



## References

- Agrawal, Anup and Knoeber, Charles R.. 1996. Firm performance and mechanisms to control agency problems between managers and shareholders, *Journal of Financial and Quantitative Analysis* 31: 377-397.
- Alba. Pedro, Bhattacharya, Amar, Claessens, Stijn, Ghosh, Swati and Hernandez, Leonardo. 2000. The role of macroeconomic and financial sector linkages in East Asia's financial crisis, *The Asian Financial Crisis: Causes, Contagion and Consequences*, Cambridge University Press: 9-66.
- Alba. Pedro, Claessens, Stijn and Djankov, Simeon. 1998. Thailand's corporate financing and governance structures: Impact on firms' competitiveness, *Conference on Thailand's Dynamic Economic Recovery and Competitiveness*.
- Altman, Edward I.. 1968. Financial ratios, discriminant analysis and the prediction of corporate bankruptcy, *Journal of Finance* 23: 589-609.
- Altman, Edward I.. 1984. A further empirical investigation of the bankruptcy cost question, *Journal of Finance* 39: 1067-1089.
- Altman, Edward I., Hartzell J. and Peck M.. 1995. *Emerging markets corporate bonds: A scoring system*, New York, Salomon Brothers.
- Anderson, Ronald C. and Reeb, David M.. 2003. Founding-family ownership and firm performance: Evidence form the S&P 500, *Journal of Finance* 58: 1301-1328.
- Andrade, Gregor and Kaplan, Steven N.. 1998. How costly is financial (not economic) distress? Evidence from highly leveraged transactions that became distressed, *Journal of Finance* 53: 1443-1493.
- Ang, James S., Cole, Rebel A. and Lin, James Wuh. 2000. Agency costs and ownership structure, *Journal of Finance* 55: 81-106.
- Arellano, Manuel and Bond. Stephen. 1991. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations, *Review of Economic Studies* 58: 277-297.
- Arsirahpongphisit, Oraluck, Kester, George W. and Skully, Michael T.. 2000. Financial Policies and practices of listed firms in Thailand: Capital structure, capital budgeting, cost of capital, and dividends, *Journal of Business Administration* 88: 70-93.
- Asawarachan, Akarawat. 2001. Independent Study Project, Faculty of Commerce and Accountancy, Thammasat University.
- Ball, Ray and Shivakumar, Lakshmanan. 2002. Earnings quality in U.K. private firms, Graduate School of Business University of Chicago, *Working Paper*.
- Banerjee, Saugata, Heshmati, Almas and Wihlborg, Clas. 2000. The dynamics of capital structure, *SSE/EFI Working Paper Series in Economics and Finance No. 333*.
- Bartholdy, Jan and Mateus, Cesario. 2003. Debt and taxes: Evidence from a bank based system, Aarhus School of Business, *Working Paper*.
- Baxter, N.. 1967. Leverage, risk of ruin and the cost of capital, *Journal of Finance* 22: 395-403.

