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CORPORATE GOVERNANCE AND PRODUCT MARKET POWER: EVIDENCE FROM TAIWAN

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ABSTRACT

The objective of this study is to investigate how a firm's corporate governance affects its product market power. Adopting firms listed in the TSE and the OTC Exchange from 1996 to 2011, we find three main results. Firstly, better corporate governance leads to stronger product market power. Secondly, firms with higher research and development expenditure return on assets and market to book value have stronger market power while large and high leveraged firms are weak in product market power. Last but not least, cash holding plays an important role in deciding firms' product market power. Companies with a high level of cash holding enjoy better product market power.

JEL: G34

KEYWORDS: Corporate Governance, Product Market Power, Agency Problems, Cash Holdings

INTRODUCTION

In corporate governance, the agency problem refers to conflicts of interests between managers and shareholders. Prior research has focused on three types of agency problems: (i) conflicts of interest between shareholders and managers (Jensen, 1986), (ii) conflicts of interests between outside minority shareholders and controlling shareholders (La Porta et al., 2000); and (iii) conflicts of interest between bondholders and shareholders (Jensen and Meckling, 1976).

Recent studies on the best practices of modern firms are based on the assumption of widely dispersed ownership, which consists of large and small investors with legal protection of their rights, independent boards, and information disclosure (Shleifer and Vishny, 1997; Baek et al., 2004). However, a concentration of ownership is common in the largest American corporations and in developed countries. Concentration of power also diminishes in direct relation to the level economic development of countries (Claessens et al., 2000). The separation of ownership and control in Taiwan is rare; 75% of listed companies are under family control, and wealth is centralized in the hands of few families (Baek et al., 2004).

Ararat, Black, and Yurtoglu (2017) find a strong correlation between governance and firm market value. They construct a Turkey Corporate Governance Index, compiled of sub-indices for board structure, shareholder rights, disclosure, board procedure, and ownership. The primary finding is that the disclosure sub-index indicates higher market value and profitability. Moreover, Giroud and Mueller (2011) argue that strong corporate governance is more prevalent in competitive industries and positively associated with stock performance (Rajan and Zingales, 1998), operating performance (Core et al., 2006) and equity returns (Gompers et al., 2003).

To our knowledge, no empirical study exists showing how corporate governance affects product market power. Previous studies find that poor corporate governance mechanism results in poor profitability (e.g., Joh, 2003). There is plenty of evidence on the link between management responsibility and performance outcomes in East Asian listed companies (e.g., Jung and Kwon, 2002; Ho and Wong, 2001; Mak and Li, 2001; Piesse and Khantri, 2002; Dhnadirek and Tang, 2003; Yeh et al., 2001). This evidence allows us to examine the effect of corporate governance on product market power in Taiwanese listed companies.

Our finding demonstrates that better corporate governance results in stronger product market power. Additionally, firms with a higher level of cash holding and better corporate governance are relatively more competitive in their product markets.

The remainder of the paper proceeds as follows. Section 1 briefly describes corporate governance. Section 2 illustrates relevant literature review. Section 3 displays data, methods, and variable descriptions. Section 4 provides data description and results. Section 5 discusses further findings and conclusions.

LITERATURE REVIEW

According to Shleifer and Vishny (1997), corporate governance is of enormous practical importance they emphasize the problem of agency referred to as the separation of management and finance, or in more standard terminology, ownership and control. The focus of their study of corporate governance is on how suppliers of finance assert control over managers to obtain a return on their investment. Meanwhile, firm management escalates the acquisition of capital from investor either because they need cash to increase productivity or to cash out their holding in the firm.

Strong evidence of the agency problem is documented in many papers; Jensen (1986) observe that management chooses to reinvest available cash rather than to return it to investors, while Shleifer and Vishny (1997) conclude management incentives and managerial ownership in large firms are too small to ensure that management is concerned with maximizing their firm's profit. In terms of salary and executive bonuses for performance, Jensen and Murphy (1990), find them to be ineffective compensation. In sum, the benefit of large block ownership and control firms is contested in the literature; meanwhile this control not available for small investors.

