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Dividend Policy of European Banks

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The majority of managers set themselves some long-term coefficient-objective for the distribution of dividends in relation to the profits of the period (*target payout ratio*). But they do not mechanically apply this ratio to each year's profits as they try to avoid brusque fluctuations which could provoke movements in investors' positions in imperfect markets.

The purpose of this paper is to verify whether the dividend distribution policy of a company depends not only on profit but also on other factors, amongst which the both the theoretical and empirical literature point to the following: the profitability of the company, the stability of its earnings, its rate of growth and opportunities for investment and its financial and governing structure, highlighting the institutional aspects of the financial systems of the countries in which banks operate.

The results obtained in the empirical test allow us to affirm that the policy of payouts does not depend solely on business profits. We observe that the economic and financial factors proposed by the theories mentioned, along with institutional factors, in practice determine the dividends of companies according to the structure of government which exists within organisations.

PALABRAS CLAVES: Banks, dividends, panel data.

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DIVIDEND POLICY OF EUROPEAN BANKS

1. INTRODUCTION

Although there are many studies which analyse companies' dividend policy, they are inconclusive. Nowadays the existence or lack of an optimum decision on the distribution of dividends is a *puzzle* whose pieces do not fit together perfectly[1]. The importance of the problem lies in discovering the level of distribution of dividends which permits an equilibrium between the internal resources the company needs to finance part of its investments and the interests of shareholders.

The problem has been studied from two points of view. The first group of works attempts to discover the relationship which exists between the dividends distributed by a company amongst its shareholders and the price which these shareholders are prepared to pay for the company's shares. A second group of studies, which include the present paper, seek those factors which managers consider when setting the rate of dividend distribution of the companies they manage.

The company can direct its dividend policy towards the maintenance of a fixed rate of distribution of dividends or it can adjust this rate to its economic and financial situation; in other words, it can try to smooth out the distribution of benefits *á la Lintner* (1956), aiming to achieve an objective distribution rate which will not be influenced by variations in short-term investment (Fama and French, 1998a and 2000) or, by contrast, condition its dividend policy not only to business profits but also to other factors, amongst which the theoretical and empirical literature points out the following: the profitability of the company, the stability of its earnings, its rate of growth and opportunities for investment and its financial and governing structure (Barclay, Smith and Watts, 1995; Gaver and Gaver, 1993).

The fact that dividend policy does not depend solely on business profits has lead us to analyse, from a positive approach, the factors which in practice determine the dividends of banks according to their governing structure, emphasising the institutional aspects of the financial systems of their countries of origin.

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[1] A concept coined by Black (1976) as the methodological basis of one of the best known works on the dividend theory.

With this purpose in mind, the paper is organised as follows: In the second section we present a brief review and justification of the various viewpoints regarding companies' dividend policy. In this epigraph we also enumerate a series of institutional factors, relative to the financial system of the country in which the companies operate, which may affect their dividend policy. In addition we describe various alternative theories from the contractual approach which attempt to explain the factors which determine such policies. In the third epigraph we present the empirical part of the paper which, using data from the period 1991-1998, supplied by the data base Bank Scope selects a sample of European financial entities. Using the panel data technique, we test whether at an international level the hypotheses of the relevance of dividend policies and of partial dividend adjustment are fulfilled. In the final section, we analyse the results and draw conclusions from the study.

2. THEORIES OF COMPANY DIVIDEND POLICY

The traditional posture regarding company dividend policy considers that the market value of shares increases when managers opt for a high target payout ratio (Gordon, 1959). Later, Miller and Modigliani (1961) proposed that in a capital market where there are no imperfections such as taxes, transaction costs and asymmetric information and agency costs, the dividend policy of a company is an irrelevant question for the market value of its shares.

