Corporate Governance and Performance during the Aftermath of the 1994 Mexican Crisis

KAREN WATKINS* DICK VAN DIJK JAAP SPRONK

Abstract

Good corporate governance arrangements have been associated with high performance. This paper studies the effects of family, bank, and business group ties on Mexican firm performance during the period 1995-1997. Two performance variables are taken into account for robustness reasons: return on assets and profit margin on sales. Results show that companies with positive corporate governance schemes performed better than the rest during this period.

Resumen

Buenos mecanismos de gobierno corporativo se relacionan con buen desempeño empresarial. Este artículo estudia los efectos de los vínculos familiares, bancarios y empresariales en el desempeño de las empresas mexicanas durante el período 1995-1997. Dos variables de desempeño son empleadas por razones de solidez: retorno sobre los activos y margen de ventas. Los resultados muestran que durante este período, el desempeño de las firmas con mejores estructuras de gobierno corporativo fue más favorable que para las demás.

^{*} Karen Watkins Universidad Popular Autónoma del Estado de Puebla. Tel: +52 222 2299400, ext. 678; email: karen.watkins@upaep.mx; <u>watkins@few.eur.nl</u>. We want to thank Gonzalo Castañeda for providing access to his company database, created as part of CONACYT Grant No. 32583-D, and Jaime Diaz Tinoco for providing access to SIVA. Our thanks also to Patricia Angel Vazquez for her help at BMV. Dick van Dijk, Erasmus Universiteit Rotterdam, Econometric Institute, Burg.Oudlaan. Tel: +31 10 408 1263; e-mail: <u>djvandijk@few.eur.nl</u> Jaap Spronk, Erasmus Universiteit Rotterdam, Department of Finance and Investments, Burg.Oudlaan. Tel: +31 10 408 1282; e-mail: <u>spronk@few.eur.nl</u>

Palabras clave: gobierno corporativo, desempeño empresarial **Clasificación JEL**: G34, D82, L25

1. Introduction

The Mexican 1994 economic crisis started with the devaluation of the Mexican peso, on December 20th, 1994. This unexpected event took place in a setting of fixed exchange rate regime, low inflation, fiscal surplus, and large foreign reserves. During 1994 Mexican authorities were confident about the stability of the economy; nevertheless, the growing current account deficit and political shocks during that year generated strong capital outflows. The outcome was a shift to a floating exchange rate regime, devaluation of more than 100%, inflation of around 50%, and recession. During 1995 real GDP declined 10%, interest rates rose considerably in order to avoid further devaluation, and credit was reduced.

Mexican companies were forced to adapt to the new circumstances, or declare bankruptcy. As a consequence of the currency devaluation and the rise in domestic interest rates, companies' peso and dollar denominated debt increased in real terms. In addition, firms faced cash constraints as internal demand dropped and credit was restricted. The outcome for Mexican firms was mixed: some firms survived the crisis, others did not, and some even benefited from it.

The explanations for Mexican companies' differences in performance after the 1994 economic crisis derive from two sources: financial and operational robustness prior to the crisis, and corporate governance schemes. The first of these streams relate to initial conditions; for instance, profitable firms with low debt levels had better odds to survive the crisis than others (for a recent study on this issue see Watkins et al., 2005). Regarding

corporate governance schemes, recent studies on the 1997 Asian financial crisis have proved that good corporate governance improves performance (see Mitton, 2002, and Kim and Lee, 2003).

Our paper adds further insight into the role of corporate governance in the aftermath of economic crises, by examining the Mexican case. In particular, we consider the influence of corporate governance arrangements such as bank, business, and family ties on firm performance during the immediate period after the crisis: 1995 to 1997. Mexico's industrial environment has been characterized as one with diversified firms, controlled by few influential families, who possess ties with the government and banks (see Castañeda, 2002). For robustness reasons we take into account two performance measures: return on assets (ROA) and profit margin on sales (PROFIT). Although several papers have analysed corporate governance effects on performance (see Claessens et al., 2000), to the best of our knowledge there is none related to the aftermath of the Mexican 1994 crisis. We believe this is due to the lack of publicly available corporate governance data, and the difficulty to obtain historic financial information. We have built a unique database for 176 listed nonfinancial companies using five sources: Mexican Securities Market's (BMV) online resources, microfilms at BMV for historic data, Annual Financial Facts and Figures (published by BMV), and electronic devices such as SIVA and Infosel-Financiero.

