

# Blockholder Ownership, Dividends and Firm Value In Continental Europe.<sup>12</sup>

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## Abstract

Blockholder ownership may increase firm value because of incentive alignment or lower it because of expropriation of minority investors. Dividend policy provides a way to distinguish between the two effects since large owners may prefer low dividends if they derive private benefits from controlling firms, while minority investors may prefer high dividends that benefit all shareholders. I examine the relationship between blockholder ownership, dividend policy and firm value in a panel of the largest EU and US/UK companies 1998-1998. I find a negative effect of blockholder ownership on firm value in continental Europe, which is particularly strong for firms with high reinvestment rates and high equity-asset ratios. No similar effect is found in the US/UK. Moreover, in continental Europe blockholder ownership has a negative effect on dividend payout ratios. The findings indicate that concentrated ownership leads to a preference for retained earnings, which lowers the exchange value of the firm to minority investors.

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The role of large owners in the economy is one of the most important topics in corporate governance. Theoretically, large owners (blockholders) may play a valuable role by reducing the familiar (type 1) agency problems between shareholder and managers, but recent research has emphasized that large blockholdings give rise to a second (type 2) agency problem between blockholders and minority investors (Shleifer and Vishny, 1997, Becht, Bolton and Röell, 2002). Empirically, several papers have analysed the impact of ownership structure on firm performance (Short, 1994, Demsetz and Lehn, 1985; Becht, Bolton and Röell, 2002), but a causal link has not been established (Holderness, 2003), partly because most studies have had to rely on cross-sectional data and partly because it is difficult to find good instruments to isolate the effects of ownership structure from that of many other variables, which affect firm performance. In fact if ownership is endogenously determined by performance-maximizing agents there may be no equilibrium effect of ownership structure (Demsetz, 1983). Simultaneous equation studies by Loderer and Martin (1997), Cho (1998), Himmelberg, Hubbard and Palia (1999), Demsetz and Villalonga (2001) have tended to reinforce this view. For all we know, the role of large owners will moreover be likely to vary over time periods and countries as a function of the legal system and other kinds of regulation (Shleifer and Vishny, 1997, La Porta et al. 1998, 1999, 2000b).

This paper contributes to the literature by examining how dividend policy and capital structure moderates the relationship between ownership and firm value. In line with recent research on the topic (La Porta, Silanes, Shleifer and Vishny, 2000a, Gugler and Yurtoglu, 2003, Da Silva, Goergen and Renneboog, 2004) I use dividend policy as a way to test for type 2 agency conflicts between blockholders and minority investors. Minority investors that fear expropriation by large owners may have a preference for dividends over retained

earnings, which may lead to a discount in firm value for firms with low dividends. I test these hypotheses on time series data from the US and EU and find that blockholder ownership has a negative effect on firm value in continental Europe which is not found in the US, but that the effect is contingent on dividend policy and capital structure since it is larger (more negative) for firms with high reinvestment and equity/assets ratios. Blockholder ownership is found to have a negative effect on pay-out ratios. I interpret these findings as further evidence of agency conflicts between blockholders and minority investors.

## Theoretical Issues

The main research question addressed in this paper is how dividend policy and capital structure moderate the relationship between ownership and firm performance in different institutional settings. In principle, one could imagine a simple causal structure such that blockholder ownership directly influences dividend policy which then influences firm value: more blockholder ownership could mean less power to minority investors and a tendency to retain earnings which can create private benefits for the controlling owner(s). Moreover, if stock prices are set at the margin by minority investors, lower dividends and higher retained earnings could lead to lower firm value since minority investors would correctly expect some level of self-dealing by controlling owners of firms with high retained earnings.

However, more complicated interaction effects are possible and perhaps more likely. It may be that the perceived effects of dividend policy depends on the level of blockholder ownership: the market may be adverse to low dividends if blockholder ownership and the

perceived risk of expropriation by blockholders is high, but more positive, if the level of ownership concentration is low and the risk of expropriation is therefore perceived to be small. I develop these ideas in the following.