- Berger, Philip G., Ofek, Eli and Yermack, David L.. 1997. Managerial entrenchment and capital structure decisions, *Journal of Finance* 52: 1411-1438.
- Booth, Laurence, Aivazian, Varouj, Demirguc-Kunt, Asli and Maksimovic, Vojislav. 2001. Capital structure in developing countries, *Journal of Finance* 56: 87-130.
- Bradley, Michael, Jarrell, Gregg A. and Kim, E. Han. 1984. On the existence of an optimal capital structure: theory and evidence, *Journal of Finance* 39: 857-878.
- Brennan, Michael and Kraus, Alan. 1987. Efficient financing under asymmetric information, *Journal of Finance* 42: 1225-1243.
- Brigham, Eugene F. and Ehrhardt, Michael C.. 2002. Financial management: Theory and Practice (10<sup>th</sup> Edition), (n.p.): Thomson Learning.
- Buranasakda, Bussarin. 2002. Testing the pecking order theory of capital structure: Evidence from Thailand, Special Project, Faculty of Commerce and Accountancy, Chulalongkorn University.
- Chittaya, Porntas. 1997. Baht Floation Impact on SET Firms, Special Project, Faculty of Commerce and Accountancy, Chulalongkorn University.
- Chung, Kee H. and Jo, Hoje. 1996. The impact of security analysts' monitoring and marketing functions on the market value of firms, *Journal of financial and quantitative analysis* 31: 493-512.
- Claessens, Stijn, Djankov, Simeon and Klapper, Leora. 2002. Resolution of corporate distress in East Asia, *Journal of Empirical Finance (Forthcoming)*.
- Claessens, Stijn, Djankov, Simeon and Lang, Larry H.P.. 2001. Who controls East Asian corporations?, World Bank, *Working Paper*.
- Claessens, Stijn and Fan, Joseph P.H.. 2002. Corporate governance in Asia: A survey, *International Review of Finance (Forthcoming)*.
- Claessens, Stijn and Laeven, Luc. 2003. Financial development, property rights and growth, *Journal of Finance* 58: 2401-2436.
- Danbolt, Jo, Rees, William P. and Shamsheer, Mohamed. 1998. Disadvantaged capital access – Impediments to Scotland's economic growth?, *Working Paper*.
- DeAngelo, Harry and Masulis, Ronald W., 1980, Optimal capital structure under corporate and personal taxation, *Journal of Financial Economics* 8, 3-29.
- DeMiguel, Alberto and Pindado, Julio. 2001. Determinants of capital structure: New evidence from Spanish panel data, *Journal of Corporate Finance* 7: 77-99.
- Demirguc-Kung, Asli and Maksimovic, Vojislav. 1998. Law, finance, and firm growth, *Journal of Finance* 53: 2107-2137.
- Denis, David J. and Denis, Diane K.. 1993. Managerial discretion, organizational structure and corporate performance: A study of leveraged recapitalization, *Journal of Accounting and Economics* 16: 209-236.
- Diamond, Douglas W.. 1989. Reputation acquisition in debt markets, *Journal of Political Economy* 97: 828-862.
- Drobtz, Wolfgang and Fix, Roger. 2003. What are the determinants of the capital structure? Some evidence for Switzerland, University of Basel, *Working paper No. 4/03*.

- Edwards, Sebastian. 1999. On crisis prevention: Lessons from Mexico and East Asia, *NBER Working paper No. W7233*.
- Fama, Eugene F. and French, Kenneth R.. 1998. Taxes, financing decisions, and firm value, *Journal of Finance* 53: 819-842.
- Fischer, E., R. Heinkel, and J. Zechner. 1989. Dynamic capital structure choice: Theory and tests, *Journal of Finance* 44: 19-40.
- Fisman, Raymond and Love, Inessa. 2003. Trade credit, financial intermediary development, and industry growth, *Journal of Finance* 58: 353-374.
- Frank, Murray and Goyal, Vidhan. 2003. Testing the pecking order theory of capital structure, *Journal of Financial Economics* 67: 217-248.
- Garvey, Gerald T. and Hanka, Gordon. 1999. Capital structure and corporate control: The effect of antitakeover statutes on firm leverage, *Journal of Finance* 54: 519-546.
- Gedajlovic, Eric and Shapiro, Daniel M.. 2001. Ownership structure and firm profitability in Japan, *Academy of Management Journal*, Working Paper.
- Giannetti, Mariassunta. 2003. Do better institutions mitigate agency problems? Evidence from corporate finance choices, *Journal of Financial and Quantitative Analysis* 38: 185—212.
- Gleason, Kimberly, Lynette, Knowles and Mathur, Ike. 2000. The interrelationship between culture, capital structure, and performance: Evidence from European retailers, *Journal of Business Research* 50: 185-191.
- Graham, John R.. 1996. Debt and the marginal tax rate, *Journal of Financial Economics* 41: 41-73.
- Graham, John R.. 1996. Proxies for the corporate marginal tax rate, *Journal of Financial Economics* 42: 187-221.
- Graham, John R., Lemmon, Michael L. and Schallheim, James S.. 1998. Debt, leases, taxes, and the endogeneity of corporate tax status, *Journal of Finance* 53: 131-162.
- Graham, John R.. 2000. How Big Are the Tax Benefits of Debt?, *Journal of Finance* 55: 1901-1941.
- Grossman, Sanford J. and Hart, Oliver. 1982. Corporate financial structure and managerial incentive, *The Economics of Information and Uncertainty*, (n.p.), University of Chicago Press.
- Guffey, Daryl M. and Moore, William T.. 1991. Direct bankruptcy costs: Evidence from the trucking industry, *Financial Review* 26: 223-235.
- Harris, Milton and Raviv, Artur. 1990. Capital structure and the informational role of debt, *Journal of Finance* 45: 321-349.
- Harris, Milton and Raviv, Artur. 1991. The theory of capital structure, *Journal of Finance* 46: 297-355.
- Hart, Oliver and Moore, John. 1995. Debt and seniority: An analysis of the role of hard claims in constraining management, *American Economic Review* 85: 567-585.

