

# The Legal and Financial Determinants of Malaysian Corporate Performance

Anita DORAISAMI  
*Monash University\**

**Abstract.** Macroeconomic sources of vulnerability to crisis in East Asia have been widely cited. However, several studies have identified microeconomic weaknesses stemming from poor corporate governance and corporate practices as a leading cause of the crisis. Many of these studies have assumed that all crisis affected East Asian economies shared common key characteristics in their corporate environment, leading to poor corporate performance. This paper aims to establish if microeconomic weaknesses stemming from corporate sector performance contributed to Malaysia's vulnerability to the crisis. In doing so, recent literature on the legal-based view that stresses the importance of the legal and corporate governance environment is incorporated. Further, Malaysia's performance was compared to the economies which were severely affected by the crisis, i.e. Thailand, Korea and Indonesia, to gain some insight on the extent of similarities that existed among firms in these countries in terms of their corporate financing patterns and performance prior to the crisis.

## 1. Introduction

The link between macroeconomic variables and vulnerability to crisis in East Asia has been widely researched. However, several studies have identified microeconomic weaknesses as a leading cause of the crisis (see IMF 1998; Krugman 1998; Johnson *et al.* 2000; Frankel 2001). Many of these explanations have focused on linking the crisis to corporate governance practices which ensue from the Asian model of capitalism. Frankel (2001: 320) epitomises this view and is worth quoting at length.

“The main problem in East Asia was not macroeconomic but structural. Deep flaws afflicted the financial system. They include excessive leverage and a banking system based excessively on directed lending, connected lending and other collusive personal relationships. Ten years ago, finance experts called it relationship banking and thought that it might help to minimise problems of asymmetric information and incentive incompatibility, today it is called crony capitalism. The US financial model shared with the UK and so sometimes called the Anglo-American model is different. It emphasises arms length relationships. One lesson widely drawn from the crisis (and I believe correctly so) is that the Anglo-American style of financial structure apparently works better after all, compared to the Japanese-Asian model.”

---

\* Monash University, Department of Economics, Monash University, Caulfield, Victoria 3145, Australia.  
Email: [Anita.Doraisami@BusEco.monash.edu.au](mailto:Anita.Doraisami@BusEco.monash.edu.au)

<sup>1</sup> This view has been challenged by Wade and Veneroso (1998). They argue that high savings rates, when governments and households are not big borrowers, result in bank lending being geared to firms, and that the financing of export-led industrialisation required mobilisation of considerable resources which could only be facilitated by extensive borrowing.

Johnson *et al.* (2000) stated that corporate governance explains the extent of the exchange rate depreciation and stock market decline better than standard macroeconomic measures and that corporate governance can be of first order importance in determining the extent of macroeconomic problems. The main argument is that the bank based financial system of East Asia entrenched collusive links between firms, banks and the state and that this resulted in overlending and overborrowing so that corporations displayed high levels of gearing and undertook projects without due consideration of the returns on investment resulting in low profitability.<sup>1</sup> Reform of the Asian model of capitalism and a move to the Anglo-American style of financial structure is seen as an appropriate response to the crisis.

However, as Khan (1999) observes, there are two types of difficulties that have generally accompanied these attempts to characterise the problems of corporate governance. The first and most immediate is the problem of explaining why in spite of such weak corporate governance, Asian crisis economies were able to grow rapidly for so long. The second difficulty related to the first is the casual empiricist approach to finding fault with corporate governance. The basic premise appears to be that weaknesses of corporate governance can be traced to the deviation of corporate governance systems from the arms length equity based Anglo-American model of corporate governance. Implicit in this exercise is the assumption that the Anglo-American model is an ideal that is of universal applicability and deviations from this model are therefore indicators of failure of corporate governance of various degrees. This debate merely revisits the century old debate on the relative merits of a bank based versus stock market based system.

Further there is also an assumption that all crisis affected East Asian economies shared common key characteristics in their corporate environment, which led to poor corporate performance. Only more recently has empirical research emerged that can provide some evidence to enable comparisons between East Asian corporate environments. This includes work on the ownership and control of East Asian corporations (see Claessens *et al.* 2000) and the legal determinants of external finance, corporate governance and corporate performance (La Porta *et al.* (hereafter LLSV 1997; 1998)).

This paper aims to establish if microeconomic weaknesses stemming from corporate sector performance contributed to Malaysia's vulnerability to the crisis. In doing so, recent literature on the legal based view which stresses the importance of the legal and corporate governance environment is incorporated and Malaysia's performance is compared to the other Asian Crisis economies (hereafter referred to as ACEs) of Thailand, Korea and Indonesia to gain some insights on the extent of similarities that existed among ACE firms in terms of their corporate financing patterns and performance prior to the crisis.

