Microanalysis of Corporate Behavior in East Asia

—Corporate Governance, Investment, and Financing—

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Summary

The East Asian region, which went through a long period of remarkable economic growth, experienced a serious financial crisis in 1997. In this dissertation, I investigate the causes of this Asian crisis from the viewpoint of microanalysis rather than using the conventional macroeconomic approach.

1. The Asian Crisis and Corporate Governance

East Asia, the focus of the 1997 financial crisis, had only recently achieved unparalleled economic development. The conventional explanations for the Asian crisis

emphasize macroeconomic and banking issues (Corsetti et al., 1998; Krugman, 1998; Radelet and Sachs, 1998a,b). These explanations concur that a loss of confidence by domestic and foreign investors in all emerging markets led to a large nominal depreciation and, in some cases, a stock market crash. However, these explanations fail to indicate why this loss of confidence by investors triggered the financial crisis in some emerging market countries but not in others.

Recent research has frequently cited poor corporate governance as one of the causes of the Asian crisis of 1997 (Stiglitz, 1998; Harvey and Roper, 1999). Johnson, Boone, Breach, and Friedman (JBBF, 2000) show that country-specific measures of corporate governance explain cross-country differences in performance during the Asian crisis better than standard macroeconomic variables. Mitton (2002) demonstrates that corporate governance also explains cross-firm differences in performance during the Asian crisis within countries. In a similar vein, in this chapter, I also use firm-level data to examine whether firm-level differences in corporate governance explain differences in corporate performance. However, there are two aspects of this study that are distinct from the previous literature. First, I use the panel data for the 1994–2000 period from the five East Asian crisis countries of Indonesia, Korea, Malaysia, the Philippines, and Thailand. Second, I focus on how the impact of corporate governance variables on corporate performance changed before and after the Asian crisis.

Summary statistics in this study show that the outbreak of the Asian crisis was followed not only by a generally negative impact on the performance of firms, but also by expanded cross-firm variation in performance. This suggests that the effects of the Asian crisis were not necessarily uniform across the corporate sector. Another possibility is that performance may have been influenced significantly by elements

peculiar to individual firms.

I focus on the corporate governance problems in a firm's idiosyncratic elements. Much recent research indicates that the corporate governance problems in this area are detrimental to the performance of firms. I develop my argument around the close relationship between the corporate governance issue and the Asian crisis and seek to establish some robust basic facts on this issue. In particular, I examine two aspects of corporate governance. The main findings on how these factors affected corporate performance during the crisis are as follows.

The first aspect, ownership structure, is one of the key determinants of corporate governance (Shleifer and Vishny, 1997). I highlight the agency problem between large shareholders and minority shareholders, and measure it in terms of the ownership concentration of controlling shareholders and the divergence between the voting rights and cash flow rights of the controlling shareholders in the firm. I find that, in general, these two variables are associated with significantly better performance during the Asian crisis.

The second aspect is corporate diversification. Although it is not a direct corporate governance mechanism, corporate diversification could affect corporate governance through its influence on the agency problem between manager and shareholder (Mitton, 2002). I investigate the effects of diversification on the performance of firms and find no consistent evidence that diversification worsened performance during the crisis.

2. Corporate Governance and Investment in East Asian Firms

Most of the extant research relating to my work focuses on the correlation between

firm performance and corporate governance during the East Asian financial crisis, because the crisis brought about substantial cross-sectional variation in both the costs and the benefits of expropriating outside investors across firms and countries. However, the mechanism by which corporate governance affects performance remains largely unknown, although it is commonly argued that corporate governance in East Asia is characterized by the prevalence of family-controlled firms, which are often thought to have poor corporate governance (see Claessens et al., 1999; Shleifer and Vishny, 1997). Next, I concentrate my analysis on the relationship between family control and corporate investment.

A large amount of research regarding East Asian corporate governance suggests that many firms in East Asia are actually dominated by specific families. In this type of family ownership structure, the problem between shareholders and entrepreneurs regarding consistent interest is less; however, there does exist a problem of conflicting interest between majority shareholders and minority shareholders. In such cases, it is argued that there is a strong possibility that the controlling shareholder may expropriate profits that would have otherwise gone to outside investors.