**The effect of blockholder ownership on firm value** could be positive or negative. A positive effect may come about because large shareholders have greater power and stronger incentives to ensure shareholder value maximization (Jensen and Meckling, 1976; Zeckhouser and Pound, 1990; Burkart et al., 1997, 1998). A negative effect may occur, if blockholder ownership above a certain level leads to entrenchment of owner-managers that expropriate the wealth of minority shareholders (Fama and Jensen, 1983; Morck, Shleifer and Vishny, 1988; Shleifer and Vishny, 1997). Moreover the owners' portfolio risk will increase with their exposure, which may influence risk taking and expected returns (Bolton and von Thaden, 1998). Non-linear effects are not unlikely. It may be that the incentive alignment dominates for small levels of blockholder ownership, whereas entrenchment effects set in at higher levels. The effect may even become positive against very high levels: If ownership is highly concentrated – and one blockholder is firmly in control – the main effect of greater ownership concentration may still influence the incentives of the incumbent owner: the higher her share of ownership, the more the incentive to undertake costly tunnelling activities are internalized by the controlling owner – and less expropriation should therefore take place.

Moreover, in addition to agency relations, there may be other reasons why concentrated ownership can raise or lower firm value. Concentrated ownership may for example reduce the liquidity and therefore the value of a share to minority investors.

**Dividends.** The relationship between corporate governance and dividend policy has recently been emphasized by La Porta, Silanes, Shleifer and Vishny, (2000a), Gugler and Yurtoglu, (2003), Da Silva, Goergen and Renneboog, (2004). La Porta et al. (2000) find that stronger minority investor rights are associated with higher dividend pay-outs, which they interpret to indicate that minority shareholders pressure corporate insiders to pay out. Gugler and Yurtoglu (2003) find large negative effects of announced dividend changes in German companies where corporate insiders have more power. Da Silva et al. (2004) find a U-shaped relationship such that dividends first decrease and then increase with the voting share of the largest owner.

In principle, controlling owners will prefer to retain profits as long as their private benefits per dollar of retained earnings exceeds their share of the after tax dividend. Legal and institutional constraints imply some discount on the utility of on-the job consumption relative to unconstrained private consumption. On the other hand taxation and the percentage pay-out to minority investors imply a loss from the viewpoint of the controlling owner, who will therefore all else equal choose to retain profits as long as

$$(1) \quad (1-c) > (1-t)(1-s),$$

where  $c$  is the marginal discount per dollar of private benefits consumed in the firm,  $t$  is the controlling owners' relevant marginal tax rate and  $s$  is the controlling owners' share of cash flow. The idea is that incumbent owners lose something by on-the-job compared to private consumption, but that they weigh this loss up against the loss by distributing after-tax funds to minority shareholders. As proposed by La Porta et al (2000a, 2000b) the discount rate on

private benefits (c) should vary positively with the level of investor protection, which increases the costs of expropriation. Tax rates also vary across nations (La Porta et al., 2000a). The controlling owners' share of cash flow varies both across nations and firms. A non-linear effect of increasing blockholder ownership on the dividend pay out ratio may come about if blockholder ownership facilitates entrenchment and access to private benefits up to a point after which increasing cash flow rights imply that more of the costs of private benefits are internalized by the controlling owner(s) themselves.

Dividend policy may be one indicator of conflicts of interest between minority investors and owners or managers, but it is clearly not the only one. Agency problems may lead to overinvestment, excess resource consumption of various kinds, inflated salaries and the like. It is even possible that smart insiders will prefer to keep dividends high as a visible signal of good faith to the minority investors while they behave more selfishly in other respects. Nevertheless, the level of blockholder ownership may influence stock market reactions to changes in dividends (and dividend policy may influence stock market reactions to changes in blockholder ownership). Moreover, investors may be more concerned about the cumulated effects of dividend policies over a period of time (e.g. the cash reserves of the company) than about pay out ratios in a given year.

Similarly blockholder ownership is not the only determinant of dividends. Previous literature indicates first that dividends are subject to considerable inertia, since managers are reluctant to cut them (Lintner 1956); and secondly, current and expected profitability as well as investment are among the most important determinants of both intra- and interfirm variations in dividends.

Finally, dividends are not the only way that companies can distribute funds to shareholders. Share buy-back have become increasingly popular during the 1990's, and it would seem to be necessary to check whether one kind of redistribution substitutes for another.