However, in the majority of countries there is an unfavourable tax effect for investors who obtain rent via dividends which may lead them to design their own dividend policy. Several pieces of research have attempted to evaluate the relevance of tax on dividends testing the hypothesis of tax effect compared with the client effect; empirical evidence shows that shareholders create portfolios to neutralise the greater tax burden on dividends as compared with capital gains tax (Brenan, 1970; Miller and Scholes, 1978; Litzenberger and Ramaswamy, 1979, 1980 and 1982). As the results are not conclusive, one needs to look to other explanations related with problems of information and uncertainty suffered by companies in order to understand the influence that dividend policies can have on the valuation of shares and to discover what factors determine these policies in practice. In Germany, where the tax differences aren't so importants, Amihud and Murgia (1997) suggest other reasons apart from the taxes to explain the dividends payout of companies.

When asymmetric information causes adverse selection problems, dividends are a signal used by the internal members of the company to transmit credible information to the market concerning the quality of its investment projects (Ambarish, Kose and Williams, 1987; Kose and Lang, 1991; Michaely,

1996). Other authors (Bhattcharya, 1979; John and Williams, 1985; Bernheim, 1991; Bernheim and Wantz, 1995) consider, however, that dividends would have no informative effect if it were not for the higher tax rates that they impose on shareholders. Miller and Rock (1985) demonstrate from a theoretical viewpoint that there exists a signalling equilibrium under asymmetric information.

Particularly, Slovin, Sushka and Polonchek (1994) and Bessler and Nohel (1996) postulate that the announcement effect of dividend reductions should be more severe for banks that for non financial firms due to the fact that "large banks may lose large corporate customers if the bank is feared to have financial difficulties as evidenced by the fact that dividends need to be cut" (Bessler and Nohel, 1996).

Faced with problems of moral risk, a greater payout of dividends will be translated into a cut-back in the discretionality which managers have over their available resources, obliging them to have greater recourse to capital markets to satisfy the financial needs of the company as suggested by Rozeff (1982), Easterbrook, (1984), Jensen (1986), Lang and Litzenberger (1989) and Yoon and Starks (1995) among others[2]-. Evidence suggest too that, in financial firms, a measure of the manager´s portfolio diversification opportunity set and bank size affect the dividend policy (Mercado-Mendez and Willey, 1995). In addition, the regular payment of dividends avoids bondholders winning over shareholders since company risk may vary and the impact that debt may have on investment decisions. Another proposition arises when the financing of a company may be conditioned by the existence of a pecking order in the different sources of funds, such that resources generated by the company itself have preference over external funds in the financing of investment projects (Myers, 1984). When the banks own a main percentage of the ownership of the company -as it occurs in many european firms the pecking order theory is a good explanation of the dividend policy adopted by companies as Giner and Salas (1995) show for a sample of Spanish firms. From the perspective of this theory, when resources generated increase, the response of dividend policy will be opposite in sign and the benefits paid out will increase (Fama and French, 2000).

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[2] These last two works contrast the theory of free cash flow vs. the theory of signals with the idea that the company, during periods of growth, has a dividend policy oriented more towards sending positive signals to the market than to reducing the discretionality of managers. In any case, the results obtained differ, so further studies would be needed to reach definitive conclusions.

2.1. THE INSTITUTIONAL FRAMEWORK AND DIVIDEND POLICY

In the last few years, researchers have tried to discover whether the model of dividend payout in companies is the same in different countries or whether, on the contrary, different institutional frameworks have an influence on the policy of benefit distribution.

Dewenter and Warther (1998) affirm that the fewer agency conflicts which occur in Japanese companies compared with North American companies mean that differences exist between their respective dividend policies; that is, that the differences between organisational structures of the companies in these two countries determine their dividend policies.

In a study carried out of the dividend policies of 4.000 companies in 33 countries, La Porta et al. (1998) observe that companies operating in countries whose legislation gives greater protection to minority shareholders pay more dividends, which would back the validity of the agency model in which dividends are the result of the legal protection of investors, contrary to the agency model in which dividends are a substitute for legal protection and where managers seek to establish the good reputation of their company via dividend policies. The results obtained by these authors are inconsistent with the tax theory of dividends and do not provide information about dividends as a mechanism for the transmission of signals to capital markets.