Previously, family-controlled conglomerates were not necessarily rated negatively. On the contrary, it is recognized that the strong industrialization resolve of the prewar Japanese *Zaibatsu* led industrial development and, even from the corporate governance viewpoint, *Zaibatsu* headquarters efficiently monitored subsidiaries. At the same time, this system was positively rated as it functioned as the main funds supplier, with supply contracts being based on this monitoring. Furthermore, there is a consensus that *Keiretsu*, which were centered on the main banking system after the breakup of the *Zaibatsu* after the war, played the role of promoting investment in firms within the

Keiretsu.

My study is based on two hypotheses, one positive and one negative, regarding family-controlled firms, and quantitatively analyzes the influence of family control on the pattern of corporate investment using firm-level data from Indonesia, Korea, Malaysia, Philippines, and Thailand to regress the capital investment function. To this end, I first classify the sample data into family-controlled firms and nonfamily-controlled firms (independent firms), and then divide the sample period into pre-crisis and post-crisis. By comparing these two groups between two periods, I find that family-controlled firms faced more severe internal financing constraints than did nonfamily-controlled firms.

This result suggests that it is difficult to state that the financial institutions and central firms within family-controlled affiliated firms were effective in achieving smooth financing of investment in the conglomerate and alleviating internal financing constraints. In fact, one can argue that nonfamily-controlled firms positively pushed forward capital markets and bank financing and that, by virtue of these investments, internal financing constraints were released to a relatively high degree.

3. Regional Characteristics of Financial Systems in East Asia

My analysis highlights the financial systems in East Asia. I assume tacitly that there are some common systematic features shared by the financial systems in this area. However, what these common features are remains unclear. To address this problem, I examine firm-level data from 46 countries worldwide to compare East Asian financial systems with those of developed countries, South Asia, South America, and Africa and

the Middle East, to investigate whether there are any common features shared by financial systems in the East Asian area.

I look at this issue from one component of the financial system, namely, corporate capital structure, although this issue is usually studied by also taking into account household's portfolio selection (surplus agents in the financial market), in addition to firm's financing structure (deficit agents in the financial market). This general view is based on the classification between the "bank-oriented" and the "market-oriented" financial systems. Mayer (1990) conducted the first study that used an international comparative analysis view, and others such as Mayer (1990) and Allen and Gale (2000) investigated the comprehensive financial systems in developed countries, such as the United States, Japan, the United Kingdom, Germany, and France, from the comparative institutional analysis view. Demirguc-Kunt and Levine (2001) extended this research to include developing countries by performing a cross-section test across 150 countries, with particular focus on specific countries in Asia and South America, and analyzed their financial structures and economic development at great length. From a more narrow aspect, my analysis represents a novel attempt in the sense of comparing the five areas from the viewpoint of examining the regional features of these financial systems.

There are some extant studies using cross-country comparisons to test theories of corporate capital structure, notably those of Rajan and Zingales (1995) and Booth, Aivazian, Demirguc-Kunt, and Maksimovic (2001). The former paper uses four key independent variables to analyze the determinants of capital structures across the G-7 countries: tangibility of assets, market-to-book ratio, logarithm of sales as a size proxy, and a measure of profitability. They found that the extent to which firms are levered is

quite similar across the G-7 countries. Booth et al. (2001) extends the Rajan and Zingales (1995) model to include the average tax rate and business-risk variables when examining the financial structures of firms in 10 developing countries in Asia, South America, and Africa and the Middle East. Their research helps confirm that the stylized facts, identified in Rajan and Zingales (1995) relating to developed countries, also apply to developing countries, despite the profound difference in institutional factors found in developing countries. Generally, debt ratios in developing countries seem to be affected in the same way and by the same types of variables that are significant in developed countries; however, there are systematic differences in the way these ratios are affected by factors specific to each country.