**The effect of blockholder ownership on dividends** could be positive or negative. If dividends function as a way for managers to signal their commitment to future shareholder value creation, it may not be necessary to pay out large dividends in firms, whose commitment to shareholder value is already secured by the presence of large blockholders. This “substitution argument” (blockholder ownership substitutes for dividends) would imply a negative effect of blockholder ownership on dividends. But if minority shareholders are more afraid of expropriation in companies where blockholders hold a large proportion of the shares, it might be necessary to have high dividends to signal that this fear is unfounded. In what La Porta et al. (2000a) describe as the “outcome model” of corporate dividends, companies pay dividends because they are pressured to do so by the shareholders. According to the incentive alignment argument this pressure will increase with the level of blockholder ownership up to a point after which entrenchment effects may set in if the controlling owners prefer to retain profits to achieve private benefits. At very high levels of blockholder ownership the effect may again become positive because the controlling owners internalize the costs of the private benefits that they enjoy (Morck et al., 1988).

**The effects of dividends on firm value.** The direct effect of a high dividend (pay out ratio) on firm value is clearly negative. If pay-out at time  $t$  is high, there will be less to pay out in future periods. This will have a negative effect on firm value, which is theoretically the

discounted expected present value of future dividends. However, high dividends may signal that the firm is particularly successful or that its managers are particularly committed to maximizing shareholder value. In such cases high dividends may increase firm value, although dividends are an ambiguous signal of profitability since greater profitability may also imply good investment opportunities and a need to retain earnings rather than to redistribute them as dividends.

## Data

The data is drawn from a comprehensive electronic database on large listed firms across the world (Thomson Financial, Worldscope/Disclosure) and consists of two data sets combined:

- all EU and US companies that had net sales and net assets exceeding US\$ 2 billion in 1998
- the total number of companies in 11 smaller European countries (Austria, Belgium, Denmark, Finland, Greece, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden) for which information was available in the Worldscope database.

The idea behind including the smaller countries is to both avoid the large-country bias and to increase the number of different legal systems in the analysis. The combined data set contains 990 companies over 10 years, a total of 6680 firm-year observations (somewhat less than  $990 \times 10 = 9900$  because of missing information for some companies). We require at least 5 observations per variable per firm. The variables are described in table 1.



// Table 1 //

*Blockholder ownership (CHS)* is measured by the fraction of closely held shares (Worldscope/Disclosure, 1997) including shares held by owners who hold more than 5%; shares held by officers, directors and their families, shares held in trust, shares held by another corporation (except in a fiduciary duty by banks) or shares held by pension/benefit plans. This measure is somewhat broader than the measures of blockholder ownership used in previous studies since it involves the holdings of insiders (managers) as well as large outside investors. The main benefit of the measure is that it is available as a time series in the Worldscope database with up to 10 consecutive years of observation for a relatively large sample of US and European companies (n=990).

*Firm value* is measured by dividing the sum of the market value of equity and the book value of the total debt by the book value of assets. I use this approximation denoted the “simple Q” by Loderer and Martin (1997) since a Q measure of equity at replacement costs was not available. However, Chung and Pruitt (1994) found that the correlation between the “simple Q” and a measure of Q that attempts to use market values throughout is as high as 0.97. To correct for a right-skewed distribution of the firm value variable, I use log values. Q is measured at the end of the period and presumably reacts fast to new information so change in other variables like blockholder ownership in a given period logically precede changes in Q. In GMM estimation Q is therefore not regressed on lag CHS but on CHS.

*Control variables.* GMM estimation, which includes the lagged dependent variable and the addition of fixed time and firm effects, filters out an unusually high amount of firm-specific heterogeneity that may influence both blockholder ownership and firm value, and this is a key advantage of the present study. However, to ensure the robustness of the results, I include additional control variables similar to those adopted by Demsetz and Villalonga (2001), excluding advertising and research intensity measures (which I did not have access to) and structural variables like risk, profit volatility and industry effects that supposedly do not change over time and therefore cancel out in year-to-year changes. *Sales growth* could have a positive influence on firm value. *Sales/Assets changes* (change in asset turnover) could affect Q since higher turnover for given assets will often mean higher accounting profitability. The *Equity/assets ratio changes* should capture variations in capital structure, which may put more pressure on managers to maximize profits to meet debt payments (Jensen, 1986, 1989) and thereby increase firm value per unit of capital input.