In conformity with La Porta et al. (2000), controlling shareholders generally apply a pyramid framework, or cross-shareholdings, to increase their controlling power and to accelerate a divergence of voting rights from cash flow rights. This ownership-control deviation contributes to the capability and the incentive to take over minority investors (Joh, 2003). Taiwan listed firms exhibit a significant separation between control and ownership (Claessens et al., 2000; Du and Dai, 2005). To reinforce the control, controlling shareholders of Taiwanese companies typically make use of external constrains to acquire seat control rights.

Ko et.al (2016) surveys how firm-level governance systems influence the competition for managerial incentives. They sampled four Pacific Basin markets, namely, Taiwan, Hong Kong, China, and Singapore, from 2001 to 2012. They find that competition leads to higher sensitivity to pay-for-performance incentives for widely-owned firms, but not for family-owned or state-controlled firms. This result indicates that the role of governance is poor when firms are controlled by the state or family. Additionally, La Porta et al. (2000) discover the necessity of corporate governance in emerging markets. They state that better corporate governance can enhance firms in non-competitive industries leading to an increase in firm value, investor protection, law enforcement compliance and capital expenditures as a consequence.

Kao, Chen and Lu (2017) examine equity overvaluation and the effects of corporate governance and product market competition with highly incentive management and weak investor protection in Taiwan. They find

that corporate governance effectively reduces abnormal returns, but product market competition reinforces the reverse effect of one-year-ahead overvaluation on current market valuation. Another study is from Chen, Kao and Lu (2014), they investigate the relationship between ownership dominance and firm performance in Taiwan. Firm performance increases with controlling ownership especially at a low level management ownership. The advantage of high level controlling ownership is reducing the negative effect of controlling ownership on firm performance and it occurs when external competition or internal governance is stronger. Moreover, external competition and classified internal governance are highly effective at alleviating the negative effect of controlling ownership on firm performance.

Joh (2003) documents how poor corporate governance activity results in poor profitability. Specifically, poorly managed firms try hard to stay in the market, but tend to inefficiently allocate resources when competing with other firms, despite many years of low profitability. There is plenty of evidence on the link between of management responsibility and performance outcomes in East Asian listed companies, including companies in South Korea (Jung and Kwon, 2002), Hong Kong (Ho and Wong, 2001), Singapore (Mak and Li, 2001), Malaysia (Piesse and Khantri, 2002), Thailand (Dhnadirek and Tang, 2003), and Taiwan (Yeh et al., 2001). Guetat, Jarboui, and Boujelbene (2015) investigate the effect of corporate governance on Tunisian hotel performance. This study proposes diverse variables to measure the association between corporate governance and the performance of Tunisian hotels. The results suggest that corporate governance is significantly positive and associated with performance. Bessenova and Gonchar (2017) explore the roles of managerial ownership and incentive payment as potential drivers of innovation decisions by firms and as shifters of the competition-innovation link in the Russian manufacturing industry, where poorly protected property rights and a path-dependent market structure (typical for many transition economies) lead to a variety of outcomes. They use survey-based micro data for nearly 2000 non-listed companies in Russia. The results propose that managerial ownership may trigger decisions to undertake R&D and risky product innovations. Further, managerial ownership strengthens the stimulating effects of competition on innovation.

Applying data of Chinese listed firms from 2003 to 2013, Yu and Yang (2017) show evidence that good governance increases firm value significantly only in competitive industries. The impact of corporate governance on firm value is time-varying. They also examine why product market competition is stronger in state-owned firms rather than non-state-owned firms. Further, Ararat, Black, and Yurtoglu (2017) find a strong correlation between firm market value and governance. They took a sample from the Turkey Corporate Governance Index (TCGI) for the years 2006 to 2012. Afterwards, they developed sub-indices for ownership, board organization, board procedure, shareholders rights, and disclosure. The primary sub-index which creates higher market value and profitability, and brings results for the TCGI as a whole, is the disclosure sub-index.

DATA AND METHODOLOGY

In this study, we use a data from the Taiwan Stock Exchange (TSE) and the Over-the-Counter (OTC), the fastest growing financial exchange in Asia. The data set covers the horizon from 1996 to 2011. Firm's financial data, including financial ratios and stock process, were collected from Taiwan Economic Journal (TEJ).

