ScienceDirect

Journal of Corporate Finance
Volume 14, Issue 2, April 2008, Pages 118-132

Ownership structure, cash flow, and capital investment: Evidence from East Asian economies before the financial crisis ☆

K.C. John Wei [a], Yi Zhang [b]

Show more

Share Cite

https://doi.org/10.1016/j.jcorpfin.2008.02.002
Get rights and content

Abstract

Using financial and ownership data from eight East Asian emerging markets before the Asian financial crisis, we document that while the sensitivity of a firm's capital investment to its cash flow decreases as the cash-flow rights of its largest shareholders increase, this sensitivity increases as the degree of the divergence between the control rights and cash-flow rights of the firm's largest shareholders increases. We interpret the results to be consistent with the free cash-flow hypothesis, which postulates that too much free cash flow in the hands of entrenched managers is likely to lead to overinvestment. This is particularly true for firms with the greatest divergence between the largest shareholders' control rights and their cash-flow rights and for firms with lower profitability.

Introduction

The effect of cash flow on capital investment has been extensively studied with the role that financing constraints play receiving the most attention. In a perfect market without asymmetric information or financial constraints, a firm's cash flow should not affect its capital investments. Instead, capital investments should be solely determined by the firm's investment opportunities. However, in the real market, although firms tend to invest more following increases in their stock prices, cash flow is a better predictor than stock prices of a firm's capital investments.[1]

There are two competing explanations for the positive relation between cash flow and corporate investments. The first explanation is based on the agency costs of free cash flow as suggested by Jensen (1986). Jensen shows that managers have a tendency to overspend their free cash flow on unprofitable projects for their own private benefits. This free cash-flow hypothesis suggests that the positive relation between cash flow and investment is basically a symptom of *overinvestment*. Firms tend to overinvest, not because external capital is too expensive, but because internal capital is too inexpensive. The alternative explanation is based on asymmetric information. For example, Myers and Majluf (1984) show that the cost of external funds is more expensive than is the cost of internal funds due to asymmetric information problems. This asymmetric information hypothesis argues that the positive relation between cash flow and investment is typically a symptom of *underinvestment*. Firms tend to pass up some positive net present value projects because the cost of external capital is too high compared with the cost of internal capital.

The empirical results from Fazzari et al. (1988), Hoshi et al. (1991), and other follow-up studies seem to support the asymmetric information hypothesis. These studies show that financially constrained firms tend to have higher investment-cash flow sensitivities. Further, Lamont (1997) and Shin and Stulz (1998) document that capital investments by segments of a diversified firm depend on the cash flow from other segments. These results suggest that because the cost of external capital is significantly more expensive than the cost of internal capital, financial constraints are an important factor when a firm makes its investment decisions. However, Kaplan and Zingales (1997) provide both theoretical arguments and empirical evidence that investment-cash flow sensitivities are not good indicators of financial constraints. Whether or not investment-cash flow sensitivities are valid measures of financial constraints is still the subject of debate.[2]

The existing studies on investment-cash flow sensitivities seldom consider the overinvestment argument caused by the agency problem, which creates conflicts between managers and shareholders (Jensen and Meckling, 1976).[3] Recent studies suggest that since large shareholders have strong incentives to maximize the value of the stocks they own, large shareholders can help to overcome this agency problem.[4] However, large shareholders are also associated with negative entrenchment effects.[5] The empirical results from Morck et al. (1988) and McConnell and Servaes (1990) appear to substantiate both the enhancement and entrenchment effects of large shareholders. They find an inverse U-shaped relation between managerial equity ownership and firm valuation. That is, firm valuation initially increases as managerial ownership increases. However, after a certain point, firm value starts to decrease as managerial ownership increases, because managers become entrenched and start to pursue their private benefits at the expense of outside investors.[6]

Hadlock (1998) argues that if the positive investment-cash flow relation is caused by a managerial preference to overinvest internal funds, then the positive investment-cash flow sensitivity should decrease as the alignment of interests between managers and shareholders increases. On the other hand, if the positive investment-cash flow relation is caused by a managerial preference for underinvestment, the positive investment-cash flow sensitivity should increase as the alignment of interests between managers and shareholders increases. Using managers' ownership data from 1975 as his measure of the alignment of interests between managers and shareholders along with financial data from 1973–1976, Hadlock (1998) finds an inverse U-shaped relation between managerial ownership and investment-cash flow sensitivities for the U.S. firms in his sample. He interprets the results to be consistent with the underinvestment hypothesis caused by asymmetric information.