Aidvaizain, Booth and Clearly (1998) compare the Lintner model for 300 companies in developing countries with an amplified model in which other additional variables are introduced. The results they obtain provide evidence that dividends are more sensitive to the companies' profits than to delayed dividends and that they are less used as signalling mechanisms in institutional structures oriented towards the bank than in those oriented to the market. These authors consider that the relationship between debt, investment and dividends are similar in all the countries and that the theory of financial signalling is more suitable for those countries in which companies are financed through capital markets, since these alleviate problems of asymmetric information, thus reducing the need for them to have recourse to dividend policies.

The possible conflict of interests between the shareholders and creditors of a company is used by Leuz, Deller and Stuberdader (1997) as a starting point for the comparison of restrictions in dividend payments to shareholders in Germany, U.S.A. and the United Kingdom. Their results confirm that the restrictions to payment of dividends are similar in the three countries despite their institutional differences. However, the origin of these restrictions is different: in the U.S.A and the United Kingdom, they are due to debt contracts and in Germany they are established by regulations. Agency theory would

justify these results in such a way that we can affirm that restrictive clauses in contracts, established by the company with its creditors, influence the payout of dividends and the conflict of interests which arise from agency relationships between its shareholders and bondholders.

These studies show that different institutional frameworks have an influence on policies of distribution of benefits and that the theoretical justifications applied are different according to the financial system in which the company is operating. As a result of these studies and of the analysis done by Rajan and Zingales (1995) for the structure of capital in G-7 countries, the institutional effects which may be relevant for a company's decisions on dividends are:

1. Orientation of companies to the capital market vs. orientation to the bank.

2. Restrictions to dividend payouts as a result of the debt contracts stablished by the company.

3. The separation of ownership and control in organisations which determines the government of the company.

4. The existence of laws which protect the minority shareholders of a company.

The first institutional difference we have alluded to which weighs up the greater or lesser importance of the bank as against the capital market in the financing of companies implies such a vast differential element that two principle models of financial systems are usually contrasted: the Anglo-Saxon model based on the market -common to countries such as U.S.A., Canada and the United Kingdom- and the continental European model- which also includes countries like Japan- based on banks.

La Porta et al. (1998, 2000a y 2000b) distinguish four institutional systems: three systems which come from the civil law tradition and are French, German and Scandinavian and one which comes from the common law tradition. The evidence shows that each country belongs to one system due to dominating tradition of that country and that is the reason of the orientation of companies towards the bank or towards the capital markets for financing their operations. The countries which come from the civil law tradition use the banks more frequently while the countries which come from the common law tradition more often use the capital markets.

Due to the practical effects and looking at the empirical study we have done which follows the resulting consecuence is that we can group them into

two: a system orientated to the bank that comes from the civil law tradition and a system orientated to the capital market which comes from the common law tradition.

2.2. FACTORS DETERMINING DIVIDEND POLICIES IN THE LIGHT OF THREE EXPLANATORY THEORIES

The conceptual framework in which our paper is set, the contractual approach, will serve as a reference to determine those factors which affect the dividend policy of companies: the theory of signals, the theory of free cash flow and a reputation model: in each model, the decision to distribute profits or not depends on factors particular to each company and on institutional factors.

2.2.1. The theory of signals

Within the framework of problems of asymmetry of information existing in the heart of the company, the theory of signals defines dividend policy as a signalling mechanism through which internal shareholders, within management, reveal their incentives and private information to external shareholders. This information may modify the value of shares if the announcement of dividends contains relevant information concerning the company's expectations which has not already been discounted by the market. External shareholders reflect in the price of shares the value they attribute to the new information available and express through these variations their degree of conformity with the company's financial policy and the behaviour of management[3] (Aharony and Swary, 1980; Bhattacharya, 1979 and 1980; John and Williams, 1985; Ambarish, John and Williams, 1987).

In real capital markets it is observed that a variation in the payout ratio is generally followed by changes in the price of shares. This situation deserves a reflection on the information content of dividends[4]: when a company adopts a stable dividend policy through time; that is, when it sets a target payout ratio, there is an isolation of dividends *á la Lintner* such that, consistent with the

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[3] Investors interpret a variation in the payout ratio as a change in the expectations of managers as to the company's future profits. In this case it could be affirmed that alterations in dividend policy provide information to the share market: an increase in dividend payouts is interpreted as good news.