We investigate the relationship between corporate governance and product market power; regressions are estimated through a pooled ordinary least squares (OLS) method. We employ several classifications of control variables to estimate our hypothesis of the effect of corporate governance on product market power and specify the following baseline model:

$$EPCM_{i,t} = \alpha_i + \beta_1 CG_{i,t} + \sum_{j=2}^{6} \beta_j ControlVariables_{i,t} + Industrydummies + Yeardummies + \varepsilon_{i,t} \quad (1)$$

where the dependent variable is product market power, and the proxy is the excess in price-cost margin (EPCM). Corporate governance (CG) includes DEV1 and DEV4, respectively. We predict that better corporate governance increases its product market competition. Our control variables include leverage (LEV), firm size (LNMV), R&D expenditure (RD), performance (ROA and MB), industry dummies and year dummies. Industry dummies and Year dummies are used to capture the effects of the different industries and different years presented in our sample. The above variables are adopted in the literature and are illustrated as follows.

Our corporate governance measure includes the ultimate owner's voting rights minus cash flow rights (DEV1) and the ultimate owner's seat control rights minus cash flow rights (DEV4). Inspired by Peress (2010), we consider EPCM as a proxy for a firm's market power, higher EPCM reflects higher power. EPCM is calculated as the difference between the price cost margin of each firm and the price cost margin of its industry. The price cost margin is identified as operating profits over revenues. Operating profits are obtained after deducting the cost of goods sold and the operating expenses from revenues. The difference between firms' price cost margin and the average price cost margin of its industry reveals firms' ability to set the prices of products above their marginal costs.

Highly leveraged firms lose substantial market share (Opler and Titman, 1994). Kovenock and Philips (1995) show that increasing debts make recapitalizing firms more passive, while their rivals become more aggressive and more likely to invest when the market share of the leveraged firms is growing. When firms are in financial distress, they are more likely to externally seek funds through bank loans or capital markets, and it can be costlier if firms' rivals aggressively seize the opportunity to gain market share. Following Berger and Ofek (1995), leverage is measured by the book value of debt divided by total assets.

Large firms are able to extend power in their industries. Large firms are also shown to have potential capacity expansion to expand their financing in building market shares (Fresard, 2010). According to previous studies, the natural log of market value is identified as firm value (LNMV).

The availability of internal sources of investment funds is beneficial for firms, especially in R&D. Blundell et al. (1995) document a robust and positive impact on innovation for firms with higher market power. One significant implication of R&D that must be considered is investment towards product differentiation – innovative features of product –where the activity of R&D has potential to mitigate power. We define R&D as the ratio of R&D expenditure to assets.

Businesses that are defensible and profitable can enjoy larger market shares. The reason is that firms can reinvest current profits and thus grow faster and yield larger market shares than their rivals at any point in time. These arguments imply a positive association between past performance and product market power (Day and Wensley, 1988). Peress (2010) adopts return on assets (ROA) and market-to-book ratio (MB) to measure past performance.

ROA is identified as net income divided by total assets, and MB is defined as the ratio of the market value of assets to their book value. Chauhan, Lakshmi, and Dey (2016) figure out the effects of firm-level corporate governance on the performance of listed firms in India where founder ownership is centralized. They use a fully expansive measurement of corporate governance and it find that corporate governance is highly positively associated with firm performance. They also argued that better governance mitigates self-dealing by controlling owners and thereby improves future firm performance.

Table 1 provides descriptive statistics for our sample of 11,613 firm-year observations from 1996 to 2011. The industry with the largest number of firm-year (5,521 firm-years) is the information and electronic industry; it accounts for 47.54% of the total firms. The automobile industry has the smallest number of firm-year (64 firm-years) and accounts for 0.55% of total firms. In the shipping and transportation industry, firms enjoy higher EPCM (4.38%) than the average across industries (0.26%).

Table 1: Summary Statistics for the Sample Firms and Their EPCM Industry

Industry	Number	Percentage	EPCM
Cement	109	0.94%	0.006
Food	376	3.24%	0.0239
Plastic	350	3.01%	-0.0082
Textile	751	6.47%	0.0052
Electrical Machinery	620	5.34%	-0.0072
Electrical & Cable	226	1.95%	0.0192
Biotechnology & Medical Care	681	5.86%	-0.0231
Glass & Ceramic	73	0.63%	0.0066
Paper & Pulp	108	0.93%	-0.0078
Iron & Steel	477	4.11%	0.0034
Rubber	147	1.27%	0.0096
Automobile	64	0.55%	0.0032
Information and Electronic	5,521	47.54%	0.0029
Building Material & Construction	696	5.99%	0.0013
Shipping & Transportation	267	2.30%	0.0438
Tourist	93	0.80%	-0.0501
Trading & Consumers' Goods	230	1.98%	0.0008
Gas & Electricity	126	1.08%	0.0055
Others	698	6.01%	0.0109
Total	11,613	100.00%	
Average			0.0026