In this paper, we extend Hadlock's (1998) work to use the information on both large shareholders' cash-flow rights and the divergence between large shareholders' control rights and their cash-flow rights to disentangle the positive enhancement effect from the negative entrenchment effect of large shareholders. Using the information on both control rights and cash-flow rights more effectively distinguishes between the two competing explanations for why cash flow affects capital investment than does using the information on managerial cash-flow rights alone. Further, the existing literature suggests that while the positive enhancement effect is related to the cash-flow rights of large shareholders, the negative entrenchment effect is *more* associated with the control rights of large shareholders. However, as pointed out by Claessens et al. (2002), it is difficult to separate the incentive effect from the entrenchment effect of large shareholders using U.S. firms, since stocks in U.S. firms are widely held and there is little divergence between control rights and cash-flow rights. In contrast, in East Asian emerging economies, many firms are owned and controlled by single large shareholders via pyramid ownership structures. Many of the firms in these pyramid structures exhibit high ownership concentration and high levels of divergence between the control rights and cash-flow rights of large shareholders.[7] Thus, East Asian corporations provide an excellent sample with which to study the effect of the separation between the cash-flow rights and control rights of large shareholders on corporate investment.

The implication of Hadlock's (1998) results suggests that, if firms typically overinvest their internal capital, the investment-cash flow sensitivity should decrease as the cash-flow rights of the large shareholders increase and this sensitivity should increase as the divergence between the control rights and cash-flow rights of the large shareholders increases. On the other hand, if asymmetric information typically raises the cost of external funds, we expect to observe the opposite results. If the capital market is perfect and the availability of internal funds does not affect investment choices, then managerial ownership structures should not have any effect on the relation between cash flow and corporate investment.

Using financial and ownership data from eight East Asian emerging markets during 1993–1996, our empirical results support the overinvestment hypothesis caused by the agency costs of free cash flow. More specifically, the investment-cash flow sensitivity is negatively related to the cash-flow rights of the largest shareholders, while this sensitivity is positively associated with the divergence between the control rights and cash-flow rights of the largest shareholders, especially among firms with lower returns on assets (ROA). Our results not only support the overinvestment hypothesis, but also provide evidence for the positive enhancement effect related to the cash-flow rights and the negative entrenchment effect associated with the control rights of the largest shareholders on corporate investment. Our results complement those of Claessens et al. (2002), Lins (2003), and Joh (2003). These studies show that firm valuation is negatively associated with the separation of cash-flow ownership from control.

Moreover, our evidence of overinvestment by East Asian corporations immediately before the Asian financial crisis may contribute to our understanding of this devastating financial crisis that began with the devaluation of the Thai baht on July 2, 1997. Weak corporate governance, especially the divergence between the control rights and cash-flow rights of large shareholders, has been cited as one of the causes of the crisis. Several studies have examined the impact of corporate governance on firm performance during the East Asian financial crisis of 1997–1998. Johnson et al. (2000) find that measures of corporate governance, particularly the effectiveness of protections for minority shareholders, explain the extent of the exchange rate depreciation and the stock market decline during the crisis better than do standard macroeconomic measures. Mitton (2002) finds that corporate governance and disclosure are positively related to firm performance during the time of the crisis (1997–1998). Lemmon and Lins (2003) also offer similar results.

The rest of this paper is organized as follows. Section 2 discusses our hypothesis development. Section 3 describes our data and empirical specifications. Section 4 reports our baseline results, while Section 5 presents the robustness checks. Section 6 concludes the paper.

Section snippets

The overinvestment hypothesis resulting from the agency costs of free cash flow

The overinvestment hypothesis proposed by Jensen (1986) argues that managers have a tendency to overinvest internally generated funds. Hadlock (1998) further argues that if the positive investment-cash flow relation is caused by a managerial preference to overinvest internal funds, there should be a negative relation between the investment-cash flow sensitivity and the alignment of interests between managers and shareholders. In East Asia, ownership is concentrated as opposed to being diffused…

Sample selection

We start with all firms in East Asia from 1991–1996 that appeared on the Worldscope tape. Regarding ownership data, we focus on ultimate ownership. We use ownership data assembled by Claessens et al. (2000).[9] Claessens et al. (2000) collected 1996 data on the ownership of corporations in Hong Kong, Indonesia, Japan,…

Regression results based on portfolios sorted by the largest shareholders' ownership

We begin with simple tests of Hypothesis 1, Hypothesis 2 based on portfolio analysis. To conduct the tests, we first assign all firms in our sample to quartiles according to the largest shareholders' cash-flow rights (*Cashright*). We also separately assign all sample firms to two groups according to their "Control minus ownership" (*Divergence*) values. Firms with *Divergence* values equal to *zero* are assigned to the "Control minus ownership=0" group and those with *Divergence* values greater than *zero*…

Alternative requirements for panel data

To work with a large sample, we use an unbalanced panel dataset in the above analyses. More specifically, we include all firms in the sample that have at least one firm-year in the span of 1993–1996, provided that all the data required for analysis are available. This sampling procedure might bias our results. In this section, we examine whether our results are robust to the requirement of specific numbers of firm-years for a firm to be included in the sample.