Our main result is that firms with good corporate governance schemes performed considerably better than others during the period 1995-1997. In particular, belonging to diversified business groups favoured performance, while having bank or family ties was prejudicial for firms.

The paper is organized as follows. Section 2 deals with the theory on corporate governance and the hypotheses to test. Section 3 describes the data set and variables

employed. Section 4 discusses the results, which are based on a dynamic panel data model with random effects. Section 5 concludes.

2. Theory and Hypotheses

Corporate governance can be defined as a collection of procedures that provide protection for companies' stakeholders. In the words of Kose and Senbet (1998), "Corporate governance deals with mechanisms by which stakeholders (equity holders, creditors, and other claimants who supply capital, as well as employees, consumers, suppliers, and the government) of a corporation exercise control over corporate insiders and management such that their interests are protected". This relates to the agent-principal problem, as described by Jensen and Meckling (1976) and Myers (1977).

Agency costs can be reduced through different governance mechanisms. Boubakri et al. (2005) classify these mechanisms as internal and external. Internal governance mechanisms relate to ownership structure (such as ownership concentration); external mechanisms refer to the legal system, labour markets (such as markets for outside directors competing in reputation as experts in monitoring CEO's; see Fama and Jensen, 1983), and takeover markets (markets for corporate control).

For the purpose of this paper we focus on internal governance mechanisms, which are directly controlled by a firm. We classify ownership structure into three sub-categories, according to available information for Mexican firms: independent, family ownership, and informal ownership. Independent firms are those having no family, business, or bank links. By family ownership we refer to companies where two or more members of the board of directors possess the same first and second last names, meaning they are brothers or sisters. This is a proxy for companies where the majority of equity is held by the same family. Informal ownership relates to companies having group or bank links, which implies that not only direct stakeholders have power over the decisions of the firm. Ownership concentration is not a publicly available variable in Mexico, therefore it is excluded from the analysis.

Bennedsen and Wolfenzon (2000), and Maury (2005), claim that when investor protection is poor (meaning external governance mechanisms are weak), family controlled companies become attractive as the private benefits of control represent a relevant share of the company's value. Then, under these conditions it is easier to expropriate minority shareholders. Authors such as Alba et al. (2003), Lee (1998), and Baek et al. (2004) have related concentration of ownership in family hands with poor performance (as in Thailand and Korea, late 1990's). The argument behind this is that inexperienced family members, instead of professional managers, usually take control of these types of firms. On the same line, Kim and Lee (2003), and Mitton (2002) argue that during the Asian crisis companies with lower proportion of outside ownership performed worse than the rest. In order to reduce to some degree this outcome, in Mexico the Code of Corporate Governance recommends at least 20% of directors for listed companies to be outsiders (see Dahyaa and McConnell, 2004). This derives our *first hypothesis: Firms having family ties performed worse than those without during the period 1995-1997*.

Diversified companies and conglomerates stabilize aggregate profits, which is important in countries with incipient capital markets like the Mexican (see Aoki, 2001). In times of crisis performance for these companies can be better than for independent ones, which favours the risk diversification argument (see Claessens et al., 2000). This argument can be extended to diversified business groups. Castañeda (2000, 2005) points out that during the Mexican crisis, internal capital markets permitted the flow of funds from booming companies (mainly exporting firms) to the rest of the economy. These business groups favoured the survival of many companies, as they improved capital allocation. We can add that being part of a diversified business group can stabilize aggregate sales, due to internal group trading. In addition, within the groups there are important governance functions. As stated by Khanna and Palepu (1996), these networks support internal trade and ensure close monitoring of management. On a similar line, Claessens et al. (2000) point out that after the Asian crisis, firms belonging to diversified business groups had 3% higher market valuations than the rest. This brings out our *second hypothesis*: *Firms belonging to diversified business groups performed better than other firms during the period 1995-1997.*

The recent East Asian downturn has shown that during crises companies with bank links perform worse than independent ones, in particular in countries where regulation is poor. As stated by Lee (1998), Claessens et al. (2000), and Morck and Nakamura (1999), Asian firms having bank ties were extremely leveraged before the 1997 crisis. This increased their vulnerability to shocks, and made them more susceptible to agency costs of debt (see Kim and Lee, 2003). These companies were exposed to higher risk levels than the rest, and were able to obtain credit to finance losses. Instead of monitoring and disciplining them, banks acted as firms' accomplices. In addition, as firms relied heavily on banks for financing their investments, when banks faced financial troubles, even profitable firms were not able to obtain credit (see Baek et al., 2004). This generates our *third hypothesis* to test: *In Mexico, bank links had a negative impact on firms' performance during the period 1995-1997.*