The methodology involves three steps. First, the origin of the legal system and ranking of each of the ACEs on their legal rules pertaining to the legal and corporate environment is established. Second, the corporate finance patterns of a sample of firms listed on the stock exchanges of ACEs are analysed. Finally, the Malaysian corporate sector performance (of the same firms) measured by twelve ratios of risk taking and profit indicators is established and the extent to which vulnerabilities to the crisis was caused by corporate sector performance and risk taking behaviour is undertaken.

Section 2 of this paper discusses the theoretical perspectives on financial systems. Section 3 examines previous empirical studies in this area. Section 4 classifies the ACEs into civil and common law countries, examines their rankings on their legal and corporate

environment and provides a definition of the ratios of risk taking and profit indicators used in this study. Section 5 provides empirical evidence on the financing patterns and performance of Malaysian firms and those of other ACEs. Section 6 summarises the findings and their policy implications.

## **2. Theoretical Perspectives on Financial Systems**

### *2.1 The Bank-based View*

Proponents of the bank-based system argue that banks may reduce the costs of screening and monitoring firms and managers, thus improving resource allocation and corporate control (see Diamond 1984; Boyd and Prescott 1986). Sheard (1989; 1991) and Aoki (1990) have stressed the main bank's monitoring role, particularly in light of its shareholding in its client firm, suggesting that this relationship represents a form of corporate governance in which the bank acts as a delegated monitor for the group's cross shareholding member firms. Furthermore, banks frequently establish close long term relationships with firms and ease cash-flow constraints as well as rescue companies in financial distress (Sheard 1989; Hoshi *et al.* 1991). By forming long term relationships, banks can credibly commit to making additional funding available as the project develops (Stulz 1999). Thus in mitigating information and transaction costs, banks may promote the expansion of existing firms and the creation of new ones.

### *2.2 The Market-based View*

Proponents of stock markets assert that, first, well functioning stock markets may stimulate the acquisition and dissemination of information and that improved information about firms should enhance resource allocation. Second, stock markets are said to facilitate takeovers whereby outsiders can purchase poorly operating firms, change management, and set the stage for greater profitability. Third, when stock markets function well, it is easier to link managerial compensation with stock market price and this helps to align the interests of managers with those of firm owners. Finally, well-functioning stock markets are said to ease risk diversification and the ability to avoid liquidity risk. Stock markets facilitate traditional, cross-sectional risk sharing, where individuals can create a tailor made portfolio of assets. In better developed markets, it is easier for agents to construct portfolios with a minimum of middlemen. Many profitable investments require long term investment of capital, but investors are often reluctant to relinquish control of their savings for long periods. Liquid equity markets make long term investment more attractive because they allow savers to sell equities quickly and cheaply if they need access to their savings.

### *2.3 The Legal-based View*

The legal-based view of a financial structure espoused by LLSV (1997; 1998) stresses that finance is a set of contracts which are defined and made effective by legal rights and enforcement mechanisms. A well functioning legal system facilitates the operation of both markets and intermediaries, and it is the overall level and quality of financial services as

determined by the legal system that determines the efficiency of financial systems. According to Levine (1999), this view pronounces the bank-based versus the market-based financial system analytically vacuous.

LLSV's (1997; 1998) starting point is the recognition that laws in different countries have been transplanted voluntarily or through colonisation and conquest from a few legal families or traditions. In general, commercial laws originate from two broad traditions: common law which is English in origin and civil law which is derived from Roman law. Within the civil tradition, there are only three major families that modern commercial law originates from: French, German and Scandinavian (Watson 1974).

LLSV (1997; 1998) then assemble a data set identifying the legal family (relying principally on Reynolds and Flores 1989) and the legal and corporate environment on a range of indicators in 49 countries. Their findings indicate that differences in these indicators are systematically linked to the country's legal origin. Countries with a common law tradition generally have stronger legal protection of investors, irrespective of the level of per capita income. Further, common law countries also have better accounting standards than both French and German civil law countries with Scandinavian countries obtaining top ranking. In terms of law enforcement, Scandinavian countries are also clearly ahead, with German civil law countries close behind followed by common law countries.

The differences in the contracting environment have had profound implications for the evolution of intermediaries and securities markets as demonstrated by several researchers LLSV(1997; 1998), Levine (1998; 1999), Beck *et al.* (2000), Demirguc-Kunt and Maksimovic (1998) and Demirguc-Kunt and Levine (1999). Their findings showed that common law countries tend to stress the rights of minority shareholders, with beneficial implications for security markets. Civil law traditions, on the other hand, tend to encourage financial intermediary development. Rajan and Zingales (1999) assert that bank-based relationships are more likely to emerge in more opaque and less efficient environments where the bank-firm relationship effectively compensates for the informational asymmetries.

### 3. Previous Empirical Research

With the onset of the East Asian financial crisis and the advancement of the 'crony capitalism view', several studies have sought to trace the corporate roots of the Asian financial crisis. Pomerleano (1998) examined the performance of corporations in Hong Kong, Indonesia, Korea, Philippines, Malaysia, Taiwan and Thailand, and compared their financial profile and performance to corporations in France, Germany, Japan and the US. Data was obtained from the *Financial Times Information Extel* database for companies from 1992-1996.