- Harvey, Campbell R., Lins, Karl V. and Roper, Andrew H.. 2003. The effect of capital structure when expected agency costs are extreme, *NBER Working Paper No. w8452*.
- Hatzinikolaou, Dimitris, Katsimbris, George M. and Noulas, Athanasios G.. 2002. Inflation uncertainty and capital structure: Evidence from a pooled sample of the Dow-Jones industrial firms, *International Review of Economics and Finance 11*: 45-55.
- Heshmati, Almas. 2001. The dynamics of capital structure: Evidence from Swedish micro and small firms, *Research in Banking and Finance 2*: 199-241.
- Hongpan, Namthip. 2000. An empirical study on the determinants of the capital structure of Thai firms, Special Project, Faculty of Commerce and Accountancy, Chulalongkorn University.
- Hovakimian, Armen, Opler, Tim and Titman, Sheridan. 2001. The debt-equity choice, *Journal of Financial and Quantitative Analysis 36*: 1-24.
- Jensen, Michael C.. 1986. Agency costs of free cash flow, corporate finance, and takeovers, *American Economic Review 76*: 323-339.
- Jensen, Michael C. and Meckling, William H.. 1976. Theory of the firm: managerial behavior, agency costs and ownership structure, *Journal of Financial Economics 3*: 305-360.
- Jensen. Gerald R., Solberg, Donald P. and Zorn, Thomas S.. 1992. Simultaneous determination of insider ownership, debt, and dividend policies, *Journal of Financial and Quantitative Analysis 27*: 247-263.
- Joh, Sung Wook. 2003. Corporate governance and firm profitability: Evidence form Korea before the economic crisis, *Journal of Financial Economics 68*: 287-322.
- Kalpagonchai, Rosjarek. 2003. An empirical study of capital structure choice: Macroeconomic condition, firm-specific and financial constraints in Thailand, Thesis, Faculty of Commerce and Accountancy, Chulalongkorn University.
- Kamonpornphan, Rungtip. 1997. Capital structure management when firms raise funds, Special Project, Faculty of Commerce and Accountancy, Chulalongkorn University.
- Kaplan. Steven. 1989. The effects of management buyouts on operating performance and value, *Journal of Financial Economics 24*: 217-254.
- Kemsley, Deen and Nissim, Doron. 2002. Valuation of the debt-tax shield, *Journal of Finance 57*: 2045-2073.
- Kim, E. H.. 1978. A mean variance theory of optimal capital structure and corporate debt capacity, *Journal of Finance 33*: 45-64.
- Klein, April. 1998. Firm performance and board committee structure, *Journal of Law and Economics 56*: 275-303.
- Korajczyk, Robert A. and Levy, Amnon. 2002. Capital structure choice: Macroeconomic conditions and financial constraints, Northwestern University 2002, *Working paper No. 279*.
- Krasker, William. 1986. Stock price movements in response to stock issues under asymmetric information, *Journal of Finance 41*: 93-105.