This table provides summary statistics about the sample firms and their EPCM by industry. Adopting firms listed in the TSE and the OTC Exchange of 11,613 firm-year observations from 1996 to 2011. EPCM is calculated as the difference between the price cost margin of each firm and the price cost margin of its industry.

RESULTS

For our measures of corporate governance, product market power, and the control variables, Table 2presents the pooled mean, median, standard deviation, minimum, maximum, the 75th percentile, and the 25th percentile. The mean of EPCM is 0.26% and its maximum is 50.07%. Corporate governance is captured by DEV1 and DEV4, and the average values are 5.49% and 36.93%, . The results indicate that a separation between ownership and control exists in Taiwanese listed firms. The average and median values of LNMV are 8.05 and 7.95 for all sample years, respectively. The mean of LEV, RD, ROA and MB are 39.08%, 1.7%, 7.12% and 1.46, respectively.

Table 3 exhibits the correlations between variables. The result shows that correlation coefficients between EPCM and the proxies of corporate governance (DEV1 or DEV4) are-0.04 and -0.14, respectively. These two findings imply that firms with better corporate governance have higher power. Additionally, EPCM positively correlates with LNMV, RD, ROA and MB while negatively associates with LEV. These demonstrate that large firms with more R&D expenditure, and firms with a higher ROA and MB enjoy stronger product power, but firms with higher leverage lack power in their product markets.

Table 2: Descriptive Statistics for Key Variables in Firms' Sample

	Mean	Median	Std Dev	Minimum	Maximum	Upper Quartile	Lower Quartile
EPCM	0.0026	-0.0094	0.1233	-0.3556	0.5007	0.066	-0.0777
DEV1	0.0549	0.0163	0.0917	0	0.9158	0.0612	0.0024
DEV4	0.3693	0.3582	0.2559	-0.5501	0.9987	0.5454	0.1978
LEV	0.3908	0.3853	0.1627	0.065	0.867	0.5008	0.2667
LNMV	8.0504	7.9558	1.355	5.0562	12.3668	8.9005	7.0613
RD	0.017	0.0072	0.0245	0	0.1558	0.0235	0
ROA	0.0712	0.0699	0.0922	-0.7358	0.3372	0.1229	0.0261
MB	1.463	1.2246	0.9283	0.0543	6.7676	1.8543	0.8113

EPCM is calculated as the difference between the price cost margin of each firm and the price cost margin of its industry. DEV1 is the deviation of ultimate owner's voting rights minus cash flow rights and DEV4 is the deviation the ultimate owner's seat control rights minus cash flow rights. LEV measured by the book value of debt divided by total assets. LNMV is the natural log of market value as we identified firm value. RD is the ratio of R&D expenditure to assets. ROA is identified as net income divided by total assets. MB is defined as the ratio of the market value of assets to their book value.

Table 3: Summary Statistics for the Data Employed in the Analysis

	EPCM	DEV1	DEV4	LEV	LNMV	RD	ROA
DEV1	-0.0436***						
	(<0.0001)						
DEV4	-0.1423***	0.2490***					
	(<0.0001)	(<0.0001)					
LEV	-0.3201***	-0.0041	0.0621***				
	(<0.0001)	(0.6560)	(<0.0001)				
LNMV	0.0997***	0.1108***	0.2891***	-0.1179***			
	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)			
RD	0.2476***	0.0810***	-0.1227***	-0.2018***	-0.0341***		
	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(0.0002)		
ROA	0.4367***	0.0541***	-0.1071***	-0.2997***	0.3641***	0.0729***	
	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	
MB	0.2276***	0.0389***	-0.0887***	-0.0695***	0.4154***	0.2365***	0.3971***
	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)