Financing patterns were established by examining leverage, debt sustainability, liquidity and tangible fixed asset growth. Corporate profitability, corporate fragility and corporate vitality were also examined. Pomerleano concludes that there were serious micro level excesses within a benign macro financial context, and that his findings support the view that crony capitalism led to poor investments and a mis-allocation of resources. Pomerleano also found that firm performance deteriorated significantly over this period.

Abonyi (1999) examined the performance of non-financial corporations listed on the securities exchange of Thailand from 1994 to 1996. Corporate performance was measured in terms of profit margin, return on assets, return on equity, economic value-added, financial

fragility, growth, leverage financing of tangible fixed assets, interest coverage ratio, debt equity ratio, maturity and structure of debt.

He concluded that an analysis of enterprise level data does indeed indicate a clear deterioration of corporate performance prior to the onset of the crisis. It presents a picture of a corporate sector overwhelmed by rapid growth, and characterised by an investment spending spree. In particular, this involved rapid growth in assets coupled with erosion of profit margins reflected in declining and low returns on equity and capital employed. This led to significant weakening in financial operating and strategic performance well before the crisis.

In a similar vein, Claessens *et al.* (2000) conducted a study of companies in Hong Kong, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand from 1988-1996. Performance measures used were the real rate of return on assets in local currency, return on assets in US dollars and an operational margin calculated as the difference between sales and costs of goods sold as a share of sales. They concluded that relatively low profitability meant that external financing had to remain high in most countries, with high leverage trends as outside equity was used sparingly. A major shortcoming with the studies cited above, is that while it is obvious from the results reported that considerable variations exists between countries in terms of corporate performance and financing patterns, these are not acknowledged. Not surprisingly therefore, there is no attempt to account for them.

In contrast, Johnson *et al.* (2000) employed cross-country regressions for 25 emerging market economies from the start of the Asian crisis in July 1997 until mid-Jan 1998 incorporating both corporate governance variables and macro economic variables to explain exchange depreciation and stock market performance. The macro economic variables focused on measures of the current account, foreign exchange reserves, foreign debt, the budget deficit and monetary policy. Corporate governance variables used were measures reported in LLSV (1998) for the efficiency of the legal system, corruption, the rule of law and the strength of corporate governance. Their results indicate that corporate governance variables explained more of the variation in exchange rates in general and the protection of minority shareholders in particular mattered a great deal. They state that a possible explanation for their results is that weak corporate governance results in more expropriation by managers and thus results in a larger fall in asset prices.

One recent study that closely examines the issues addressed in this paper is that by Claessens *et al.* (2001). They explored the links between a country's legal origins, the legal protection provided to creditors and shareholders, and the characterisation of a country's financial system as bank based or market based (using information from LLSV). They then proceeded to examine whether financial and operating risks undertaken by firms differ between bank-based and market-based financial systems. For classification of countries as bank-based or market-based, data from Demirguc-Kunt and Levine (1999) was used. The financial and operating risks of firms was assessed through 15 firm-specific variable, measuring cash flow risks, financial leverage, liquidity, solvency, debt maturity structure and profitability.

The results of their study indicate that a country's legal origin and the strength of its shareholders and creditor rights are closely related to the characterisation of a country's financial system as bank-based or market-based. They also found that corporations in bank-

**Table 1:** Legal systems in ACEs

Country	Legal heritage
Indonesia	Civil Law (French)
Korea	Civil Law (German)
Malaysia	Common Law (English)
Thailand	Civil Law (French)

Source: LLSV (1998)

**Table 2:** Legal and corporate governance environment rankings in ACEs

	Judicial efficiency	Corruption	Rule of law	Anti-directors rights	Creditors' rights	Accounting standards, 1990
Indonesia	2.5	2.1	4.0	2	4	N/A
Korea	6.0	5.3	5.4	2	3	62
Malaysia	9.0	7.4	6.8	4	4	76
Thailand	3.2	5.2	6.3	2	3	64

Source: LLSV (1998)

based systems had more risky financial structures, higher cash flow variability, higher leverage, lower interest coverage, used more short term debts and appeared less profitable than their counterparts in market-based economies.

A major shortcoming of this study is the use of Demirguc-Kunt and Levine's (1999) classification as bank-based or market-based. They constructed a conglomerate index of financial structure based on measures of size, activity and efficiency of banks and stock markets. The ratios used to measure the size, activity and efficiency of banks were: liquid liabilities/GDP, bank assets/GDP, claims on deposit money banks on private sector/GDP, the claims of other financial institutions on private sector/GDP, bank net interest margin and bank overhead costs. To measure market size, they used market capitalisation/GDP, Total Value Traded/GDP, and the turnover ratio measured as the trades of domestic equities as a share of the value of domestic equities.

