off” variables assuming value 0 or 1;
- percentage variables assuming value in percentage format;
- step distribution variables assuming different values depending on pre-set thresholds.

All the variables are grouped in 4 macro areas: *Board*, *Compensation*, *Shareholder and Stakeholder's Rights* and *Disclosure*.

The *Board* area analyses the organizational structure of the board of directors and the observance of good management practices; for instance, the board dimension, the age of board members, the board structure in terms of presence of executive, non-executive and independent members, the presence of various committees and their characteristics.

The *Compensation* area analyses the instruments implemented to align directors' interests with shareholders' interests; the type and quality of remunerations of executive, non executive directors and top management are investigated.

The *Shareholder and Stakeholders' Rights* area analyses the level of protection for shareholders and stakeholders; the parameters considered in this area include, but are not limited to, the level of separation between ownership and management, the functioning of annual general meeting, the risk governance, the attention devoted to environmental, social and governance (ESG) reports, the presence of a detailed organization chart, the publication of minutes of annual general meeting.

The *Disclosure* area analyses the transparency level of companies to the economic and financial community and the quality of the information disclosed.

Other variables , not related to corporate governance , are used in the model in order to account for other effects on firm value. Following *Beiner et al.* (2006), Return On Assets (*ROA*), which measures profitability of firm's ordinary business, is included because of its influence on firm value. As a source for *ROA* values Datastream is used; it should be noted that Datastream uses a specific formula to calculate the *ROA* of financial institutions¹.

$${}^1 ROA_{Banks} = \frac{(Net\ Income\ Before\ Preferred\ Dividends) + (Interest\ Expense\ on\ Debt - Interests\ Capitalized) * (1 - Tax\ rate)}{(Last\ Year's\ Total\ Assets - Last\ Year's\ Customer\ Liabilities\ on\ Acceptances)} * 100$$

$${}^1 ROA_{Other\ Fin.Com} = \frac{(Net\ Income\ Before\ Preferred\ Dividends) + (Interest\ Expense\ on\ Debt - Interests\ Capitalized) * (1 - Tax\ rate)}{(Last\ Year's\ Total\ Assets - Last\ Year's\ Custody\ Securities)} * 100$$

Following *Lehmann et al.* (2000), Ownership Concentration (*OC*) is included; the measure of concentration used is the Herfindahl Index, which is defined as the sum of the squares of the first four equity stakes; data used to calculate this index was collected using the Italian Financial Market Authority (Consob) website. In line with *Lehmann et al.* (2000), a normalization is conducted in order to obtain an ownership concentration ranging between minus infinite and plus infinite. Following again *Drobetz et al.* (2004) and *Lehmann et al.* (2000), financial reports of the companies are used as sources for the data required to calculate the capital structure variable (*ET*), which is defined as the ratio of equity value over total assets. Following *Drobetz et al.* (2004), *Klein et al.* (2005), *Beiner et al.* (2006), two additional variables are added: one expressing growth, measured as annual sales growth rate (*SG*), and one expressing firm dimension, measured as the natural logarithm of market capitalization ($\ln(CAP)$); data sources used are Datastream and Bloomberg respectively. Finally, following *Drobetz et al.* (2004), also the natural logarithm of years since the IPO ($\ln(AGE)$) is considered in order to take the experience since the IPO in capital markets into account.

4. RESULTS

Table 2 summarizes the Cross-sectional Data Regression estimates for equation:

$$Q_i = b_1 * CGI_i + b_2 * OC_i + b_3 * ROA_i + b_4 * SG_i + b_5 * \ln(CAP)_i + b_6 * \ln(AGE)_i + b_7 * ET_i + u_i$$

The table shows some important evidences:

- there is a positive and statistically significant correlation (*coefficient* = 0.0164 and *p-value* = 0.00463) between Tobin's Q and Corporate Governance; this confirms that corporate governance impacts positively on the market-value of financial institutions;
- there is a positive and statistically significant correlation (*coefficient* = 0,0859 and *p-value* < 0.00001) between Return on Assets and Tobin's Q; this confirms the hypothesis ($b_3 > 0$);
- there is a positive and statistically significant correlation (*coefficient* = 0.0696 and *p-value* = 0.04094) between Tobin's Q and Ownership Concentration, suggesting that high concentration might allow the majority shareholders to exercise a better monitoring over the management ($b_2 > 0$), like in *Sheilfer and Vishny* (1986);
- there is a negative and statistically significant correlation (*coefficient* = -0.0032 *p-value* = 0.07618) between Tobin's Q and Equity over Total Assets; this confirms the hypothesis that debt financing could incentivize managers to operate in a more efficient manner ($b_7 < 0$);
- there is a negative and statistically significant correlation (*coefficient* = -0.2802 *p-value* = 0.00962) between Tobin's Q and the natural logarithm of Market Capitalization; this seems to confirm the idea that large size produces worse performance due to organization inefficiency ($b_5 < 0$), like in *Leibenstein* (1966);
- the relationship between Tobin's Q and Sales Growth rate and that between Tobin's Q and the natural logarithm of years since IPO are negative but not statistically significant. The first finds

justification in the common belief that high sales growth rate incentivizes managers to invest in projects pursuing the increase of dimension more than profitability ($b_4 < 0$). The second relationship is in accordance with the belief that more recently listed firms are likely to be faster-growing, and perhaps more intangible asset-intensive ($b_6 < 0$), like in *Black et al.* (2003).