First, we exclude firms with only…

Conclusions

The high degree of separation between control rights and cash-flow rights in East Asian corporations provides an excellent sample with which to study investment-cash flow sensitivities in differentiating the agency costs of free cash flow from asymmetric information problems in capital markets. This separation may be impossible to detect in U.S. corporations. We find that the investment-cash flow sensitivity decreases with increases in the cash-flow rights of the largest shareholders but it…

References (37)

StulzR.

Managerial control of voting rights: financing policies and the markets for corporate control

Journal of Financial Economics (1988)

MyersS. *et al.*
Corporate financing and investment decisions when firms have information that investors do not have
Journal of Financial Economics (1984)

MorckR. *et al.*
Management ownership and market valuation: an empirical analysis
Journal of Financial Economics (1988)

MittonT.
A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis
Journal of Financial Economics (2002)

McConnellJ. *et al.*
Additional evidence on equity ownership and corporate value
Journal of Financial Economics (1990)

JohnsonS. *et al.*
Corporate governance in the Asian financial crisis
Journal of Financial Economics (2000)

JohS.W.
Corporate Governance and firm profitability: evidence from Korea before the economic crisis
Journal of Financial Economics (2003)

HarveyC. *et al.*
The effect of capital structure when expected agency costs are extreme
Journal of Financial Economics (2004)

FanJ.P.H. *et al.*
Corporate ownership structure and the informativeness of accounting earnings in East Asia
Journal of Accounting and Economics (2002)

ClaessensS. *et al.*
The separation of ownership and control in East Asia corporations
Journal of Financial Economics (2000)

2022, Journal of Contemporary Accounting and Economics

Show abstract

Informal authority and economic outcomes of family firms: An issue of national power distance

2022, International Review of Financial Analysis

Show abstract

Do financial constraints in an unstable emerging economy mitigate the opportunistic behavior of entrenched family owners?

2022, Emerging Markets Review

Show abstract

Corporate governance and investment-cash flow sensitivity: Evidence from Russian unlisted firms

2022, Journal of Comparative Economics

Show abstract

Investment decisions of family firms in the three largest euro countries: the role of the financial crisis

2021, Finance Research Letters

Show abstract

View all citing articles on Scopus

Recommended articles (6)

Research article

Deviation from target capital structure, cost of equity and speed of adjustment

Journal of Corporate Finance, Volume 39, 2016, pp. 99-120

Show abstract

Research article

Monetary policy, cash holding and corporate investment: Evidence from China

China Economic Review, Volume 46, 2017, pp. 110-122

Show abstract

Research article

Investment policy at family firms: Evidence from Thailand

Journal of Economics and Business, Volume 83, 2016, pp. 91-122

Show abstract

Research article

Are excess cash holdings more valuable to firms in times of crisis? Financial constraints and governance matters

Pacific-Basin Finance Journal, Volume 45, 2017, pp. 157-173

Show abstract

Research article

A balancing act: Managing financial constraints and agency costs to minimize investment inefficiency in the Chinese market

Journal of Corporate Finance, Volume 36, 2016, pp. 111-130

Show abstract

Research article

Independent directors and earnings management: The moderating effects of controlling shareholders and the divergence of cash-flow and control rights

The North American Journal of Economics and Finance, Volume 35, 2016, pp. 153-165

Show abstract

☆ The previous versions of the paper were titled "Ownership structure, cash flow, and corporate investment: evidence from East Asian emerging markets" and "Corporate governance, overinvestment and the Asian financial crisis". The authors appreciate helpful comments and suggestions from Dolly King, Yrjo Koskinen, and seminar participants at Hong Kong University of Science and Technology, Peking University, the 2005 Chinese Finance Annual Meetings, where it was awarded the third prize for best papers, the 4th NTU International Conference on Economics, Finance and Accounting in Taipei, the 2006 JBF Conference in Beijing, the 2006 China International Conference in Finance, where it was named the winner of the best paper award, and the 2006 European Finance Association meetings in Zurich. The authors also wish to thank Jeffry M. Netter (the editor) and an anonymous referee for insightful comments and suggestions and Dr. Virginia Unkefer for editorial assistance. John Wei acknowledges financial support from an RGC Competitive Earmarked Research Grant of the Hong Kong Special Administration Region, China (HKUST6014/01H) and Yi Zhang acknowledges financial support from the National Science Foundation of China (70603001).

View full text