Countries where the conglomerate ratio of banking sector development to stock market development was below the mean were classified as market-based. Their classification resulted in Korea, Thailand and Malaysia being classified as market-based systems. The classification of Korea and Thailand as market based systems does not accord well with previous studies based on the sources of financing on a firm level which classified them as bank-based (see Singh 1995; Matthias 2001).

**Table 3:** Firm-level risk and profitability measures

Variable	Definition
Operating Leverage Ratio: Operating Income/Sales	Operating Income/Net Sales
Operating Leverage Ratio: EBIT/Sales	Earnings before interest and tax/Net sales
Financial Leverage: Total Debt to Equity	Total Liabilities/Value of common shareholders equity
Financial Leverage: Total Debt to Assets	Total Liabilities/Total Assets
Liquidity: Current Ratio	Current Assets/Current Liabilities
Liquidity: Quick Ratio	Current Assets, net of inventory/ Current Liabilities
Liquidity: Net Working Capital/Total Assets	Net Sales/Total Assets
Solvency: Interest Coverage Ratio	EBIT/Interest Expense
Debt Maturity: Short Term Debt/Total Debt	Current Liabilities/Total Liabilities
Profitability: Net Profit Margin	Net income before preferred dividends/ Net sales or revenue
Profitability: Return on Equity	EBIAT/book value of common equity
Profitability: Return on Assets	EBIAT/Total Assets

## 4. The Legal and Corporate Governance Environment in ACEs

### 4.1 Classification of Legal Systems

Table 1 provides the classification of ACEs according to legal origin. Malaysia is the only common law country in the sample. Thailand and Indonesia have French civil law origins, while Korea has German civil law origins.

### 4.2 Measuring the Legal and Corporate Environment

The measures of legal and corporate environment used here are based on LLSV (1998). The efficiency of the legal system, levels of corruption and rule of law (measuring the tradition for law and order) all range from zero to ten with lower scores corresponding to lower efficiency of the legal system, higher levels of corruption and a lesser tradition for law and order.

Anti-director rights is an index aggregating shareholder rights. The index ranges from 0 to 5, with lower scores corresponding to lower rights. Creditor rights is an index from zero to four, with lower scores corresponding to lower rights. Accounting standards is an index which is created by examining and rating companies on their annual reports based on their inclusion or omission of 90 items. Higher scores denote higher standards.

Based on the rankings above, Malaysia, with a common law legal system, has a higher ranking on each of the legal and corporate environment indicators. Malaysia's ranking is higher in spite of its GDP per capita being lower than that of Korea. Thus, the assertions made by proponents of the legal-based view that common law countries are more likely to have higher scores on the legal and corporate governance environment rankings appear to be borne out. What remains to be established is whether Malaysian firms are more likely to

resort to equity financing and to display lower corporate risk profiles compared to their counterparts in the other ACEs. The definitions of firm risk and profit indicators used to establish these links are presented below.

### 4.3 *Measuring Firm Risk and Profitability*

Table 3 provides a definition of the specific variables used in this study. The first group includes two operating leverage variables. High ratios can contribute to risk if external financial markets do not allow a perfect smoothing of cash flow variations, which in turn may cause financial and operational distress. This imperfect smoothing may be due to financial market imperfections and informational asymmetries which can be more important in weaker institutional environments.

The second group covers two financial leverage variables. Financial leverage along with associated large interest payments will reduce the ability of a corporation to deal with financial shocks especially interest rate increases and reductions in available financing.

The third group covers three liquidity measures. Financial market imperfections can contribute to an inability of a corporation to translate its assets and earnings quickly into cash. These ratios try and capture the corporation's abilities to turn assets and earnings into liquidity quickly, which can be important if the company has relatively large amounts of short term debts.

The fourth group includes one solvency measure, the interest coverage ratio defined as the ratio of EBIT over interest expenses. This interest coverage ratio is a standard measure of credit risk; the higher the degree that cash flows are relative to interest payments for debt service, the less the company is at risk of default on its debt service.

The fifth group includes a measure of debt maturity structure: the ratio of short term debt to total debt provides a measure of the roll-over of risks and risks of short term liquidity crunches.

Last, there are three profitability measures. These three are not related directly to the financing patterns of firms as they exclude interest payments. The net income margin is not influenced by inflation.

## **5. Corporate Financing Patterns and Corporate Performance in ACEs**

### *5.1 Previous Empirical Studies*

Previous empirical studies of corporate financing patterns have calculated financing proportions on a gross and net basis, employing both accounting and flow of funds data for advanced as well as industrial countries. Studies which have focused on Korea, Malaysia and Thailand and which have used accounting data and calculated proportions on both a gross and net basis, include Singh and Hamid (1992), Singh (1995) and Matthias (2001). Given that these studies have used varying time periods, different data sources and methods, caution must be exercised in making comparisons.