Table 2 provides a correlation matrix and some descriptive statistics for the entire sample and for the US/UK and continental Europe separately.

// Insert Tables 2 and 3 about here //

On average, we have Q values of 1.46 – significantly higher in the US/UK (1.71) than in continental Europe (1.29). The level of blockholder ownership is much higher in continental

Europe (47%) than in the US/UK (10%)<sup>4</sup>, partly because continental European countries are smaller (average sales 3.1 billion US \$ compared to 8.6 in the US/UK). There appear to be no average system differences in dividend policies (pay out ratios), capital structure (equity/asset rates) or asset turnover (sales/assets).

The correlation coefficients indicate both similarities and differences in corporate governance mechanisms between the two systems. Ownership concentration is positively correlated with firm value in the US/UK, but *negatively* so in Europe. This could indicate that alignment of interest is the predominant effect of stronger blockholders in the US/UK, while entrenchment effects are stronger in continental Europe. Moreover, blockholder ownership is positively correlated with dividends in continental Europe, but negatively so in the US/UK. So while there may be some substitution between dividends and blockholder ownership in the US/UK so that it is less necessary for firms with strong owners to pay high dividends, continental European companies with strong owners apparently pay higher dividends and reinvest less. This could be because it is more necessary for them to signal a commitment to shareholder value or because strong owners in Europe are more successful in pressuring managers to pay out. Firm value is negatively correlated with dividends and positively with reinvestment rates in both systems, but the effects are stronger and more significant in the US/UK. This could indicate that the markets are more confident that retained earnings will be put to good use in Anglo-American companies, while they may suspect relatively more expropriation (type 1 or type 2 agency problems) in Europe. Likewise firm value is positively correlated with a strong

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<sup>4</sup> The Anglo-American figures are surprisingly low given that previous studies have found average levels of insider ownership in the order of 20% in listed US companies (Holderness, 2001; Anderson and Reeb, 2003). One reason for this is clearly that I focus on the very largest corporations (which tend to have lower levels of ownership concentration). Another is that the 5% cut off threshold used in the definition of closely held shares excludes some smaller blocks. Mayer and Becht (2001) find that the second largest voting block in US firms is typically less than 5%.

equity base in both systems, but the association is less strong in Europe, perhaps because of expected expropriation by the controlling owners and managers.

## Results

In table 4 I report some estimates of the impact of blockholder ownership and dividend policy on firm value. I use a GMM Generalized Methods of Moments technique which controls for fixed firm and time effects as well as lagged values of the dependent variable plus 3 control variables (used by Demsetz and Villalonga, 2001): asset turnover (sales/assets), firm size (turnover in US \$) and capital structure (the equity to assets ratio). I use this estimation method to exploit the time series characteristics of the data and to control for a large number of other factors, which influence firm value. Using time series data I can test for a dynamic association, i.e. whether a high level of blockholder ownership is associated with higher or lower firm value in subsequent time periods, which is an improvement compared to cross sectional methods. Among other things the analysis allows testing for an additional standard causality condition besides correlation: whether a change in one variable (the hypothesized cause) is indeed systematically followed by changes in another one (the hypothesized effect).

// table 4 //

Model 1 finds a significant, but numerically small negative effect of blockholder ownership on firm value in continental Europe. According to the estimates one standard deviation

change in CHS, roughly 0.25, would reduce log Q by only 4% of a standard deviation. In the US/UK this effect is positive, but not statistically significant (model 2).

The control variable estimates indicate that increases in size, leverage and capital intensity (with high sales sales/assets and low equity to assets ratios) lower firms value. The autocorrelation tests indicate a significant one period correlation in q, but no significant second order correlation. This is consistent with a random walk process driving stock prices and accounting for most of the variance in firm value.

The negative blockholder ownership in Europe turns out to be non-linear (model 3), first lowering firm value up to 60% blockholder ownership and then increasing it (see figure 1). Possibly, the negative effect reveals increasing entrenchment and possible expropriation, but once control is firmly established with a given owner (or coalition of owners), the positive effects for CHS > 60% may reflect that the owners internalize more of the consequences of their actions.

