Determinants of Ownership Concentration and Tender Offer Law in the Chilean Stock Market

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1 Motivation

· Is legal protection to minority shareholders increasing ownership concentration?

· Is there a trade-off between legal protection and widely held companies?

· What is determining the ownership concentration in the Chilean stock market?

· Are company specific or aggregate variables affecting the share of controlling shareholders?

2 Introduction

· At the empirical level, statistical evidence indicates that in average ownership is more concentrated in countries where legal protection is weaker.

· Following La Porta et al. (1998, 1999), when the legal protection is weak the ownership concentration become a substitute for investors, given that larger shareholders have a higher probability to receive a positive return for their investment.

· On the other hand, investors should be willing to take minority positions and to finance firms in countries where legal rules exist and its enforcement is effective.

· Bukart and Panunzi (2006) propose that what really matter is monitoring. The higher the monitoring, the lower the ownership concentration required to protect shareholders. When the law is a substitute for monitoring, then legal protection to shareholders could increase ownership concentration more than reducing it.

· While some rules or laws are complements for monitoring (disclosure rules and accounting standards?), others are substitutes (minimum dividend payout and insider trading law?) producing this direct relationship between legal protection and ownership concentration that contradicts the average empirical evidence.

3 Determinants of Ownership Concentration

· Beside the existence and quality of laws protecting minority shareholders, as well as those related to corporate governance, other firm's specific and aggregate variables should be considered as potential determinants for ownership concentration in the market.

· The larger the size of the firm, the larger the number of shareholders required to complete the stock of capital and the property must be more disperse. However, if voting rights are proportional to property stake the control is obtained mainly through ownership concentration and equity increses could even induce more concentration.

· A higher level of debt -measured by financial leverage- could indicates both, a binding constraint for growth or good access to banking and bond financing.

The first implies the need for minority shareholders for financing new investment projects. The second one, could imply a larger ownership concentration.

· The larger the percentage of dividend payment (above a possible legal minimum), the larger the number of minority shareholders willing to enter the company. So, ownership concentration should have an inverse relationship with the dividend payment. However, as discussed in the introduction the relationship could be direct if the dividend payout policy induces a lower monitoring by shareholders.

· Pension Funds, given the regulatory limits on their investments, are minority shareholders by definition. However, since those institutional investors have teams of well trained financial analysts and moreover, several Funds could vote as a block to gain a seat at the Board of the company, they are able to monitor managers and maybe to improve the corporate governance of the firms.

All these actions may induce a more disperse ownership concentration, by reducing the control premium to large shareholders or giving more confidence to minorities to participate.

· A deep and complete stock market -measured by market capitalization to GDP- should facilitate minority shareholders entering firms, helping to reduce ownership concentration.

· Per-capita GDP as a proxy for average income should have a direct relationship with the number of minority shareholders, helping to reduce concentration.

4 Tender Offer Law (OPAs Law)

· The tender offer mechanism gives all the shareholders the same price and opportunity to sell their shares to the new controller, who informs the percentage to buy and the time period the offer will be hold. In addition, the buyer indicates the prorata conditions to assign the shares when the supply is larger than demand, in order to ensure that all the shareholders have similar opportunities to sell shares to the controller.

· In analyzing ownership concentration it is interesting to highlight the role of "residual OPAs" whenever the controller achieve two-thirds of voting rights (shares representing that percentage), no matter if this participation was obtained by a tender offer or any other aquisition mechanism. This residual tender offer obligation is supported by the fact that with two-thirds of voting rights the controller have no opposition to rule the company, even for those actions requiring qualified quorum. On the other hand, the obligation could be justified by considering the reduced liquidity faced by minority shareholders once just one-third of the company is traded in the market, and the corresponding liquidity premium affecting prices.

· The OPAs law -published on december of year 2000- establishes a transitory period -of three years- where control could be exchanged outside the tender offer mechanism.

5 The Data

· The dataset includes 67 firms listed at the Santiago Stock Exchange, observed at annual frequency during the period 1990-2007. Even though the total number of listed firms is larger we excluded companies with a significant State property, firms with low or no trade, as well as those firms with incomplete or not reliable data.

· To measure ownership concentration the international literature usually considers the sum of the three largest shareholders, considering that companies in countries like US, UK or Japan are widely held. However, in the chilean case the main shareholder -in average- owns almost half of the company, followed by one-seventh and one-sixteenth corresponding to the second and third sharholder respectively. This way, by looking at the sum of the first three shareholders we are assuming an homogeneous behavior between them, but in fact they could have a totally different response to the variables determining the ownership concentration.

· Leverage corresponds to the total debt divided by equity, as of december of each year.

· Given the mandatory dividend payout of 30% of previous year earnings, the variable indicates the payment in excess of that minimum.

· The Pension Funds variable measures the overall share of the group of funds, provided they are among the top-ten shareholders of the firm.

· Equity and aggregate variables, as market capitalization to GDP and GDP per capita, are all measured at constant 2003 prices.