[4] The payout of dividends can be seen as a way to lessen asymmetric information both in its exante aspect or problems of adverse selection and in its ex post aspect or problems of moral risk.

signalling hypothesis, the dividend paid depends on the profits earned and on the dividend paid the previous year.

In those countries where the dividends paid are more sensitive to profits earned and less to the dividend paid the previous year -due to the effect of institutional factors of the financial system which follows a market model or a bank model- then the policy of distribution of profits moves more quickly to its objective level and, therefore, the decision as to dividends is used less as a mechanism to transmit information to capital markets -as Aidvaizain, Booth and Clearly (1999) suggets -.

2.2.2. The free cash flow theory

The starting point for this theory, which proposes an argument based on agency costs that relates dividends paid by the company to its investment opportunities, is that managers cannot be controlled perfectly so they can seek to satisfy their own interests instead of the interest of shareholders. Managers, once they have satisfied all the obligations contracted by the company with funds generated by operations, can use the remaining flows from the treasury for their own benefit (Jensen, 1986).

In a study which jointly examined dividend policy, participation in its capital of internal shareholders and the level of financial leverage of the company, Jensen, Solberg and Zorm (1992) obtain the empirical evidence that the dividends paid by the company are negatively related to its financial leverage and to the participation of internal shareholders in its capital. These results are consistent with the explanation of the dividend policy of companies proposed in the hypothesis of "*free cash flow*" of Jensen (1986)[5].

Agrawall and Jayaraman (1994) compare, on one hand the dividend policy of companies in debt and of companies not in debt and, on the other hand, that of companies with a high degree of participation of shareholders in their capital (where presumably the interests of shareholders and of managers are more in line) and that of companies with low participation. These authors' results show that companies in debt and with low presence of managers amongst their shareholders have higher target payout ratios.

The use of dividend policy as a way of reducing free cash flows is conditioned by the existence of alternatives for the control of managers'

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[5] The theory of *free cash flow* has also been used to validate models for prediction of bankruptcy of companies. These models evaluate whether the retention of profits may act as a specific mechanism to predict bankruptcies. (Dhumale, 1998).

behaviour. Companies with big investment opportunities have less recourse to dividend policy since cash flows which remain free are necessary for the financing of future investment projects. In countries whose financial system is oriented to the market, the control of managerial behaviour is done through capital markets. While in those countries where the financial system is oriented towards a bank model, the bank debt contracted by the company serves as an alternative mechanism to dividend policy to reduce the conflict of interests between managers and shareholders.

2.2.3. The monitoring hypothesis

This hypothesis, which began with the work of Easterbrook (1984), suggests that dividends can help to reduce the agency costs associated with the separation of ownership and control which occurs in companies. When the ownership of the company is highly diversified, individual investors have few incentives to control the actions of managers and if they do, the result is high costs for the company. The dividend policy forces the managers to go increasingly to the capital market, submitting their behaviour to the evaluation made by the market [6].

In countries whose financial system is market oriented, managers have incentives to align their interests with those of shareholders in order to maintain a good reputation in the capital market which will be reflected positively in the price of its shares. For this reason, management, to ensure its position in the company, will try to avoid dividend payout decisions which they think will be unpopular amongst the company's shareholders -as La Porta et al. (2000a) suggest-.

In countries whose model is bank oriented, managers seek to be on good terms with the company's creditors to be able to obtain future financing. To do this they will avoid policies of dividend payments which cause a transfer of wealth from bondholders to shareholders without exceeding -or even reaching the maximum limit- the possible clauses established in debt contracts and which restrict the distribution of dividends.

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[6] Easterbrook (1984) suggests another explanation of dividend policy based on agency costs associated with debt contracts established by the company, which we will refer to when we analyse the relationship between dividends and the indebtedness of the organization.