- Kraus, A. and Litzenberger, R. 1973. A state-preference model of optimal financial leverage, *Journal of Finance* 28: 911-922.
- La Porta, Rafael, Lopez-De-Silanes, Florencio, Shleifer, Andrei and Vishny, Robert W.. 1996. Law and finance, *NBER working paper No.5661*.
- La Porta, Rafael, Lopez-De-Silanes, Florencio, Shleifer, Andrei and Vishny, Robert W.. 1997. Legal determinants of external finance, *Journal of Finance* 52: 1131-1150.
- Laochareonrnan, Annap. 2002. Leverage, Investment and Firm Growth: Evidence from Thailand Panel Data, Special Project, Faculty of Commerce and Accountancy, Chulalongkorn University.
- Leardsaktanakul, Ittipol. 2001. An empirical study on pecking order theory with Thai firms; financial hierarchy test, Independent Study Project, Faculty of Commerce and Accountancy, Thammasat University.
- Lehn, Kenneth and Poulsen, Annette. 1989. Free cash flow and stockholder gains in going private transactions, *Journal of Finance* 44: 771-787.
- Levy, Amnon. 2000. Why does capital structure choice vary with macroeconomic conditions?, Hass School of Business, U.C. Berkeley, *Working paper*.
- Loof, Hans. 2003. Dynamic optimal capital structure and technological change, SISTER, *Working Paper No. 2003-23*.
- MacKie-Mason, Jeffrey K.. 1990. Do taxes affect corporate financing decisions? *Journal of Finance* 45: 1471-1493.
- McConnell, John J. and Servaes, Henri. 1995. Equity ownership and the two faces of debt, *Journal of financial Economics* 39: 131-157.
- Meggison, William L.. 1997. Corporate finance theory, (n.p.), Addison-Wesley Educational Publishers.
- Mehran, Hamid. 1992. Executive incentive plans, corporate control, and capital structure, *Journal of Financial and Quantitative Analysis* 27: 539-560.
- Mehran, Hamid. 1995. Executive compensation structure, ownership, and firm performance, *Journal of Financial Economics* 38: 163-184.
- Miller, Merton H.. 1977. Debt and taxes, *Journal of Finance* 32: 261-275.
- Minton, Bernadette A. and Wruck, Karen H.. 2001. Financial conservatism: Evidence on capital structure from low leverage firms, *Working Paper*.
- Modigliani, Franco and Miller, Merton H.. 1958. The cost of capital, corporation finance and The theory of investment, *The American Economic Review* 48: 261-297.
- Modigliani, Franco and Miller, Merton H.. 1963. Corporate income taxes and the cost of capital: A correction, *The American Economic Review* 53: 433-443.
- Morck, Randall, Shleifer, Andrei and Vishny, Robert W.. 1988. Management ownership and market valuation: An empirical analysis, *Journal of Financial Economics* 20: 293-315.
- Myers, Stewart C.. 1977. Determinants of corporate borrowing, *Journal of Financial Economics* 5: 147-175.

- Myers, Stewart C. and Majluf, Nicholas S.. 1984. Corporate financing and investment decisions when firms have information investors do not have, *Journal of Financial Economics* 13: 187-221.
- Narayanan, M. P.. 1988. Debt versus equity under asymmetric information, *Journal of Financial and Quantitative Analysis* 23: 39-51.
- Nilsen, Jeffrey. 2002. Trade credit and the bank lending channel of monetary policy transmission, *Journal of Money, Credit and Banking (Forthcoming)*.
- Novaes, Walter and Zingales, Luigi. 1995. Capital structure choice when managers are in control: Entrenchment versus efficiency. *NBER, Working Paper No. 5384*.
- Ogden, Joseph P., Jen, Frank C. and O'Connor, Philip F.. 2003. *Advanced corporate finance: Policies and Strategies*, (n.p.), Pearson Education.
- Ohlson, James A.. 1980. Financial ratios and the probabilistic prediction of bankruptcy, *Journal of Accounting Research* 19: 109-131.
- Opler, Tim C. and Titman, Sheridan. 1994. Financial distress and corporate performance, *Journal of Finance* 49: 1015-1040.
- Pagano, Marco, Panetta, Fabio and Zingales, Luigi. 1998. Why do firms go public? An empirical analysis, *Journal of Finance* 53: 27-64.
- Patchanant, Kancharatn. 2001. An empirical examination of domestic and multinational corporate capital structure in Thailand, Independent Study Project, Faculty of Commerce and Accountancy, Thammasat University.
- Petersen, Mitchell A. and Rajan, Raghuram G.. 1997. The benefits of lending relationships: Evidence from small business data, *Journal of Finance* 49: 3-37.
- Phillips, Gordon M.. 1995. Increased debt and industry product markets: An empirical analysis, *Journal of Financial Economics* 37: 189-238.
- Phornprapha, Prasertchai. 2002. Independent and simultaneous determinants of ownership, debt, and dividend in Thailand, Independent Study Project, Faculty of Commerce and Accountancy, Thammasat University.
- Poitevin, Michel. 1989. Financial signaling and the "deep-pocket" argument, *Rand Journal of Economics* 20: 26-40.
- Rajan, Raghuram G. and Zingales, Luigi. 1995. What do we know about capital structure? Some evidence from international data, *Journal of Finance* 50: 1421-1460.
- Safieddine, Assem and Titman, Sheridan. 1999. Leverage and corporate performance: Evidence from unsuccessful takeovers, *Journal of Finance* 54: 547-580.
- Shyam-Sunder, Lakshmi and Myers, Stewart C.. 1999. Testing static tradeoff against pecking order models of capital structure, *Journal of Financial Economics* 51: 219-244.
- Smith, Abbie. 1990. Corporate ownership structure and performance: The case of management buyouts, *Journal of Financial Economics* 27: 143-164.
- Spivey, Michael F. and McMillan, Jeffrey J.. 2000. Value creation and the entrepreneurial business, *Working Paper*.