On both a gross and net basis, the results show that in general, external financing is the most important source of financing for Korean firms. Thai firms had slightly higher retentions and made far greater use of loans and bonds. Where Malaysian firms are concerned, retentions

**Table 4:** Selected statistics on sample

	Malaysia	Thailand	Korea	Indonesia
No of firms listed on stockmarket*	481	382	712	207
No of firms listed in Worldscope*	140	148	88	45
No of firms in sample	102	113	38	32
No of firms in sample/no of firms in stockmarket (%)	21.2	29.5	5.2	15.4

Note: \* Refers to the average number for the period 1992-96

**Table 5:** Calculations of gross and net financing

Gross sources	Gross uses
1. Shares <sup>a</sup>	8. Physical investment (fixed assets)
2. Retained earnings	9. Financial assets (long-term)
3. Long-term debt <sup>b</sup>	10. Inventory
4. Short-term debt <sup>c</sup>	11. Trade advances
5. Other <sup>d</sup>	12. Cash and current investments
6. Trade credit <sup>e</sup>	13. Total uses: (8+9+10+11+12)
7. Gross sources: (1+2+3+4+5+6)	
Net sources	Net uses
Net new share (1-9)	Total physical investment (8+10)
Retained earnings	
Long-term debt	
Net short-term debt (4-12)	
Other	
Net trade credit (6-11)	
Net sources (7-9-12)	

<sup>a</sup> Shares include both new issues of common and preferred shares

<sup>b</sup> Long term debt are liabilities payable after twelve months of the Balance Sheet date

<sup>c</sup> Short term debt is liabilities payable within twelve months of the Balance Sheet date

<sup>d</sup> Other includes other liabilities, minority interest and lease obligations

<sup>e</sup> Trade credit is the sum of deferred liabilities and trade advances

Source: Corbett and Jenkinson (1997)

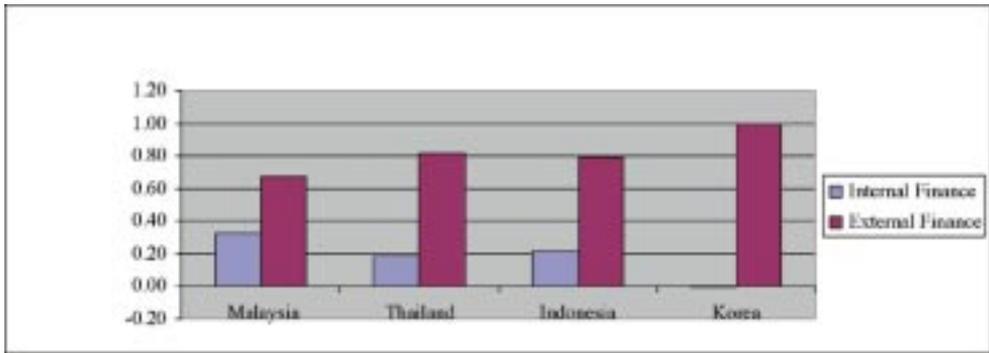
are far more important estimated to be 66.8 per cent on a gross basis by Singh and Hamid (1992) and 60 per cent by Matthias (2001) on a net basis. On these estimates, the level of retentions in Malaysian firms approach or exceed those of industrialised countries on the findings of several studies (see Mayer 1990, Cobham and Subramaniam 1998; Mayer and Alexander 1990).

## 5.2 Data and Sample

The data used in this analysis is accounting data and was extracted from Worldscope. This

**Table 6:** Weighted average net financing (1992-96)

	Malaysia	Thailand	Indonesia	Korea
Trade credit and short-term debt	0.29	0.32	-0.08	0.19
Long term debt	0.25	0.46	0.39	0.55
Shares	0.00	-0.03	0.47	0.16
Other	0.13	0.07	0.02	0.10
Retentions	0.33	0.18	0.21	0.00

**Figure 1:** Weighted averages of net source of internal and external financing

database includes company financial statements of listed companies and as a result, the database is biased towards the largest firms in each country. Companies are entered into the database periodically, and are retained even if they die subsequently.

The database was unbalanced both in terms of the number of companies and the years of coverage for each country. In general, a trade-off existed between the number of companies and the consecutive years of coverage. The sample employed here included all non-financial corporations for which financial data for five years preceding the crisis was available i.e. 1992 to 1996. Financial companies are not selected as their financing and investments are primarily of a financial nature. This selection criteria resulted in 102 Malaysian companies, 113 Thai companies, 32 Indonesian companies and 38 Korean companies in the sample (Table 4).

### 5.3 Methodology

Following Corbett and Jenkinson (1997), financing proportions were calculated using accounting data on a net basis and expressed as weighted averages. Gross sources of financing were calculated as a proportion of the change in physical and financial assets. Net sources were calculated as a source of total physical investment, which is the sum of fixed assets and inventories. Under the net basis, acquisitions of financial assets were subtracted from corresponding liabilities. Table 5 outlines the procedure involved in more detail.