3. METHODOLOGY

3.1. THE MODEL PROPOSED AND DEFINITION OF VARIABLES

Lintner (1956) elaborates a model in which he affirms that the dividend policy of a company can be summed up in two equations: the first includes the annual variation in dividends and the second expresses the objective dividend as a constant proportion of profits obtained.

$$D_t - D_{t-1} = \alpha + b\,(D_t - D_{t-1}) \tag{1}$$

$$D_t = r\,BN_t \tag{2}$$

where:

- r : target payout ratio.

- α : constant.

- b: adjustment coefficient.

- BN_t : net profits obtained in period t.

- DIV_t, DIV_{t-1}: dividends paid in periods t and t-1.

- μ_t: random disruption of the model.

The model proposed in this paper by Lintner (1956), however, because of the existence of asymmetric information, the separation of ownership and control and conflicts of interests between members, considers that the company opts for an asymmetric dividend policy, in which there is a parameter b which added to the payout ratio r, reflects how the distribution of dividends varies in time. For this reason it is necessary to find a model with partial adjustment which includes delayed values of the variable one is trying to explain[7].

$$DIV_t = \alpha + brBN_t + (1-b)\,DIV_{t-1} + \mu_t \tag{3}$$

Adjustments in the dividend policy of companies may be due to so one needs to take these facts into account in the model to increase its capacity to explain.

From the three theories put forward in the previous section we consider the following to be determining in policies of dividend share out:

1.- Net profits of the period.

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[7] This model has been applied by Gutiérrez, Rodríguez and Vallelado (1984) to the study of the dividend policy of Spanish private banks.

2.- Dividend in earlier periods.

3.- Growth of the company.

4.- Level of indebtedness.

5.- Separation of ownership and control.

6.- Institutional factors.

These factors, based on the agency theory, explain the influence that the dividend decision has on the conflicts of interest that may arise between managers, shareholders and company creditors -an influence approximated by the relationship between payout and the level of debt-, the problems of asymmetric information which exist in the heart of the company and the governance of the enterprise due to the separation of ownership and control[8].

The generalised partial adjustment model we are going to test in this paper is the following:

$$DIV_t = \alpha + \beta_1\,ROA_t + \beta_2\,DIV_{t-1} + \beta_3 g_t + \beta_4\,L_t + \beta_5\,LOGACT_t + \beta_6\,ANGLO_t + \mu_t \quad (4)$$

where:

- DIV_t: dividend payout ratio of the period is the quotient between dividends paid out and total assets.

- ROA_t: ratio of economic yield is the quotient between net profits and the book value of the bank's total assets.

- DIV_{t-1}: dividend payout ratio of the previous period is the quotient between the dividends paid out in the previous period and the book value of the bank's total assets.

- MB is maket to book ratio.

- L_t: level of indebtedness is the quotient between the book value of external resources and the book value of its total assets.

We are going to use the following control variables:

- $LOGACT_t$: neperian logarithm of the book value of the bank's total assets[9].

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[8] The model used does not include ownership variables dut to the fact of the database employed does not have that information.

[9] This variable is used to measure the growth opportunities of banks. In other research work the variable of market value/book value and the q of Tobin are used. However, the lack of information in the data base used obliges us to this variable.

- ANGLO$_t$: dummy variable used to test the effect of institutional factors on dividend policies adopted by banks according to whether they operate in market or bank oriented financial systems.

The insertion in the basic partial adjustment model of the determining factors in dividend policy adopted by companies is done through a series of ratios due to the need to normalise the variables. We do this normalisation by using companies' total assets instead of using other variables such as private resources, net profit and price of shares[10].

3.2. HYPOTHESES TO BE TESTED

The current paper analyses whether the generalised partial adjustment proposed provides a better explanation than the Lintner (1956) model. The Lintner (1956) model allows us to test the following hypothesis:

> **Hypothesis 1:** Companies smooth out their dividend policies to try to adjust them to a long-term target payout ratio which they set as an objective and which is proportional to the profits obtained and the dividend of the previous year.