- Stiglitz, J. 1972. Some aspects of the pure theory of corporate finance: Bankruptcies and takeovers, *Bell Journal of Economics and Management Science* 3: 458-482.
- Stulz, Rene M.. 1990. Managerial discretion and optimal financing policies, *Journal of Financial Economics* 26: 3-27.
- Strebulaev, Ilya A.. 2003. Do tests of capital structure theory mean what they say?, *Working Paper*.
- Tanopajai, Jatuporn. 2002. Corporate governance, leverage and firm performance: Thailand's perspective. Independent Study Project, Faculty of Commerce and Accountancy, Thammasat University.
- Thuwajaroenpanich. Angkhana, 2000. Market timing and capital structure: Evidence from the stock exchange of Thailand, Special Project, Faculty of Commerce and Accountancy, Chulalongkorn University.
- Titman Sheridan and Wessels, Roberto. 1988. The determinants of capital structure choice, *Journal of Finance* 43: 1-19.
- Vongvitavat, Paveena. 2001. Ownership structure, leverage and productivity, Special Project, Faculty of Commerce and Accountancy, Chulalongkorn University.
- Wanzenried, Gabrielle. 2002. Capital structure dynamics in UK and Continental Europe, *Working Paper*.
- Warner, Jerold B.. 1977. Bankruptcy costs: Some evidence, *Journal of Finance* 32: 337-347.
- Weiss, Lawrence A..1990. Bankruptcy resolution: Direct costs and violation of priority of claims, *Journal of Financial Economics* 27: 285-314.
- Wiwattanakantang, Yupana. 1999. An empirical study on the determinants of the capital structure of Thai firms, *Pacific-Basin Finance Journal* 7: 371-403.
- Yingyoskumjoinchai, Varakorn. 2003. The determinants of capital structure in stock exchange of Thailand, Special Project. Faculty of Commerce and Accountancy, Chulalongkorn University.
- Zingales, Luigi.1997. Survival of the fittest or the fattest? Exit and financing in the trucking industry, *NBER Working Paper No. 6273*.
- Zingales, Luigi. 2000. In search of new foundations, *Journal of Finance* 55: 1623-1653.

## **Appendices**



- Warner, Jerold B.. 1977. Bankruptcy costs: Some evidence, *Journal of Finance* 32: 337-347.
- Weiss, Lawrence A..1990. Bankruptcy resolution: Direct costs and violation of priority of claims, *Journal of Financial Economics* 27: 285-314.
- Wiwattanakantang, Yupana. 1999. An empirical study on the determinants of the capital structure of Thai firms, *Pacific-Basin Finance Journal* 7: 371-403.
- Yingyoskumjoinchai, Varakorn. 2003. The determinants of capital structure in stock exchange of Thailand, Special Project, Faculty of Commerce and Accountancy, Chulalongkorn University.
- Zingales, Luigi.1997. Survival of the fittest or the fattest? Exit and financing in the trucking industry, *NBER Working Paper No. 6273*.
- Zingales, Luigi. 2000. In search of new foundations, *Journal of Finance* 55: 1623-1653.