The leading role of banks and the concentrated ownership of firms by the same family are two noteworthy features of the financial systems in East Asia. Certainly, under the intensive development strategies adopted by the governments of East Asian countries, the nationalized banks and policy financial institutions have performed key roles in financing firms. Moreover, it is well known that the large inflows of short-term foreign capital through these banks had a major role in worsening the impact of the 1997 Asian crisis. However, Booth et al. (1991) show that the debt ratio, especially the long-term ratio in developing countries, is generally lower than that in developed countries, and Mieno and Gunji (2004) confirm this result with evidence from Asian countries such as Thailand. Claessens, Djankov, Fan, and Lang (1999) indicate that control over firms by some rich families is dominant, and documented that the rich families expropriate the minority shareholders by having more control rights relative to their cash flow rights through their use of pyramid holdings. They show significantly positive effects of the ratio of cash flow rights to voting rights of the controlling

shareholders on market valuation using firm-level data. My study finds, however, that investor protection in East Asian countries is significantly stronger than in developed countries, by drawing on the legal protection measures in La Porta et al. (1997). Furthermore, the extent to which external financing is utilized is no less than that in developed countries. Because outside investors provide ex post investment, if expropriation by controlling shareholders did exist, they would not have financed firms. Separation of voting rights from those of cash flow is associated with lower market valuation, but the mechanism through which this affects mutual negotiation between controlling shareholders and outside investors and, therefore, external financing has not been investigated. The role of family ownership structure in East Asian financial systems awaits future study. I also find the corporate capital structure in East Asia is similar to that in South America, but significantly different from that in developed countries. Rather, the corporate capital structures in Africa and the Middle East and in South Asia are more similar to those in developed countries. The notable differences in corporate capital structure between East Asia and developed countries are in the composition of share capital and long-term debt, and not in the composition of bank loans.

4. Corporate Financial Structure and Investor Protection

I move on to analyze the relationship between corporate capital structure and legal investor protection. La Porta et al. (1997, 1998) suggest that countries differ in the level of protection given to shareholders and creditors by the legal system, and this plays a central role in determining the patterns of corporate finance. In countries

where laws protect outside investors and where that law is well enforced, investors are more willing to offer finance and, consequently, the financial market is both broader and more valuable. In contrast, where the law does not protect investors, development of the financial market is stunted. In most cases, there is a historical origin to the law governing the protection of shareholders and creditors.

Investors recognize that, with better legal protection, more of the firm's profits will come back to them as interest, a dividend, or capital gain, because the risk of their money being expropriated by entrepreneurs who control the firm is lessened. This in turn enables more entrepreneurs to successfully seek external finance. Accordingly, the legal environment is possibly one of the institutional differences that affect corporate capital structure. This strand of research, based on macro data, sheds light on the investor side of the financial market and focuses on the determinants of financial development. However, there is little discussion relating to the demand side of the financial market. How the legal system influences entrepreneurs to make decisions on their corporate capital structure, and the mechanism by which the legal system affects the financial market, remain unclear.

In actuality, do entrepreneurs finance their investments externally more with better legal protection? In countries where the ex ante contracts are more strictly enforced do firms have more debt? Seeking the answers to these questions is the prime motivation for this research.

I use a firm-level database of 46 sample countries and five sub-sample countries to examine the correlation between corporate capital structure and investor protection. This study defines corporate capital structure as a function of the origin of laws, the quality of legal investor protections, and the quality of law enforcement. I find evidence

that the legal system greatly affects corporate capital structure; however, the way it affects the capital structure may vary according to country-specific factors.

5. Outline of Chapters

Chapter 2 investigates the effects of corporate governance factors on corporate performance during the Asian crisis. Chapter 3 compares the different investment patterns of family-controlled firms and nonfamily-controlled firms. Chapter 4 identifies the characteristics of financial systems in East Asia by comparing them with those in other regions, from a viewpoint of corporate capital structure. Chapter 5 explores the correlation between legal investor protection and corporate capital structure.