The generalised partial adjustment model, which should provide a better explanation than the previous model, can be used to test these hypotheses:

> **Hypothesis 2:** A higher rate of economic yield, the result of an increase in profits, makes a proportional increase in dividend payout possible.

Normalisation of the variables included in the model means using yield as a factor to explain the dividend policies of banks instead of profits. An increase in the yield of the company when its profits increase allows for higher dividend payouts.

> **Hypothesis 3:** The use of debt by banks is a way of restricting discretionality in the behaviour of its managers and of using this decision as an alternative mechanism to dividends, which means that as financial leverage increases, then the handing out of dividends is less necessary.

As the financial leverage of the bank increases, so its debt capacity diminishes, there are greater restrictions on the paying of dividends -because of

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[10] This criteria is used by Aidvazian, Booth and Clearly (1998). Giner and Salas (1995) normalize using the asset at reposition prices and López and Rodríguez (1998) use the ratio total dividend/total asset and total dividend/ private resources.

the greater financial pressure which the organisation is under- and the substitution effect which debt could have as an alternative mechanism to dividends for sending signals to the market on the situation of the company is greater.

> **Hypothesis 4:** Banks which have higher rates of growth have greater need for resources, which leads them to reduce the dividends they pay to their shareholders.

Banks with good opportunities for growth need greater volumes of funds to face their future investment projects. One possibility is the self-financing of a good part of these projects by reducing the dividends they pay to their shareholders.

In short, the significance of the independent variables of the generalised model give it greater explanatory power and allows us to verify that the dividend decision contains information and is inter-related with the other financial decisions.

Once we have tested the validity of the hypotheses proposed it is very important to check whether the dummy variable ANGLO included in our model is significant such that, as we mentioned in the theory section of this paper, the theoretical justifications as to why companies pay dividends will be different. The variable LOGACT, which measures company size, permits us to check whether the behaviour regarding dividends is the same in large as in small companies.

3.3. SAMPLE AND METHODOLOGY USED

The empirical investigation analyses financial entities, to try to discover the effects of the specific characteristics of banks on the relevancy of their dividend policies. The data base used in the investigation is the BANK SCOPE which contains data, from between 1991-1998, of 484 European banks belonging to 22 countries.

The empirical testing of the model used to analyse those factors which determine the dividend policies of the banks in the available sample is done using panel data methodology. This methodology allows one to know

individually the values taken by a series of variables through time[11]. This technique, although it has multiple advantages over cross-sectional analysis, also has drawbacks. The most important is the existence of constant unobservable effects co-related with explanatory variables which make the ordinary least square indicators inconsistent. One possible solution to this problem would be to use intragroup estimation, but these estimators are only consistent when the explanatory variables considered in the model are exogenous: that is, they are not co-related with the random disruption of the model. In our case, the existence of both individual effects and of problems of endogeneity lead us to consider the variables in first differences and to estimate the parameters of the model by the generalised method of moments[12]. In addition, statistical models used for analysis of temporal and cross-sectional data entail serious complications when applied to censored variables (Maddala, 1987).

The procedure used for the estimation of the model, bearing in mind that dividends are a censored variable which does not take negative values nor values above one, is the Tobit method. This procedure consists in obtaining, first of all, estimations of the dependent censored variable using annual estimations of the partial adjustment model described in equation (3) and with the variables at levels. Once these predictions have been obtained, they substitute the values of the original variable in the panel data and one then estimates the generalised model in equation (4) as if the problem of censored data did not exist[13].

4. RESULTS

Tables I to VIII show the values obtained by applying the Tobit method to equation (3) of our paper to censor the variable dividends. It can be seen how the estimators obtained for these delayed dividends are significant at 99% in all the periods except in 1993 whose p value is 0,32 for the variable delayed dividends: furthermore, the values obtained for statistic R squared allow us to deduce the overall significance of the estimators and the goodness of the partial adjustment model, used to obtain the censored variable in all the periods analysed.

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[11] The panel data used is characterized by being incomplete and unbalanced. Specifically, the variant of the panel data chosen for this work is the so-called micropanel. This is a set of data in which the dominant dimension corresponds to the number of individuals. The number of periods is far lower.