**Table 7:** Firm level risk and profitability indicators (median values)

Variable	Malaysia	Korea	Indonesia	Thailand
Operating Leverage Ratio: operating income/sales	0.11	0.06	0.14	0.09
Operating Leverage Ratio: EBIT/sales	0.91	0.71	0.80	0.75
Financial Leverage: Total Debt to Equity	0.70	3.83*	0.95	1.12
Financial Leverage: Total Debt to Assets	0.39	0.79	0.48	0.53
Liquidity: Current ratio	1.33	1.14	1.47	1.08
Liquidity: Quick ratio	0.93	0.82	1.02	0.64
Liquidity: Net Working Capital/Total assets	0.09	0.07	0.14	0.03
Solvency: Interest Coverage Ratio	6.61	1.22*	3.78	3.33
Debt Maturity: Short Term Debt/Total Debt	0.85	0.88	0.80	0.86
Profitability: Net Profit Margin.	0.08	0.008*	0.10	0.06
Profitability: Return on Equity	0.10	0.03	0.10	0.11
Profitability: Return on Assets	0.08	0.07	0.11	0.10

\* indicates that the ratio is significantly different from the Malaysian ratio at the 5 per cent level based on *t*-tests of differences in means.

The netting out procedure removes intercompany trading and certain investing activities such as assets which may be included in the balance sheet of one company and counted as a liability in the balance sheet of an affiliate. As Matthias (2001) explains, the netting out of intercompany share transactions is particularly important, since shares sold by one company and bought by another company do not increase the amount of financing to the corporate sector as a whole, though the equity capital of the selling company would have increased. Like shares, short term borrowing is adjusted by subtracting investment in short term deposits, investment and cash balances. The netting out procedure thus enables a focus on investment in new physical assets within the firm.<sup>2</sup>

#### 5.4 Empirical Results

Weighted averages were calculated as the sum of each source of finance over the sample period for the entire sample in each country, divided by the total financing from all sources for the sample over the same period. Weighted as opposed to unweighted averages are used as they are less influenced by outliers in any year. A major difference between this study and previous empirical studies is that it includes all firms which meet the criteria of having five consecutive years of financial data, and therefore is more likely to include a larger number of smaller firms in the sample.

##### 5.4.1 Net Sources of Financing

The results from the net sources, in which acquisitions of financial assets were subtracted from their corresponding liabilities, are presented in Table 6. For all countries, external

<sup>2</sup> For other advantages of using the net approach see Matthias (2001)

**Table 8:** Percentage change in firm level performance indicators 1992-1996 (median values)

Variable	Malaysia	Korea	Indonesia	Thailand
Operating Leverage Ratio: Operating Income/Sales	-16.6	-2.8	112.5	-24
Operating Leverage Ratio: EBIT/Sales	-3.2	-7.2	19.5	-17
Financial Leverage: Total Debt to Equity	41	8.3	0.87	23
Financial Leverage: Total Debt to Assets	18	5.1	-3.57	8.9
Liquidity: Current ratio	-12	-6.3	5.25	-1.92
Liquidity: Quick ratio	-3.22	-2.5	1.05	-3.22
Liquidity: Net working capital/Total Assets	-33	-55	0.56	-33
Solvency: Interest coverage ratio	-33	-14.1	4.3	-51
Debt Maturity: Short Term Debt/Total Debt	-3.6	-3.17	0.0018	-11.25
Profitability: Net profit margin	-11	-92	160	-33
Profitability: Return on Equity	-33	-99	62.5	-57
Profitability: Return on Assets	-33	-25	28	-60

finance has been a main source of financing. The proportion of funds from external finance ranges from 67 per cent in Malaysia to 100 per cent in Korea. The proportion of long term debt is in most countries still an important source of financing. This proportion ranges from 25 per cent in Malaysia to 55 percent in Korea.

In summary, these results confirm those of previous findings that all ACEs employed high levels of external financing and that Malaysian firms made greater use of retentions. Indonesian firms, for which there are no previous findings, appear to be outliers in their high use of equity financing. We now proceed to examine the performance of these firms on risks and profitability indicators to ascertain if Malaysian corporate risk taking and performance could be considered a source of vulnerability.

#### 5.4.2 Firm Risk and Profitability Indicators

Table 7 reports the median values of firm level risk and performance indicators of ACE firms over the period 1992 to 1996, while Table 8 indicates the percentage change in median values over this period. *T*-tests were conducted to determine if the performance of Malaysian firms were significantly different from those of the other ACEs.

The tests reveal that the performance of Malaysian firms was significantly different from those of Korean firms only, and on three variables – debt-to-equity, interest coverage ratios and net profit margins. On these variables, it would appear that Korean firms also performed more poorly than other ACEs; in fact Korean firms turned in the worse performance overall. Thai firms performed much better; however, Malaysian firms were generally the best performers on most indicators and Indonesian firms were not far behind. In fact, Indonesian firms were the only firms that did not record a significant deterioration in performance in the five years prior to the crisis (see Table 8).