5. CONCLUSION

This work investigates how corporate governance impacts on the value of listed financial companies. To this purpose, Tobin's Q is used as a proxy for value, while the quality of the corporate governance system is assessed through the Corporate Governance Index (CGI). The cross-sectional regression for the year 2010 highlights that there is a positive and statistically significant correlation between governance and value. This result is very important: an increase by 1 point in the Corporate Governance Index produces an increase in the value equal to 0.016. This effect cannot be neglected and is more ample than what it may seem at the first sight. To appreciate the impact of the governance on firm value, it has to be considered also that the CGI difference between the *best* and the *worst* firm in terms of corporate governance is 47,09, therefore, keeping all else constant, the Tobin's Q value for the best company is 77,33% higher than the Tobin's Q value of the worst company, and this difference is explained solely by the better corporate governance system.

This finding supports the hypothesis that governance creates value for companies and investments to implement effective governance systems give net positive benefit and should therefore be pursued. Hence financial institutions should be encouraged to improve their corporate governance systems.

The positive relationship between governance and value confirms also the results of previous works and attests the effectiveness of both the model that was used and of the Corporate Governance Index. The CGI could be a useful tool to pursue many objectives such as the improvement of disclosure of financial markets, the reduction of the cost of funding, better attractiveness of the firms in the capital markets. All these aspects translate into benefits for the investors, who become able to make their investments with greater awareness and reduced risk.

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Table 1 - Dataset

Company	Index
Apulia Pronto Prestito	FTSE Italia All-Share Financial Services
Azimut	FTSE Italia All-Share Financial Services
Banca Carige	FTSE Italia All- Share Banks
Banca Finnat	FTSE Italia All- Share Banks
Banca Generali	FTSE Italia All-Share Financial Services
Banca Ifis	FTSE Italia All-Share Financial Services
Banca Intermobiliare	FTSE Italia All-Share Financial Services
Banca Monte dei Paschi di Siena	FTSE Italia All- Share Banks
Banca Popolare di Sondrio	FTSE Italia All- Share Banks
Banca Popolare dell'Emilia Romagna	FTSE Italia All- Share Banks
Banca Popolare dell'Etruria e del Lazio	FTSE Italia All- Share Banks
Banca Popolare di Milano	FTSE Italia All- Share Banks
Banca Profilo	FTSE Italia All-Share Financial Services
Banco Desio e Brianza	FTSE Italia All- Share Banks
Banco Popolare	FTSE Italia All- Share Banks
Banco Sardegna Risparmio	FTSE Italia All- Share Banks
Cam Finanziaria	FTSE Italia All-Share Financial Services
Cape LIVE	FTSE Italia All-Share Financial Services
Conafi Prestito	FTSE Italia All-Share Financial Services
Credito Artigiano	FTSE Italia All- Share Banks
Credito Emiliano	FTSE Italia All- Share Banks
Credito Valtellinese	FTSE Italia All- Share Banks
Dea Capital	FTSE Italia All-Share Financial Services
Exor	FTSE Italia All-Share Financial Services
Intek	FTSE Italia All-Share Financial Services
Intesa Sanpaolo	FTSE Italia All- Share Banks
Investimenti & Sviluppo	FTSE Italia All-Share Financial Services
Management & Capitali	FTSE Italia All-Share Financial Services
Mediobanca	FTSE Italia All- Share Banks
Mediolanum	FTSE Italia All- Share Banks
Meridie	FTSE Italia All-Share Financial Services
Mutuonline	FTSE Italia All-Share Financial Services
SoPaF	FTSE Italia All-Share Financial Services
Tamburi	FTSE Italia All-Share Financial Services
Toscana Finanza	FTSE Italia All-Share Financial Services
Unicredit	FTSE Italia All- Share Banks
Unione di Banche Italiane	FTSE Italia All- Share Banks

Table 2 – Cross-Sectional Regression

Model 7: OLS, using observations 1-34 (n = 27)

Missing or incomplete observations dropped: 7

Dependent variable: Tobin_s_Q

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
const	2.37839	0.723198	3.2887	0.00463	***
CGI	0.0164218	0.00467669	3.5114	0.00289	***
SG	-0.000298515	0.000881154	-0.3388	0.73918	
ROA	0.0858923	0.00493446	17.4066	<0.00001	***
Ln (AGE)	-0.157818	0.142446	-1.1079	0.28428	
Ln (CAPMKT)	-0.28027	0.0953499	-2.9394	0.00962	***
ET	-0.0031949	0.00168517	-1.8959	0.07618	*
D_Mib	0.504509	0.254408	1.9831	0.06480	*
D_Star	0.1531	0.22134	0.6917	0.49904	
D_Mid	-0.0635759	0.137878	-0.4611	0.65093	
OC	0.0695786	0.0312925	2.2235	0.04094	**
Mean dependent var	1.103438	S.D. dependent var		0.704828	
Sum squared resid	0.426944	S.E. of regression		0.163352	
R-squared	0.966945	Adjusted R-squared		0.946286	
F(10, 16)	46.80487	P-value(F)		6.26e-10	
Log-likelihood	17.67234	Akaike criterion		-13.34469	
Schwarz criterion	0.909519	Hannan-Quinn		-9.106164	