Model 4 examines the value effects of interaction effects between dividend policy (dividends/earnings) and blockholder ownership. High dividends have a negative direct effect on firm value, which makes sense as a trade off between present and future dividends. The interaction effect between dividends and blockholder ownership CHS\*DI1 is positive and significant which indicates that the market has a more positive (or less negative) view of dividends when blockholder ownership is high. This could be because dividends (cash pay out) reduce the likelihood of expropriation by the incumbent ownership coalition. On the

other hand, when blockholder ownership is low there may be less reason to expect expropriation.

Model 6 examines interaction effects between the reinvestment ratio (reinvested profits as a percent of equity) and blockholder ownership. Here the interaction effect CHS\*REINVR is negative and sufficiently strong to make the blockholder ownership insignificant. In other words, the evidence is consistent with the hypothesis that the negative reaction to blockholder ownership is attributable to investment behaviour.

The same conclusion applies to capital structure (measured by the equity to assets ratio). Model 7 shows a negative, but insignificant CHS\*E/A interaction effect on firm value. When this is taken into consideration, the blockholder ownership effect vanishes (becomes insignificant).

Finally, model 8 examines whether variations in the number of shares outstanding influence the relationship between blockholder ownership and performance. This could be the case, if the negative effect of blockholder ownership was attributable to a negative liquidity effect for smaller firms, or if lower blockholder ownership was accompanied by more share buy backs (and increases in firm value). However the negative blockholder ownership effect appears not to be influenced by the inclusion of “Shares” as a control variable.

Table 5 examines the empirical link between blockholder ownership and dividend pay out controlling for other factors which may influence dividends. I run separate regressions for Anglo-American and European firms to check for system effects.

// Table 5 //

I find that the level of blockholder ownership has a negative effect on dividend pay-out in both systems, which may reflect both substitution (dividends are less necessary when blockholder ownership is high and management more tightly controlled) and expropriation (the controlling shareholders choose to pay out less because they benefit from entrenchment and private benefits of control). The negative effect is stronger in the US/UK than in Europe, however. Perhaps the need to signal shareholder value is greater and the substitution effect therefore less strong in Europe. In neither system is the estimated effect particularly strong, however. The results indicate that one standard deviation change in blockholder ownership in Europe would lower the dividend payout rate by 2.5 percent compared to a mean value of some 41% (1/10 of a standard deviation). So the effect is not numerically large. In the US/UK the effect is numerically stronger, closer to 1/5 of a standard deviation.

As for control variables dividend policy appears to be more stable in Europe (the effect of the lagged value is stronger). In both systems a higher Q-value induces firms to reduce their dividends in the next period as they should if Q signals investment opportunities. Sales growth, another indicator of business opportunities, has the expected positive effect in the US/UK, but not in continental Europe. Perhaps stock markets are more sceptical about the expansion of European firms, for example more suspicious of empire building and

overinvestment. The equity to assets ratio has a positive effect on dividends in both systems which could imply that firms have targets for their equity base and choose to pay out more once they have a strong equity base. The effect is stronger in the US, however, which may indicate that the cost of equity is given greater priority in the market based US-UK systems than in Europe. In neither of the two systems does cash flow have a significant effect.

## **DISCUSSION**

This paper has examined corporate dividends payouts as a moderating mechanism between blockholder ownership and the stock market value of European firms. Using dynamic panel data analysis I found a negative effect of the level of blockholder ownership on firm value. This effect was at least partly attributable to interaction effects with dividend policy in that firm value was less negatively affected in European companies with high pay out ratios, low investment rates and a smaller equity base. The results indicate that blockholder ownership is excessive from a minority shareholder viewpoint and that private benefits may be a motive for retaining earning rather than paying them out as dividends.

Compared to previous studies on cross sectional data there are clear advantages to using dynamic panel data, in particular the ability to filter out firm effects and a to include a cleaner test of causality using lagged values of the dependent variable as an instrument. However, the aggregate level of the blockholder ownership variable also creates problems, since for example owner identities and the distribution of ownership rights between them may be important. Gugler and Yurtoglu (2003) present interesting results which indicate that large



external shareholders may act as watchdogs on incumbent controlling shareholders. Nevertheless previous research has found a high correlation between ownership share of the largest owner and the closely held shares measure (Thomsen and Pedersen, 2000).