*Our sample consists of 11,613 firm-year observations from the TSE and the OTC Exchange from years 1996 to 2011.For all of the variables, EPCM is calculated as the difference between the price cost margin of each firm and the price cost margin of its industry. DEV1 is the deviation of ultimate owner's voting rights minus cash flow rights and DEV4 is the deviation the ultimate owner's seat control rights minus cash flow rights. LEV measured by the book value of debt divided by total assets. LNMV is the natural log of market value as we identified firm value. RD is the ratio of R&D expenditure to assets. ROA is identified as net income divided by total assets. MB is defined as the ratio of the market value of assets to their book value. P-values are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.*

This section examines the impact of corporate governance on product market power. It consists of four models; each model is estimated by using the specifications of EPCM as the measurement of the dependent variable. Prior studies document that a larger price cost margin can indicates strong market power (Perez, 2005; Peress, 2010). In all models, we find significantly negative coefficients of EPCM for DEV1 and DEV4; a higher level of corporate governance exhibits a higher product market power. By adding control variables in model 3 and model 4, we find that the coefficients of leverage are significantly negative, which suggests that highly leveraged firms lose market power. LNMV has significantly negative coefficients -

0.0048 and -0.0037 on EPCM. Our results coincide with Demsetz (1973) and Peltzman (1977), showing that power for smaller firms results in higher price-cost margins. In interpreting the effect of R&D in models 3 and 4, both coefficients are significantly positive displaying that increasing R&D expenditures will enhance product market power. Profitability measured by ROA and MB significantly positive in models 3 and 4. This result is consistent with our prediction that higher firm profitability has larger price-cost margin.

Table 4: The Effect of Corporate Governance on Product Market Power

	[1]	[2]	[3]	[4]
Intercept	0.0065	0.0366***	0.0374***	0.0401***
	(0.0076)	(0.0078)	(0.0105)	(0.0105)
DEV1	-0.0630***		-0.0852***	
	(0.0121)		(0.0106)	
DEV4		-0.0728***		-0.0316***
		(0.0045)		(0.0042)
LEV			-0.1613***	-0.1625***
			(0.0068)	(0.0068)
LNMV			-0.0048***	-0.0037***
			(0.0010)	(0.0010)
RD			1.3260***	1.3076***
			(0.0544)	(0.0545)
ROA			0.5049***	0.4909***
			(0.0157)	(0.0159)
MB			0.0149***	0.0139***
			(0.0015)	(0.0015)
Industry dummies	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes
R^2	0.0185	0.0365	0.3453	0.3447
Adj.R2	0.0157	0.0338	0.3431	0.3424
F-value	6.62***	13.30***	156.52***	156.06***

*This table reports the effect of corporate governance on product market competition. Our sample consists of 11,613 firm-year observations from the TSE and the OTC Exchange from years 1996 to 2011. For all variables, EPCM is calculated as the difference between the price cost margin of each firm and the price cost margin of its industry. DEV1 is the deviation of ultimate owner's voting rights minus cash flow rights and DEV4 is the deviation the ultimate owner's seat control rights minus cash flow rights. LEV measured by the book value of debt divided by total assets. LNMV is the natural log of market value as we identified firm value. RD is the ratio of R&D expenditure to assets. ROA is identified as net income divided by total assets. MB is defined as the ratio of the market value of assets to their book value. Newey and West (1987) autocorrelation- and heteroskedasticity-consistent standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.*

The value of a dollar of cash is substantially less if a firm has poor corporate governance. Good governance can enhance a firm's value. Fresard (2010) suggests that cash policy encompasses a substantial strategic dimension. Dittmarand Mahrt-Smith (2005) indicates that governance has a substantial impact on value through its impact on cash. To explore the relationship between corporate governance and product market power, we investigate the link between corporate governance and cash holdings on product market power. We examine whether firms with better corporate governance and large cash reserves face a higher product market power. The regression model is as follows:

$$EPCM_{i,t} = \alpha_i + \beta_1 CG_{i,t} + \beta_2 CH_{i,t} + \beta_3 (CG_{i,t} \times CH_{i,t}) + \sum_{j=4}^{8} \beta_j Controls_{i,t} + Industrydummies + Yeardummies + \varepsilon_{i,t} \quad (2)$$

where i indexes firms, t indexes time, αi is firm fixed effects, the dependent variable is product market power, and the proxy is the excess in price-cost margin (EPCM). We use CGi,t to represent corporate governance in firm i by time t, proxy by DEV1 or DEV4.We adopt CHi,t to represent cash holdings associated with firm i by time t. Controls represent the control variables, including LEV, LNMV, RD, ROA and MB; εi,t is the error term. We also consider the interaction between corporate governance and firms' cash holdings.