3. Data

3.1 Sample, data sources, and variables

Last quarter non-balanced data (from 1995 till 1997) for all listed non-financial firms (176 in total) is extracted from the Mexican Securities Market (BMV). Firms that were not listed at least during one of this after crisis years are not taken into account, as the interest of the paper is to study corporate governance effects on firm performance during the aftermath of the crisis. Two sources of data from electronic systems are used: SIVA (Integrated System of Automated Securities) and Infosel-Financiero. Data for firms who are not currently listed on the market, and historic data is extracted through microfilms at BMV. The list of board of directors (for 1994) is obtained through the Annual Financial Facts and Figures, published by BMV. All monetary variables are presented in real terms (Mexican pesos of the year 2000).

Corporate governance variables are introduced as dummies for group affiliation (two or more board members of a firm sitting on the board of at least another listed firm, whatever their position), bank linkages (at least one of the firm's board members belongs to the directorate of one or more banks), and family ties (two or more members of the board having the same first and second last names, meaning they are brothers or sisters). Groups are further described as diversified and not diversified groups. As for the definition of a diversified group, it is considered as one that is composed of many firms (at least fifteen, for internal capital and trade markets argument), from all sizes and industries (risk diversification), with at least one export-oriented company (50% or more of sales outside the country - competitiveness positive effect), and with one or more firms having access to

foreign stock markets through American Depository Receipts (foreign financing and better accounting procedures, which favours good corporate governance).

Return on assets (ROA) is defined as the ratio of EBIT to total assets; to reduce the weight of extreme observations in the econometric analysis, ROA values higher than 20% in absolute value have been excluded. Profit margin on sales (PROFIT) is defined as EBIT + depreciation and amortization, over net sales. Tobin's Q is not employed as a measure of performance: being a market based measure, it is not an adequate indicator in countries with incipient capital markets like the Mexican. In addition, this ratio is not available for the complete sample of Mexican companies, as some firms were not quoted during 1995 (but their information was public since they issued bonds or commercial paper in BMV; see Castañeda, 2005).

Three size dummies, arranged according to market assets' value, are introduced. Small companies are considered as those with less than \$1,000,000 in assets; medium firms possess between \$1,000,000 and \$10,000,000 in assets; big enterprises consist of companies with more than \$10,000,000 in assets. In addition, seven industry categories are employed to capture size and industry specific effects; for instance, it is expected that during crises small companies have more financial constraints than the rest (see Titman and Wessels, 1998), and industries such as the services sector depend more on the local economy. In fact, industry effects usually predict between 17 and 20% of financial performance (see Coles et al., 2001). In addition, control variables for performance such as productivity (net sales over net capital stock; it is associated with higher performance), foreign-denominated debt over total debt (foreign debt makes a firm more vulnerable to fluctuations in the economy), cash flows over total assets (the greater, the higher the probability of a company to expand and diversify; this makes a company less vulnerable

during crises), and leverage (total debt over equity; as it increases, so does the exposure to shocks and the amount of agency costs of debt - see Berger and Bonaccorsi di Patti, 2005) are used.

3.2. Descriptive statistics

Table 1 presents descriptive statistics for return on assets and profit margin on sales, during the immediate post-crisis year. In 1995 there were 142 quoted firms, which are classified as independent, or having bank, family, or business ties (diversified or not). These companies are further grouped according to size and industry.

Firm Characteristic	Number of Firms	RETURN ON ASSETS			PROFIT MARGIN ON SALES		
		Mean	Minimum	Maximum	Mean	Minimum	Maximum
All Firms	142	0.04 (0.16)	-0.63	0.86	0.07 (0.25)	-0.76	0.95
Independent	25	0.07 (0.14)	-0.19	0.54	0.05 (0.20)	-0.74	0.32
Bank Link	97	0.02 (0.15)	-0.63	0.58	0.07 (0.26)	-0.76	0.95
Family Tie	76	0.01 (0.15)	-0.63	0.51	0.06 (0.24)	-0.76	0.80
Business Group	90	0.04 (0.18)	-0.63	0.86	0.09 (0.26)	-0.76	0.95
Diversified Group	18	0.01 (0.13)	-0.33	0.23	0.08 (0.26)	-0.76	0.56
Small	37	0.02 (0.08)	-0.19	0.25	0.06 (0.16)	-0.74	0.32
Medium	60	0.02 (0.17)	-0.63	0.54	0.05 (0.27)	-0.76	0.82
Big	45	0.08 (0.20)	-0.29	0.86	0.11 (0.29)	-0.72	0.95
Commerce	22	-0.01 (0.21)	-0.63	0.36	-0.02 (0.28)	-0.76	0.50
Conglomerates	14	0.04 (0.19)	-0.29	0.58	0.07 (0.36)	-0.72	0.95
Services	10	-0.03 (0.06)	-0.16	0.04	0.00 (0.27)	-0.70	0.16
Mining	3	0.11 (0.16)	0.00	0.23	0.31 (0.36)	0.06	0.56
Construction	17	-0.02 (0.08)	-0.20	0.06	0.03 (0.17)	-0.33	0.32
Manufacturing	69	0.08 (0.17)	-0.24	0.86	0.12 (0.23)	-0.74	0.82
Telecommunications	7	-0.03 (0.06)	-0.11	0.05	0.06 (0.10)	-0.05	0.20