Moreover, the dataset allowed identification of the identity of the largest shareholder at the end of the period (1998), which provides an (imperfect) check for identity-of owner effects. Separate estimates by the owner identities produced significantly negative blockholder level effects for bank and government ownership while the evidence for other ownership groups (family, company, institutional investors) was mixed. Positive stock market reactions to privatization are in line with previous research on the subject (Shirley and Walsh, 1998; Thomsen and Pedersen, 2000; Dewenter, 2001; D'Souza and Megginson, 1999). A strong negative reaction to high dividends for companies with high levels of (bank-led) blockholder ownership is consistent with conflicts of interest between banks (who may prefer low leverage if they also lend money to a company) and other stockholders (who would prefer dividends and a smaller equity base to maximize shareholder value).

It is also possible to break down the sample by country in order to examine the impact of country-specific institutional differences like the legal systems differences suggested by La Porta et al. (1998). But the results do not appear particularly encouraging. For example, the dividends\*blockholder ownership interaction effect analyzed in table 4 becomes insignificant in many countries, partly perhaps because of a smaller number of observations. It comes out significant in countries as different as Austria, France and Norway which score quite differently on the investor protection measure suggested by La Porta et al. Moreover, country variations in dividend payout ratios appear not to be correlated with investor protection or

legal system – for example the average pay out ratio in Europe is not statistically different from that in the US/UK.

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**Table 1. Variable list**

Code	Description	Definition
Q	Firm value. The sum of the market value of equity + the book value of total debt divided by the book value of assets (logarithmic value).	$\text{Log} [(\text{Market price-year end} * \text{Common shares outstanding} + \text{book value of total debt}) / \text{book value of total assets}]$ .
ANGLO	System. Whether the firm is incorporated in a common law system (US/UK) or in a continental-European civil law system (La Porta et al., 1999).	Dummy=1 for US, UK. =0 for Continental Europe
CHS	Closely held shares (%). Shares held by blockholders including officers, directors (and their families), trusts, pension/benefit plans, and shares held by another corporation or individuals that hold more than 5%	$100 * (\text{Closely held shares} / \text{Shares outstanding})$
DI1	Dividend pay-out ratio.	$100 * \text{Common Dividends (cash)} / (\text{Net Income before preferred Dividends} - \text{preferred Dividends requirement})$
REINVR	Reinvestment rate.	$100 * (\text{Earnings per share-Last 12 months} - \text{Dividends per share last 12 month}) / \text{book value per share a year ago}$
Size (sales)	Sales US \$	Net sales or revenues including fees, service income, royalty and licensing, excluding value added taxes, non-operating and interest income, sales of investment and property.
AS	Sales/assets	Total asset turnover: Net sales or revenues/Total assets
EA	Equity/Assets	$100 * \text{Common Equity} / (\text{Total Assets} - \text{Customer liability on Acceptances})$
Shares	Number of Shares in circulation	Common shares outstanding (Issued shares – treasury shares)

Source: Worldscope-Disclosure (annually).

**Table 2. Descriptive Statistics**

Variable	Whole sample					Continental Europe			US/UK		
	N	Mean	Standard deviation	MIN	Max	N	Mean	Standard deviation	N	Mean	Standard deviation
<b>Q</b>	6988	1.46	0.919	0.328	13.34	4221	1.299	0.789	2767	1.714	1.039
<b>CHS</b>	6988	32.19	28.389	4.296E-8	100.00	4221	46.988	24.983	2767	9.610	15.470
<b>DI1</b>	6445	41.79	22.685	0	300.00	3870	41.023	21.472	2575	42.932	24.353
<b>REINVR</b>	6911	10.02	12.410	-94.210	99.94	4171	8.616	12.402	2740	12.154	12.116
<b>Size</b>	6987	5344436	10913883	0.140	166993000	4220	3154889	7297680	2767	8683753	14182323
<b>EA</b>	6953	35.01	20.226	0.400	99.57	4203	35.782	21.720	2750	33.822	17.639
<b>AS</b>	6969	0.94	2.206	0.010	170.59	4209	0.929	2.726	2760	0.960	0.981