## **Appendices**

## Appendix A

**Table A.1: Comparisons of corporate income tax rate during 1997 and 2001 among G-7 countries and developing countries\*.**

Countries	1997 (%)	1998 (%)	1999 (%)	2000 (%)	2001 (%)
G-7 countries					
Canada	44.60	44.60	44.60	44.60	42.10
France	36.66	41.66	40.00	36.66	35.33
Germany	57.42	56.66	52.31	51.63	39.36
Italy	53.20	41.25	41.25	41.25	40.25
Japan	51.64	51.60	48.00	42.00	42.00
United Kingdom	33.00	31.00	31.00	30.00	30.00
United States	40.00	40.00	40.00	40.00	40.00
Average	45.22	43.82	42.45	40.88	38.43
Developing countries					
Brazil	25.00	33.00	33.00	37.00	34.00
India	35.00	35.00	35.00	38.50	38.85
Jordan	N.A.	N.A.	N.A.	N.A.	N.A.
Malaysia	30.00	28.00	28.00	28.00	28.00
Mexico	34.00	34.00	35.00	35.00	35.00
Pakistan	33.00	30.00	35.00	43.00	34.65
South Korea	30.80	30.80	30.80	30.80	30.80
Thailand	30.00	30.00	30.00	30.00	30.00
Turkey	44.00	44.00	33.00	33.00	33.00
Zimbabwe	N.A.	N.A.	N.A.	N.A.	N.A.
Average	32.72	33.10	32.47	34.41	33.04

\*Sources: KPMG corporate tax rate survey

**Table A.2: Comparisons of the rules of law and the enforcement of law during 1997 and 2001 among G-7 countries and developing countries<sup>a</sup>.**

The second column defines legal origin. The third to the seventh column show the corruption perception index.

Countries	Legal origin	Corruption Perception Index (CPI) <sup>b</sup>				
		1997	1998	1999	2000	2001
G-7 countries						
Canada	English origin	9.10	9.20	9.20	9.20	8.90
France	French origin	6.66	6.70	6.60	6.70	6.70
Germany	German origin	8.23	7.90	8.00	7.60	7.40
Italy	French origin	5.03	4.60	4.70	4.60	5.50
Japan	German origin	6.57	5.80	6.00	6.40	7.10
United Kingdom	English origin	8.22	8.70	8.60	8.70	8.30
United States	English origin	7.61	7.50	7.50	7.80	7.60
Average		7.34	7.20	7.23	7.28	7.36
Developing countries						
Brazil	French origin	3.56	4.00	4.10	3.90	4.00
India	English origin	2.75	2.90	2.90	2.80	2.70
Jordan	French origin	N.A.	4.70	4.40	4.60	4.90
Malaysia	English origin	5.01	5.30	5.10	4.80	5.00
Mexico	French origin	2.66	3.30	3.40	3.30	3.70
Pakistan	English origin	2.53	2.70	2.20	N.A.	2.30
South Korea	German origin	4.29	4.20	3.80	4.00	4.20
Thailand	English origin	3.06	3.00	3.20	3.20	3.20
Turkey	French origin	3.21	3.40	3.60	3.80	3.60
Zimbabwe	English origin	N.A.	4.20	4.10	3.00	2.90
Average		3.38	3.77	3.68	3.71	3.65

<sup>a</sup> Sources: The classification of countries legal origin is gathered by La Porta et al. (1997). The Corruption Perception Indices (CPI) are collected from Transparency International. (<http://www.transparency.org>)

<sup>b</sup> The Transparency International (TI) Corruption Index is an initiative taken by the Berlin-based international non-governmental organization together with Dr. Johann Graf Lambsdorff, an economist with the University of Goettingen. It is an attempt to assess the level at which corruption is perceived by businessmen as impacting on commercial life. A highest score of ten implies an entirely clean country while a lowest score of zero suggests a country where business transactions are entirely dominated by kickbacks, extortion etc.. No country scores either ten or zero.

**Table A.3: Size of Thai financial markets\*** (unit: Billion Baht)

	1997	1998	1999	2000	2001
GDP growth rate (at 1988 prices) (%)	-1.4	-10.5	4.4	4.6	1.9
GDP (current price)	4,740.3	4,626.4	4,637.1	4,916.5	5,123.4
Equities (SET market capitalization)	1,133.3	1,268.2	2,193.1	1,279.2	1,607.3
Bank Loans	6,037.5	5,372.3	5,119.0	4,585.9	4,298.9
Domestic Bond (at par)	546.8	941.3	1,388.6	1,634.8	1,882.9
T-Bills	-	-	25.0	62.0	110.0
Government Bonds	13.8	426.9	587.1	658.7	706.4
State Enterprise Bonds	293.8	300.6	356.4	408.8	416.1
- Guaranteed	247.3	255.7	309.1	345.3	357.3
- Non-guaranteed	46.5	44.9	47.3	63.5	58.8
BOT/FIDF/PLMO Bonds	51.6	36.2	18.1	4.1	112.3
Corporate Bonds	187.6	177.6	402.0	501.2	538.1
Equities/GDP	0.24	0.27	0.47	0.26	0.31
Bank Loans/GDP	1.27	1.16	1.10	0.93	0.84
Domestic Bond/GDP	0.04	0.04	0.09	0.10	0.10