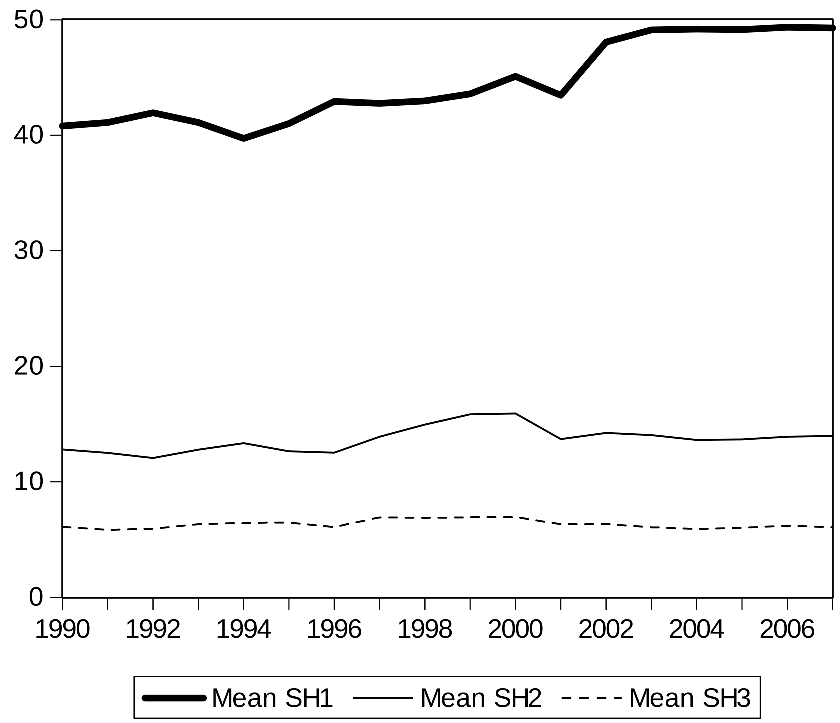

Figure 1: Mean Shareholder's Ownership

6 Econometric Analysis

· The following specification is estimated by Fixed Effects Panel methods, considering 4 alternative shareholder's share as dependent variable

$$SHARE_{j,t} = f(C, \overset{+-}{DIV}_{j,t-1}, \ln \overset{+-}{EQ}_{j,t}, \ln \overset{+-}{LEV}_{j,t}, \ln \overset{-}{GDP\_PC}_{j,t}, \overset{-}{MC\_GDP}_{j,t},$$

$$\overset{-}{PF}_{j,t}, \overset{+-}{OPA}_{j,t}, \overset{+-}{TRANS}_{j,t}, \overset{+-}{SHARE}_{j,t-1})$$

· Dividends are lagged one period to avoid its potential endogeneity, since the payout policy may depend on ownership concentration.

· The effect from the OPAs Law is represented by a dummy variable taking value equal to 1 for year 2001 on, and 0 otherwise. The transition period is considered by a second dummy variable equal to 1 for year 2001, and 0 for the rest of the sample. In this later case, only during the first year made sense to sell the control outside the tender offer mechanism since the premium they could pay for doing this later in the transition period will be larger (the reputational cost was supposed to be increasing during the transition period to the eyes of domestic and foreign institutional investors).

· Lagged dependent variable is included to take into account autocorelation in the error term. The resulting dynamic panel model is consistently estimated by a Fixed Effects method since the bias in the autoregresive coefficients goes to zero as time series observations go to infinity. On the other hand, the rest of the parameters are unbiased provided the independent variables are strictly exogenous.

6.1 Estimation Results

Table 1: Ownership Concentration (Fixed Effects Panel Estimation)

	Dependent variable: Shareholder's share			
Independent variable	Top-three	First	Second	Third
Constant	-0.7180 (0.01)	0.0855 (0.75)	-0.6157 (0.00)	-0.2234 (0.02)
Lagged Dividend Payout	-0.0099 (0.04)	-0.0214 (0.00)	0.0127 (0.00)	-0.0007 (0.69)
Ln (Equity)	0.0076 (0.10)	0.0173 (0.00)	-0.0053 (0.09)	-0.0038 (0.03)
Ln (Leverage)	0.0009 (0.57)	0.0005 (0.78)	-0.0005 (0.67)	0.0005 (0.39)
Ln (GDP per-capita)	0.0529 (0.01)	-0.0167 (0.45)	0.0509 (0.00)	0.0210 (0.01)
Market Capitalization/GDP	-0.0431 (0.00)	-0.0350 (0.00)	-0.0085 (0.12)	-0.0011 (0.73)
Pension Funds' share	-0.2069 (0.00)	-0.2311 (0.00)	0.0167 (0.56)	0.0121 (0.46)
Tender Offer Law dummy	0.0066 (0.24)	0.0185 (0.00)	-0.0087 (0.02)	-0.0047 (0.03)
Transition 2001 dummy	-0.0637 (0.00)	-0.0432 (0.00)	-0.0157 (0.00)	-0.0024 (0.43)
Lagged Dependent variable	0.7784 (0.00)	0.7934 (0.00)	0.7055 (0.00)	0.6977 (0.00)
Adjusted R^2	0.9385	0.9383	0.8482	0.7988
Number of observations	1139	1139	1139	1139

P-value in parentheses

7 Conclusions

· Dividend payout policy reduces ownwership concentration, what could be evidence on favor of a complementary role of legal protection and monitoring. It is interesting to note that the reduction on the first shareholder share is more than compensating the increase in the second shareholder participation, which in turn makes clear the opposite response between the controller and the following shareholders.

· The direct relationship between equity and concentration for the controller, and the negative effect for the second and third shareholders, implies a higher concentration on larger companies and capital increases made by the main shareholder more than by including minorities.

· The positive sign of GDP per-capita for the top-three sharholders, as well as for the second and the third, but statistically equal to zero for the controller means that the higher the average income of the country, relatively more minority shareholders are coming to the stock market.

· A depeer stock market seems to help reducing concentration, as the positive sign for Market capitalization to GDP is telling us.

· The role played by Pension Funds, in terms of monitoring and enhacing the corporate governance, is statistically significant in reducing ownership concentration.

· Even though the central pourpose of OPAs Law is achieved, the tender offer mechanism increases the ownership concentration. The main reason for this effect has to do with the "residual OPA" obligation considered by the law.

· The current evidence of statistically significant opposit responses between the controller and the following two-top shareholders should be taken as a warning for international comparisons based on a common measure of ownership concentration, between stock markets with totally different property structures.