**Table 3.1 Correlations. Whole sample.**

Pearson Correlation Coefficients, significance levels, number of Observations

	qw	CHS	dil	REINVR	Size	EA	AS
qw	1.00000 6988	-0.18890 <.0001 6988	-0.05951 <.0001 6445	0.30406 <.0001 6911	0.02322 0.0523 6987	0.26720 <.0001 6953	0.07897 <.0001 6969
CHS	-0.18890 <.0001 6988	1.00000 6988	-0.01904 0.1265 6445	-0.12670 <.0001 6911	-0.21738 <.0001 6987	0.01427 0.2343 6953	-0.01566 0.1912 6969
dil	-0.05951 <.0001 6445	-0.01904 0.1265 6445	1.00000 6445	-0.37061 <.0001 6385	0.00004 0.9972 6445	0.01652 0.1857 6418	0.10627 <.0001 6427
REINVR	0.30406 <.0001 6911	-0.12670 <.0001 6911	-0.37061 <.0001 6385	1.00000 6911	0.04586 0.0001 6910	0.05057 <.0001 6888	0.05020 <.0001 6896
Size	0.02322 0.0523 6987	-0.21738 <.0001 6987	0.00004 0.9972 6445	0.04586 0.0001 6910	1.00000 6987	-0.17568 <.0001 6952	0.00446 0.7096 6969
EA	0.26720 <.0001 6953	0.01427 0.2343 6953	0.01652 0.1857 6418	0.05057 <.0001 6888	-0.17568 <.0001 6952	1.00000 6953	0.15914 <.0001 6949
AS	0.07897 <.0001 6969	-0.01566 0.1912 6969	0.10627 <.0001 6427	0.05020 <.0001 6896	0.00446 0.7096 6969	0.15914 <.0001 6949	1.00000 6969



**Table 3.2 Correlations. Continental Europe.**

Pearson Correlation Coefficients, significance levels, number of Observations

	qw	CHS	dil	REINVR	Size	EA	AS
qw	1.00000 4221	-0.14628 <.0001 4221	-0.02870 0.0742 3870	0.20935 <.0001 4171	-0.04392 0.0043 4220	0.22078 <.0001 4203	0.06509 <.0001 4209
CHS	-0.14628 <.0001 4221	1.00000 4221	0.09594 <.0001 3870	-0.11292 <.0001 4171	-0.08880 <.0001 4220	-0.05771 0.0002 4203	-0.03165 0.0401 4209
dil	-0.02870 0.0742 3870	0.09594 <.0001 3870	1.00000 3870	-0.31375 <.0001 3831	-0.01076 0.5033 3870	0.07136 <.0001 3856	0.15047 <.0001 3859
REINVR	0.20935 <.0001 4171	-0.11292 <.0001 4171	-0.31375 <.0001 3831	1.00000 4171	-0.02302 0.1373 4170	0.06066 <.0001 4161	0.04829 0.0018 4162
Size	-0.04392 0.0043 4220	-0.08880 <.0001 4220	-0.01076 0.5033 3870	-0.02302 0.1373 4170	1.00000 4220	-0.27881 <.0001 4202	-0.01272 0.4093 4209
EA	0.22078 <.0001 4203	-0.05771 0.0002 4203	0.07136 <.0001 3856	0.06066 <.0001 4161	-0.27881 <.0001 4202	1.00000 4203	0.08743 <.0001 4201
AS	0.06509 <.0001 4209	-0.03165 0.0401 4209	0.15047 <.0001 3859	0.04829 0.0018 4162	-0.01272 0.4093 4209	0.08743 <.0001 4201	1.00000 4209

**Table 3.3 Correlations. US and UK.**

Pearson Correlation Coefficients, significance levels, number of Observations

	qw	CHS	dil	REINVR	Size	EA	AS
qw	1.00000 2767	0.08213 <.0001 2767	-0.11519 <.0001 2575	0.37760 <.0001 2740	-0.02798 0.1411 2767	0.39610 <.0001 2750	0.17984 <.0001 2760
CHS	0.08213 <.0001 2767	1.00000 2767	-0.18486 <.0001 2575	0.11153 <.0001 2740	-0.09361 <.0001 2767	0.08913 <.0001 2750	0.10001 <.0001 2760
dil	-0.11519 <.0001 2575	-0.18486 <.0001 2575	1.00000 2575	-0.46064 <.0001 2554	-0.01094 0.5791 2575	-0.06816 0.0006 2562	-0.00524 0.7908 2568
REINVR	0.37760 <.0001 2740	0.11153 <.0001 2740	-0.46064 <.0001 2554	1.00000 2740	0.04071 0.0331 2740	0.05247 0.0061 2727	0.07759 <.0001 2734
Size	-0.02798 0.1411 2767	-0.09361 <.0001 2767	-0.01094 0.5791 2575	0.04071 0.0331 2740	1.00000 2767	-0.09589 <.0001 2750	0.03990 0.0361 2760
EA	0.39610 <.0001 2750	0.08913 <.0001 2750	-0.06816 0.0006 2562	0.05247 0.0061 2727	-0.09589 <.0001 2750	1.00000 2750	0.27990 <.0001 2748
AS	0.17984 <.0001 2760	0.10001 <.0001 2760	-0.00524 0.7908 2568	0.07759 <.0001 2734	0.03990 0.0361 2760	0.27990 <.0001 2748	1.00000 2760