The results presented in Table 8 are calculated as the difference in the median value of performance indicators in 1992 and the median value of the performance indicators in 1996, expressed as percentage of the median value in 1992. As performance indicators are measured

as ratios, a small change in this ratio could result in a large percentage change being recorded. For example, the decline in both the return to equity and return on assets in Malaysia of 33 per cent represents a decline in the return to equity from 0.12 in 1992 to 0.08 in 1996 and a decline in the return on assets from 0.09 in 1992 to 0.06 in 1996. Therefore caution must be exercised in interpreting the results in Table 8.

From Table 8, it is clear that profitability had declined in all ACEs, except Indonesia. Liquidity as measured by the net working capital/total assets was also falling. Malaysian firms also recorded rising levels of financial leverage albeit from a much lower ratio. These results are corroborated by Pomerleano (1998) and Abonyi (1999). However, as the crisis evolved, Indonesian firms quickly recorded the highest levels of illiquid and insolvent firms as they were subject to the worst deterioration in the macro economic environment with a decline in GDP of 14 per cent, a 500 per cent depreciation of the rupiah and a 70 per cent inflation rate. Claessens *et al.* (1999) estimate that 65 per cent of Indonesian firms were insolvent in 1998. Malaysian firms faced a much more benign macro economic environment and recorded a significantly lower level of insolvent firms at 5 per cent. There was also no doubt that this was due to the fact that Malaysian firms were subject to stringent rules regarding foreign borrowings by Bank Negara and that interest rates in Malaysia were significantly lower in Malaysia than the other ACEs as result of IMF conditionalities.

## 6. Conclusions

Several studies have identified micro economic weaknesses as a leading cause of the crisis. This chapter sought to investigate if micro economic weaknesses stemming from corporate sector performance contributed to Malaysia's vulnerability to the crisis. In doing so, recent literature on the legal-based view which stresses the importance of the legal and corporate governance environment was incorporated and Malaysia's performance was compared to that of the other ACEs. Overall the findings of studies which have reached conclusions on the corporate governance and corporate performance of East Asian corporations as a group reviewed in the literature does not apply to Malaysia. Malaysia ranked highly in terms of a legal and corporate environment and Malaysian firms generally turned in a good performance.

In general the findings indicate that while firms in all ACEs made significant use of external financing, Malaysian firms made greater use of retentions while Indonesian firms made significantly greater use of equity. Korean firms, as expected, were outliers in terms of their extremely high debt equity ratio, low interest coverage ratio and their low net profit margin. The charge that East Asian firms were heavily leveraged and were showing signs of declining profitability as a result of over-investment and resource mis-allocation can only be directed at Korea. Even so, this argument overlooks the points raised by Wade and Veneroso (1998) that the Korean system was extremely successful at facilitating industrialisation and only became more vulnerable as the underpinnings of the entrenched links between banks, firms and the state weakened as the pressures for deregulation mounted.

As far as the links postulated between differences in corporate finance patterns and the legal and corporate environment by the legal-based view of finance is concerned, this appears to be accurate to some degree as far as Malaysia is concerned. Malaysia's common law heritage and its higher rankings on the legal and corporate environment are borne out. Although Malaysian firms do not make significant use of equity finance, (at least in this

study) they make greater use of retentions and this in turn results in better performance on some ratios including solvency and leverage ratios.

Finally, the deterioration in Malaysian, Thai and Korean corporate performance prior to the crisis, suggests that corporate performance indicators may provide a reliable early warning indicator of currency crisis as well as the vulnerability of the corporate sector to a rise in interest rates to defend the currency. Overall, Malaysian interest rates were much lower throughout the crisis than that of the other ACEs and this partially explains the substantially lower percentage of insolvent Malaysian firms. It also suggests that the strong links between banks, firms (and governments) should not be dismantled before changes have taken place in corporate finance patterns and the corporate governance environment.