Table 1:Descriptive statistics for the year 1995

Table 1 presents descriptive statistics (year 1995) for the two performance variables of interest: RETURN ON ASSETS and PROFIT MARGIN ON SALES. Values equal or greater than one in absolute value have been excluded as outliers. Firms are classified as independent, or having bank, family, or group (diversified and not) links. Companies are further grouped according to size and industry. Standard deviation is shown in parenthesis.

During the year 1995, the average return on assets and profit margin on sales were 0.04 and 0.07, respectively. During 1993, which represents a normal year, the average

values for ROA and PROFIT were 0.07 and 0.12 (according to information from BMV, see Table 2). This reflects that due to the crisis, on average performance declined substantially during the immediate aftermath year 1995. However, this conclusion is not accurate for all types of firms. For example, independent companies seem to outperform firms in all other categories, with an average ROA of 0.07. The same is true for companies belonging to business groups, as they present profit margin on sales of 0.09. On the lower end are companies with family and bank ties, with ROA of 0.01 and 0.02, respectively.

Table 2:Descriptive statistics for the period 1990-2000							
	R	OA	PROFIT				
Period	Mean	Standard Deviation	Mean	Standard Deviation			
1990	0.07	0.08	0.13	0.14			
1991	0.08	0.07	0.15	0.12			
1992	0.06	0.07	0.13	0.15			
1993	0.07	0.11	0.12	0.15			
1994	0.00	0.14	0.01	0.23			
1995	0.04	0.16	0.07	0.25			
1996	0.05	0.16	0.11	0.24			
1997	0.05	0.12	0.14	0.17			
1998	0.04	0.12	0.10	0.17			
1999	0.05	0.12	0.14	0.16			
2000	0.05	0.16	0.13	0.19			

Table 2 presents mean values (years 1990-2000) for the two performance variables of interest: RETURN ON ASSETS and PROFIT MARGIN ON SALES. Values equal or greater than one in absolute value have been excluded as outliers.

These results are in general consistent with the theory, except for the case of independent companies. According to the corporate governance literature for emerging market economies, companies belonging to business groups perform better than independent ones in times of crisis; see Claessens, Djankov, and Xu, 2000. However, independent companies in Mexico have initial advantages over the rest of firms, which might explain this apparent controversy. First of all, 60% of these independent firms are

export-oriented. In particular, these types of companies performed better than others due to the positive impact of the devaluation of the Mexican peso; their average PROFIT during 1995 was 0.12. Second, more than half (56%) of the independent companies in the sample are big. As explained in the next paragraph, big companies have less financial and operational constraints than the rest.

From table 1 it becomes evident that there are size and industry effects on performance during 1995. Big companies performed much better than the rest during the crisis, which can be attributed to their greater operational and financial flexibility. In times of crisis, scarce credit is assigned mainly to the biggest (and perhaps not the most profitable) companies. For instance, prior to the Mexican 1994 crisis, big companies were less leveraged than others. This relationship changed during the crisis period, when small firms became the least leveraged. Considering that small firms' equity declined on average 16% during the time, there is evidence of an important credit crunch for small firms.

On an industry basis, the best performing sectors were mining, manufacturing and conglomerates. The mining industry does not depend as much as the rest on the local economy, as it exports most of its products (and their prices are fixed in international markets). Therefore, it is not surprising that the Mexican crisis practically had no impact on its aftermath results. Manufacturing also depends less than other sectors on the domestic demand, as an important proportion of its products are sold in external markets. As for conglomerates, in times of crisis they serve as an insurance, for their diversification stabilizes aggregate profits. During the crisis period exports grew on average 104% for the manufacturing industry, and 180% for conglomerates. Services, commerce, construction, and telecommunications are more connected to the local economy; therefore internal macroeconomic shocks have a greater impact on them.