[12] The estimation of the parameters of the model was done using the DPD (Dynamic Panel Data) written by Arellano and Bond (1988).

[13] This solution proposed by Arellano and Bover (1988) has been applied to the Spanish market by other authors such as Giner and Salas (1995) and De Miguel and Pindado (1999).

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REGRESSION MODEL TO CENSOR THE VARIABLE DIVIDENDS BY THE TOBIT METHOD

TABLE I 1992	
VARIABLES	
CONSTANT	-001159** (0,00060)
ROA	0.32710*** (0,044352)
DIV(-1)	0,170271*** (0,041875)

TABLE V 1996	
VARIABLES	
CONSTANT	-0,004347*** (0,000518)
ROA	0,676685*** (0,015867)
DIV(-1)	0,253588*** (0,045071)

TABLE II 1993	
VARIABLES	
CONSTANT	-0,004905*** (0,000614)
ROA	0,718398*** (0,010743)
DIV(-1)	0,063300 (0,064508)

TABLE VI 1997	
VARIABLES	
CONSTANT	-0,002520*** (0,000475)
ROA	0,548828*** (0,022162)
DIV(-1)	0,156812*** (0,022492)

TABLE III 1994	
VARIABLES	
CONSTANT	-0,001438** (0,000679)
ROA	0,361808*** (0,025042)
DIV(-1)	0,060128*** (0,015991)

TABLE VII 1998	
VARIABLES	
CONSTANT	-0,012777*** (0,001262)
ROA	1,249095*** (0,075120)
DIV(-1)	0,487365*** (0,159757)

TABLE IV 1995	
VARIABLES	
CONSTANT	-0,001289*** (0,000523)
ROA	0,187913*** (0,020496)
DIV(-1)	0,514225*** (0,040156)

In brackets the standard deviation of the estimated coefficients of the variables.
*** Significance at 99%
** Significance at 95%
 * Significance at 90%

In a second stage, as we enunciated in an earlier section, we apply the panel data methodology using the censored variable of dividends. The results obtained are shown in table VIII. In brackets are the t-ratios consistent with heteroskedaticity.

TABLE VIII VARIABLES IN FIRST DIFFERENCES (PANEL DATA TECHNIQUE)	
CONSTANT	0,000115 (0.000821)
DIVIDENDS	0,341776*** (0,01065)
ROA	0,957280*** (0.02130)
LEVERAGE	-0,007452*** (0,001056)
G	0,008695 (0,008048)
LOGACTIVS	-0,018961*** (0,003809)
Wald test of joint significance	15288,552*** (5)
Wald test of joint significance of all dummies	38,8088***(5)
Wald test of joint significance of time dummies	16,2370*** (5)
Wald test of joint significance for ANGLO dummy	15,2754***(5)
Sargan test	53,3722 (10)
m$_1$	-2,086 (475)
m$_2$	1,578 (331)
*** Significance at 99%. ** Significance at 95%. *Significance at 90%.	

The Wald test allows us to test the null hypothesis of all the coefficients, except the constant term. This statistic is distributed according to a function χ^2_r with a number of degrees of freedom equal to the number of coefficients estimated. The p value represents the maximum level of significance for which the null hypothesis of absence of overall significance for all the regressors is rejected. In the two values of the statistic obtained we can observe that the significance of the variables allows us to accept that dividend policy is established as a decision process with adjustments in which a target ratio is not rigidly applied. Variables related with the economic and financial situation of the company are taken into account, as is reflected in the model.

The significance obtained in the test of Wald for the variable dummy ANGLO tells us that the discrimination made in the countries in the sample is significant and that the different institutional aspects of these two financial systems can have an influence on the dividend policies adopted by banks.

The Sargan test or test of conditions of overidentification allows us to test the null hypothesis that the restrictions of overidentification used are valid, that is, that the instruments are valid. This statistic is distributed according to a function χ^2_r where r is the number of overidentification conditions, that is, the difference between the number of conditions of orthogonality and the number of coefficients estimated. In this test, the rejection of the null hypothesis suggests an inadequate selection of instruments, due, for example, to an erroneous characterisation of the autocorrelation or, to the lack of correlation between the explanatory variables and the instruments. The Wald tests test the significance of the coefficients: SC: overall significance; DA: annual dummies.