**Table 4. Effects of ownership and capital structure on firm value (GMM estimates). Dependent variable log Q,**

Model	1	2	3	4	5	6	7
<b>SYSTEM</b>	<b>Europe</b>	<b>US/UK</b>	<b>Europe</b>	<b>Europe</b>	<b>Europe</b>	<b>Europe</b>	<b>Europe</b>
$Q_{(T-1)}$	0.2982**	0.2726	0.3012***	0.2696***	0.2927***	0.2979***	0.2943
Closely Held Shares – $CHS_{(T)}$	-0.0007**	0.0011	-0.0029***	-0.0018***	-0.0006	-0.0001	-0.0007**
$CHSSQ_{(T)}$			0.00002**				
Dividends/earnings . $DI_{(T)}$				-0.0010***			
$CHS*DI_{(T)}$				0.00002***			
Reinvestment rate $REINVR_{(T)}$					0.0007		
$CHS*REINVR_{(T)}$					-0.00002*		
$CHS* EQUITY/ASSETS_{(T)}$						-0.00002	
$SHARES_{(T)}$							0.0000***
$SALES/ASSETS_{(T)}$	0.0689***	0.1705**	0.0686**	0.0646**	0.0731***	0.0688***	0.0691***
$EQUITY/ASSETS_{(T)}$	0.0011*	-0.0019	0.0011*	0.0011*	0.0013*	0.0019**	0.0011*
$SALES_{(T)}$	-0.0000***	0.0000	-0.0000***	-0.0000***	-0.0000***	-0.0000***	-0.0000***
<b>CONSTANT</b>	0.0020	0.0224	0.0000	-0.0013	-0.0124	0.0008	0.0015
<b>Time effects</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Firm effects</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>N (firms)</b>	616	374	616	597	614	616	616
<b>N (firm-years)</b>	2641	1687	2641	2340	2602	2641	2641
<b>Wald Chisquare</b>	388.77	744.33	398.38	381.19	382.39	388.71	388.38
<b>1st order autocovariance test (z)</b>	-5.3***	-4.73**	-5.30***	-4.01***	-5.04***	-5.30***	-5.24
<b>1st order autocovariance test (z)</b>	0.16 n.s.	1.36 n.s.	0.02 n.s.	0.31 n.s.	-0.03 n.s.	0.16 n.s.	0.15 n.s.

\*\*\*, \*\*, \* and + = significant at 0.1, 1, 5 and 10 per cent, respectively.

**Table 5. Effects of blockholder ownership on dividend pay out (GMM estimates)**

Model	1	2
SYSTEM	Europe	US/UK
DEPENDENT VARIABLE	Dividends/Net Income	Dividends/net Income
DI (T-1)	0.3581	0.1605
CHS(T-1)	-0.0940**	-0.1681**
Q(t-1)	-3.6458	-3.6921
Cash flow	-0.0044	0.0174
Equity/assets(T-1)	0.1858**	0.2771***
Sales growth (T-1)	0.00003	-0.0001***
Time effects	Yes	Yes
Firm effects	Yes	Yes
N (firms)	583	350
N (firm-years)	2225	1534
Wald Chisquare	99.14	65.49
1st order autocovariance test (z)	-8.61***	-6.96***
1st order autocovariance test (z)	0.70 n.s.	2.74***

\*\*\*, \*\*, \* and + = significant at 0.1, 1, 5 and 10 per cent, respectively.

**Figure 1. Blockholder effect in Europe  
Linear and Quadratic Estimates**