4. Regression results

In this section, the relationship between firm performance and corporate governance schemes is analysed. Table 3 displays results from estimating a dynamic random effects panel data model, using the Swamy-Arora estimator of the component variances. The reported t-values are based on standard errors that are robust to cross-sectional heteroskedasticity, so random effects can be employed. Time fixed effects are also introduced, in order to study the dynamics of performance during the immediate post-crisis years. ROA values greater than 0.20 in absolute value are treated as outliers, as in aftermath crisis years it is expected performance to be low. In fact, the median ROA for the period 1995-1997 is 0.04. The sample includes data from 1995 till 1997, which reflects the crisis aftermath period.

*, **, ***, **** Significant at 1%, 5%, 10%, and 15% levels, respectively.								
The table presents feating period smaning and naniporaten governance attangements the Swamy-Arora								
estimator of the component variances, The reported standard errors are robust to PROFILE MARGENE ON SALUES y.								
The sample increases based on standard errors that are robust to cross- eliminated as outliers, which represent 24 observations. t-values based on standard errors that are robust to cross- Battlena the teroskedasticity are in parenthesis0.01**** (-1.46) -0.04** (-1.93)								
Battlynaink eteroskedasticity are in parenthesis.	-0.01**** (-1.46)	-0.04** (-1.93)						
Family Tie	-0.01**** (-1.50)	-0.03* (-4.47)						
Business Group	0.01**** (1.56)	0.02 (1.23)						
Diversified Group	0.03* (6.51)	0.07* (3.72)						
Small	0.01*** (1.63)	0.00 (-0.09)						
Big	0.00 (0.48)	-0.03 (-1.33)						
Commerce	0.03 (1.00)	0.00 (0.02)						
Conglomerates	0.01 (0.19)	-0.08 (-1.31)						
Services	-0.01 (-0.10)	-0.06 (-1.20)						
Construction	0.01 (0.36)	0.03 (0.36)						
Manufacturing	0.06* (2.36)	0.04 (0.46)						
Telecommunications	0.00 (-0.37)	0.05 (0.61)						
Productivity (-1)	0.01* (2.70)	0.00 (-0.18)						
Foreign Debt (-1)/Total Debt (-1)	0.00 (-0.25)	0.02* (4.71)						
Cash Flows (-1)/Total Assets (-1)	0.11* (3.69)	0.30* (5.66)						
Leverage (-1)	0.00 (-0.56)	0.00 (-0.41)						
Period=1996	0.02* (6.70)	0.04* (16.18)						
Period=1997	0.02* (3.61)	0.06* (5.58)						
ROA (-1)	0.03* (4.41)							
PROFIT (-1)		0.02*** (1.52)						

From table 3 the main conclusion is that internal corporate governance arrangements did influence Mexican firm performance during the period 1995-1997. Consistent with the literature, having bank or family ties was prejudicial for companies, while belonging to business groups (particularly diversified business groups) favoured performance.

Companies participating in diversified business groups had several advantages over the rest of firms. First of all, they created efficient internal capital markets, as described by Castañeda (2002). From the publicly available data published by BMV, it is evident that these firms had twice the amount of trade credit compared to the rest of companies. Second, this data shows that there was an important flow of internal trade taking place. Specifically, during 1995 companies from diversified business groups had three times more net sales than the other firms, which means they did not face such a sharp drop in demand. These companies acted like a small economy, creating their own demand and supply, and therefore they were not so much exposed to the local economic downturn.

In general there are not significant differences in performance according to size or industry indicators. Therefore, it seems that internal corporate governance variables are more powerful explaining performance during the aftermath period, compared to size or industry effects.

All control variables taken into account are significant, except for leverage. Productivity and cash flows over total assets present the expected signs, however foreign debt over total debt has opposite sign. Lagged ROA and PROFIT are significant and positive, which reflects the influence of initial conditions on performance. Time effects, which are introduced in the regressions by including the periods 1996 and 1997 are also significant and positive, which indicate recovery.

5. Conclusions

Poor corporate governance arrangements are related to lower performance and firm value. This is particularly true in times of crisis, when stakeholders are less confident about firms' robustness, and expropriation is more feasible. In these circumstances nervous agents take their money away from companies with poor corporate governance, which further deteriorates firm value. In contrast, companies with good corporate governance schemes have better odds of surviving an economic downturn.