The m_1 and m_2 tests allow us to detect the eventual first order and second order serial autocorrelation. The statistics are distributed according to a normal typified function, the null hypothesis being the absence of correlation (Arellano and Bonds, 1991).

Table VIII shows a positive relationship between earnings and dividends such that an increase in profits enables higher payouts. In market oriented countries financial entities will try to increase their market presence through their dividend policy in order to have a good company reputation, while in bank oriented countries, the most profitable entities pay higher dividends to reduce managerial discretionality in the use of funds.

As for financial leverage, the results in table VIII coincide with hypothesis 3 such that companies with a higher level of debt pay out lower dividends. In this way both decisions act as alternative mechanisms to restrict the possible discretionality of managers with free cash flows. In this case the good reputation the company seeks is with its creditors to ensure the attainment of debt in the future. It will therefore fulfil the restrictions to dividends proposed by the debt contracts -principally in market oriented countries- or by legal regulations -more common to bank oriented countries-.

In addition, the inclusion in the model of financially sustainable growth means that those companies with growth opportunities -a company with future investment projects obtains higher values of the variable g-, require great quantities of financing which will lead them to put the breaks on dividend payments. However, the coefficient we obtain is positive, although not significant, so we cannot validate hypothesis 4. It may be that this lack of

significant dependence between growth opportunities and dividends, contrary to research, is because the variable used is not the appropriate one[14].

The negative influence of size with respect to the dividend decision highlights that the greater size of companies brings about a global reduction in problems of asymmetric information, -results which are in agreement with Aidvazian, Booth and Cleary (1999)- and make the use of dividends as a mechanism to reduce these problems less necessary[15].

5. CONCLUSIONS

In answer to the question we posed in the introduction about the factors which influence the dividend policies of financial entities, we can conclude from the results of our investigation that this financial decision is a relevant decision which contains information in itself and not only reflects information already transmitted by profits and that European financial entities seek to achieve a target payout ratio: The Lintner model is a good approximation to the decision adopted.

The policy of dividend payout put into practice by European banks is also influenced by the different institutional frameworks of the financial systems of the countries in which they operate. Among these factors, especially relevant is the orientation to the market -common in Anglo-Saxon countries- as compared with orientation to the bank -common in European countries- and the origin of restrictions to dividends because of debt contracted by companies -according to what has been established in the contract or is regulated by law-.

With regard to this, we checked that the factors influencing dividend policies proposed by the three explanatory theories referred to -theory of signals, hypothesis of free cash flow and the reputation model- determine this financial policy and justify the payout decision adopted by entities within the institutional framework in which they undertake their operations.

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[14] The variable Market to Book ratio is more frequently used in investigation, or a measure of the q of Tobin. However, the fact that the data base BANKSCOPE does not include market values prevents us from using this measure.

[15] Regarding this relationship, other authors, by contrast, have discovered a positive influence between the size of the company and dividend share out because it causes greater problems expost in these companies which means they have recourse to dividend decisions to alleviate the possible increase in asymmetric information.

In this way, the most profitable companies have greater profits and can increase their payouts, while the most indebted companies pay lower dividends: in this latter relationship it has been verified that the financing decision of the company and the dividend decision act as alternative mechanisms to reduce agency problems such that they send signals to the market about the situation of the company at the same time as they reduce problems of moral risk in the heart of the organisation, by diminishing free cash flows which could be used with discretion by managers. From this perspective we can also affirm that the most indebted companies find themselves under greater pressure from taxation authorities such that they will tend to reduce payouts to be able to face contracted obligations.

In short, the reasons put forward confirm the propositions suggested by the financial theory of the agency and we can justify that the arguments used by this theory are perfectly adequate to put together the dividend puzzle and to evaluate and elaborate the dividend payout policies of organisations.

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