## References

- Abonyi, G. 1999. Thailand: from financial crisis to economic renewal. Institute of Southeast Asian Studies Working Papers in Economics and Finance Series, No. 3.
- Aoki, M. 1990. Toward an economic model of the Japanese firm. *Journal of Economic Literature* **28**: 11-27
- Beck, T. R., Levine and N. Loayza. 2000. Finance and the sources of Ggrowth. *Journal of Financial Economics* **58(1)**: 261-300.
- Boyd, J. and E. Prescott. 1986. Financial intermediary coalitions. *Journal of Economic Theory* **38**: 211-232.
- Claessens, S., S. Djankov and G. Frerri. 1999. Corporate distress in East Asia. *Public Policy for the Private Sector* Note 172 The World Bank Washington D.C.
- Claessens, S. D., S. Djankov and L. Lang. 2000. The separation of ownership and control in East Asian corporations. *Journal of Financial Economics* **58**: 81-112.
- Claessens, S., S. Djankov and T. Nenova. 2001. Corporate growth and risk around the world. In *Financial Crisis in Emerging Markets* ed. R. Glick, R. Moreno and M. Spiegel. Cambridge: Cambridge University Press.
- Cobham, D. and R. Subramaniam. 1998. Corporate finance in developing countries: new evidence for India. *World Development* **26 (6)**: 1033-1047.
- Corbett, J. and T. Jenkinson. 1997. How is investment financed? A study of Germany, Japan, the United Kingdom and the United States. *The Manchester School of Economic and Social Studies* **65**: 69-93.
- Demirguc-Kunt, A. and R. Levine. 1999. Bank based and market based financial systems: cross country comparisons. *World Bank Policy Research Working Paper* No.2146 Washington DC.
- Demirguc-Kunt, A. and V. Maksimovic. 1998. Law, finance and firm growth. *Journal Finance* **53 (6)**: 2017-2137.
- Diamond, D. 1984. Financial intermediation and delegated monitoring. *Review of Economic Studies* **July 51(3)**: 393-414.
- Frankel, J. 2001. The Asian model, the miracle, the crisis and the fund. In *Global Financial Crisis and Reforms: Cases and Caveats* ed. B. Ghosh, pp. 319-329. London: Routledge.
- Hoshi, T., A. Kashyap and D. Scharfstein. 1991. Corporate structure, liquidity and investment evidence from Japanese industrial groups. *Quarterly Journal of Economics* **106**: 33-60.

- International Monetary Fund. 1998. *World Economic Outlook*. Interim Assessment Washington DC.
- Johnson, S., P. Boone, A. Breach and E. Friedman. 2000. Corporate governance in the Asian financial crisis” *Journal of Financial Economics* **58**:141-186.
- Khan, H. 1999. Corporate governance of family based businesses in Asia : which road to take? Paper Prepared for the 2<sup>nd</sup> Anniversary Symposium of the Asian Development Bank Institute, Tokyo.
- Krugman, P. 1998. *What Happened to Asia?* Unpublished Paper MIT 1998.
- La Porta, R., F. Lopez – de-Silanes, A. Shleifer and R. Vishny. 1997. Legal determinants of external finance. *Journal of Finance* **52(3)**: 1113-1150.
- \_\_\_\_\_. 1998. Law and finance. *Journal of Political Economy* **106 (61)**: 1113-1155.
- Levine, R. 1998. The legal environment, banks and long-run economic growth. *Journal of Money Credit and Banking* **30(3)**: 596-613.
- \_\_\_\_\_. 1999. Law finance and economic growth. *Journal of Financial Intermediation* **8**: 8-35
- Matthias, R. 2001. Corporate financing and systems of industrial finance: a comparative analysis of Malaysia, Thailand and selected industrialized countries. In *Southeast Asia’s Industrialization : Industrial Policy, Capabilities and Sustainability* ed K. S. Jomo, pp. 183-221. Palgrave Basingstoke Hampshire.
- Mayer, C. 1990. Financial systems, corporate finance, and economic development. In *Asymmetric Information, Corporate Finance and Investment* ed. R.G. Hubbard, pp. 307-332. Chicago: The University of Chicago Press.
- Mayer, C. and I. Alexander. 1990. Banks and securities markets: corporate financing in Germany and the UK. *CEPR Discussion Paper*, No. 433.
- Pomerleano, M. 1998. The East Asia crisis and corporate finances: the untold micro story. *Emerging Markets Review* **2**: 14-27.
- Rajan, R. and L. Zingales. 1999. Which capitalism ? Lessons from the East Asian crisis. *Journal of Applied Corporate Finance* **2**: 16-26.
- Reynolds, T and A. Flores. 1989. *Foreign Law: Current Sources of Basic Legislation in Jurisdiction Around the World*. Littleton: Rothman and Co.
- Sheard, P. 1989. The main bank system and corporate monitoring and control in Japan. *Journal of Economic Behaviour* **11**: 399-422.
- \_\_\_\_\_. 1991. Main bank and the governance of financial distress. In *The Main Bank System, Its Relevancy for Developing and Transforming Economies* ed. M. Aoki and H. Patrick. Oxford: Oxford University Press.
- Singh, A. 1995. Corporate financial patterns in industrialising economies: a comparative international study. *IFC Technical Paper* No. 2. Washington, D.C.: The World Bank.
- Singh A and J. Hamid. 1992. Corporate financial structures in developing countries. *IFC Technical Paper* No 1. Washington D.C.: The World Bank.
- Stulz, R. 1999. *Financial Structure Corporate Finance and Economic Growth*: Mimeo Ohio State University.
- Wade, R and F. Veneroso. 1998. The Asian Crisis: the high debt model versus the Wall Street treasury IMF complex. *New Left Review* March- April:1-24.
- Watson, A. 1974. *Legal Transplants: An Approach to Comparative Law*. Charlottesville: University of Virginia Press.