As expected, the Mexican 1994 currency crisis had larger aftermath effects on companies with poor corporate governance schemes. We have shown that firms having bank or family links performed worse than those without them, and that companies belonging to diversified business groups were the least injured during the economic downturn. Initial conditions were also important in explaining performance during the period 1995-1997, as shown by the positive results of independent firms. These companies were mainly export-oriented and big, which represents an advantage over the rest of firms.

From these conclusions we derive several recommendations for Mexican companies, in order to deal with future crises: 1) To diversify risk by producing both for

local and international markets. 2) To participate in international financial markets through American Depository Receipts. 3) To create networks with other companies, with the objective of building diversified business groups. 4) To rely more on equity and trade credit than on bank financing. 5) To hire managers according to experience and aptitude, and not based on family attributes.

References

- Alba, P., Claessens, S., & Djankov, S. (2003) "Thailand's corporate financing and governance structures", The World Bank, Policy Research Working Paper, Washington.
- Aoki, M. (2001) "Toward a comparative institutional analysis", MIT Press, Massachusetts.
- Baek, J.S., Kang, J.K, & Park, K.S. (2004) "Corporate governance and firm value: Evidence from the Korean financial crisis", Journal of Financial Economics 71, 265–313.
- Bennedsen, M. & Wolfenzon, D. (2000) "The balance of power in closely held corporations", Journal of Financial Economics 58, 113-139.
- Berger, A. & Bonaccorsi di Patti, E. (article in press) "Capital structure and firm performance: A new approach to testing agency theory and an application to the banking industry", Journal of Banking and Finance.
- Boubakri, N., Cosset, J.C., & Guedhami, O. (2005) "Post privatization corporate governance: The role of ownership structure and investor protection", Journal of Financial Economics 76, 369-399.

- Castañeda, G. (2002) "Internal capital markets and financing choices of Mexican firms before and during the financial paralysis of 1995-2000", Unpublished manuscript.
- 8. Castañeda, G. (2005) "Consequences of firms' relational financing in the aftermath of the 1995 Mexican banking crisis", Journal of Applied Economics, 8 (1), 53-79.
- Claessens, S., Djankov, S., & Xu, L.C. (2000) "Corporate performance in the East Asian financial crisis", The World Bank Research Observer 15, 23-46, Washington.
- Coles, J.W., McWilliamsb, V.B., & Sen, N. (2001) "An examination of the relationship of governance mechanisms to performance", Journal of Management 27, 23-50.
- 11. Dahyaa, J. & McConnell, J.J. (article in press) "Outside directors and corporate board decisions", Journal of Corporate Finance.
- Fama, E. & Jensen, M. (1983) "Agency problems and residual claims", Journal of Law and Economics 26, 327–350.
- 13. Jensen, M.C. & Meckling, W.H. (1976) "Theory of the firm: Managerial behavior, agency costs and ownership structure", Journal of Financial Economics 3, 305–360.
- 14. Khanna, T. & Palepu, K. (1996) "Corporate scope and severe market imperfections: An empirical analysis of diversified business groups in an emerging economy", Graduate School of Business Administration, Harvard University, Boston, Massachusetts.
- 15. Kim, B. & Lee, I. (2003) "Agency problems and performance of Korean companies during the Asian financial crisis: Chaebol vs. non-chaebol firms", Pacific - Basin Finance Journal 11, 327-348.

- Kose, J. & Senbet, L.W. (1998) "Corporate governance and board effectiveness", Journal of Banking and Finance 22, 371-403.
- Lee, J. (1998) "Causes for business failures: Understanding the 1997 Korean crisis", Journal of Asian Economics 9, 637-651.
- 18. Maury, B. (article in press) "Family ownership and firm performance: Empirical evidence from Western European corporations", Journal of Corporate Finance.
- 19. Mitton, T. (2002) "A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis", Journal of Financial Economics 64, 215-241.
- 20. Morck, R. & Nakamura, M. (1999) "Banks and corporate control in Japan", Journal of Finance 54, 319–339.
- 21. Myers, S.C. (1977), "Determinants of corporate borrowing", Journal of Financial Economics 5, 147-175.
- Titman, S. & Wessels, R. (1998) "The determinants of capital structure choice", Journal of Finance 42, 1-19.
- 23. Watkins, K., Van Dijk, D., & Spronk, J. (2005) "Macroeconomic crisis and individual firm performance: The Mexican experience", Tinbergen Institute Discussion Paper 04-057/2, Rotterdam, The Netherlands.