Table 5: The Effect of Corporate Governance and Cash Holding on Product Market Power

	[1]	[2]	[3]	[4]
Intercept	0.0187*	0.0141	0.0195*	0.0169
	-0.0107	(0.0109)	-0.0108	(0.0110)
DEV1			-0.0354	
			(0.0178)	
DEV4				-0.0125*
				(0.0069)
CASH	0.0911***	0.1247***	0.0817***	0.1069***
	(0.0126)	(0.0159)	(0.0138)	(0.0201)
CASH×DEV1	-0.508***		-0.3508	
	(0.0549)		(0.1022)	
CASH×DEV4		-0.1826***		-0.1293***
		(0.0256)		(0.0412)
LEV	-0.1349***	-0.1376***	-0.1352***	-0.1373***
	(0.0074)	(0.0075)	(0.0074)	(0.0075)
LNMV	-0.0048****	-0.0036***	-0.0047***	-0.0033***
	(0.0010)	(0.0010)	(0.0010)	(0.0011)
RD	1.2734***	1.2415***	1.2717***	1.2400***
	(0.0602)	(0.0604)	(0.0063)	(0.0604)
ROA	0.4941***	0.4816***	0.4941***	0.4796***
	(0.0160)	(0.0162)	(0.0160)	(0.0162)
MB	0.0132***	0.0124***	0.0132***	0.0121***
	(0.0015)	(0.0015)	(0.0015)	(0.0016)
Industry dummies	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes
R^2	0.3298	0.3289	0.3275	0.3291
Adj.R2	0.3273	0.3264	0.3275	0.3265
F-value	132.38***	131.81***	129.28***	128.71***

*This table reports the effect of corporate governance on product market competition. Our sample consists of 11,613 firm-year observations from the TSE and the OTC Exchange from years 1996 to 2011. For all of the variables, EPCM is calculated as the difference between the price cost margin of each firm and the price cost margin of its industry. DEV1 is the deviation of ultimate owner's voting rights minus cash flow rights and DEV4 is the deviation the ultimate owner's seat control rights minus cash flow rights. LEV measured by the book value of debt divided by total assets. LNMV is the natural log of market value as we identified firm value. RD is the ratio of R&D expenditure to assets. ROA is identified as net income divided by total assets. MB is defined as the ratio of the market value of assets to their book value. Newey and West (1987) autocorrelation- and heteroskedasticity-consistent standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.*

CASH in all columns shows a significantly positive relationship to EPCM, which are 0.0911, 0.1247, 0.0817, and 0.1069, respectively. Firms with larger cash reserves can curb the entry of potential competitors, and thereby gain higher product market power. This result strongly agrees with Fresard (2010), who shows that firms' cash reserves have strategic effects on product market outcomes. Moreover, CASHxDEV1 and CASHxDEV4 in columns show a significantly negative on relationship with EPCM, which are -0.5080, -0.3508, -0.1826, and -0.1293, respectively. This infers that corporate governance is one key factor in the impact of cash holdings on firms' product market power, i.e., well-governed firms dissipate

cash quickly in ways that significantly increase their product market power. This is consistent with the finding that firms with abundant investment opportunities have incentives to hold cash in order to maintain their competitive position (Chen and Chuang, 2009).

CONCLUDING COMMENTS

The goal of this paper is to empirically examine the effects of corporate governance on product market power for firms listed in the TSE and the OTC Exchange from 1996 to 2011. We find that better corporate governance has a positive impact on firms' product market power. In addition, large and highly leveraged firms have reduced product market power; however, high R&D expenditure, ROA and MB are positively associated with firms' market power. Lastly, firms' cash holdings benefit their product market power but only for firms with strong corporate governance.

To our best of our knowledge, there are no empirical studies showing how corporate governance affects product market power. However, the limitation of the paper is that we only focus on internal corporate governance. Further studies on external corporate governance, such as media attention and the channel of its the impact of corporate governance and product market power, would be worthwhile in the future.

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