\*Source: Thai Bond Dealers Club (<http://www.thaibdc.or.th>)

**Table A.4: Summary of sample selection criteria**

Numbers in the third to the last row indicate number of firms left with the specific criteria in each year.

Year		1997	1998	1999	2000	2001
Firms listed on the SET	SET-listed	436	419	392	383	389
Non-listed corporations submitted financial statements to MOC	Non-listed	150622	151114	155474	161620	156450
Firms with industry classification and not in the financial industry	SET-listed	249	259	261	258	251
	Non-listed	101007	109696	119710	132275	147147
Firms with positive equity	SET-listed	225	241	238	233	228
	Non-listed	81868	86959	94487	105264	117623
Firms with positive sales	SET-listed	223	238	237	233	227
	Non-listed	60670	63400	68049	75323	84155
Firms with 3-year consecutive financial statements	SET-listed			211	218	210
	Non-listed			46369	50883	55745
Firms that are not bankrupt	SET-listed			210	217	209
	Non-listed			46351	50856	55700
Non-listed firms left						
Financial statements approved by auditors with license from SEC	Non-listed			1783	1971	2135
Paid-up capital $\geq$ 100,000,000 Baht	Non-listed			638	720	785
SET-listed subsample	SET-listed			209	213	209
Non-listed subsample	Non-listed			209	213	209

The process in selecting the sample starts with 436, 419, 392, 383 and 389 public firms that were listed on the SET in 1997, 1998, 1999, 2000 and 2001 respectively. Then, after excluding firms that are classified as financial institutions (those with the first two digit of TSIC industry classification code as 81 and 82) and firms that do not have TSIC industry classification in the BOL database, there are 249, 259, 261, 258 and 251 SET-listed firms left in the subsample in 1997, 1998, 1999, 2000 and 2001 respectively. The SET-listed firms having negative or zero equity will be dropped from the sample since these samples will mislead the interpretation of the leverage ratio. Therefore, the sample size will further reduce to 225, 241, 238, 233 and 228 firms in 1997, 1998, 1999, 2000 and 2001 respectively. Furthermore, only SET-listed firms with positive sales will be included in the sample to exclude the non-

operating firms. Thus, the sample size of the SET-listed firms will be reduced to 223, 238, 237, 233 and 227 firms in 1997, 1998, 1999, 2000 and 2001 respectively. Since the methodology of dynamic capital structure investigation need the 2-year previous leverage ratio of the firm, the SET-listed firms incorporated in this study should have the three-year consecutive financial statements in the database. Therefore, the sample size of the SET-listed firms will be reduced to 211, 218 and 210 firms in 1999, 2000 and 2001 respectively. Then, the defaulted firms designated as dissolved (no matter account unresolved or account resolved), bankrupt or absolute receivership will be deleted from the sample, leaving 210, 217 and 209 non-defaulted firms in 1999, 2000 and 2001 respectively.

Then, we will try to match the non-listed firms with the SET-listed firms specified above. There are totally 150622, 151114, 155474, 161620 and 156450 private corporations registered with the Ministry of Commerce (MOC) and submitted their financial statements in 1997, 1998, 1999, 2000 and 2001 respectively. Then, after excluding firms that are classified as financial institutions and firms that do not have TSIC industry classification in the BOL database, there are 101007, 109696, 119710, 132275 and 147147 private corporations left in the subsample in 1997, 1998, 1999, 2000 and 2001 respectively. Then, the sample size will further reduce to 81868, 86959, 94487, 105264 and 117623 firms in 1997, 1998, 1999, 2000 and 2001 respectively after dropping firms having negative or zero equity. Furthermore, the limitation of positive sales will reduce the sample size to 60670, 63400, 68049, 75323 and 84155 firms in 1997, 1998, 1999, 2000 and 2001 respectively. With the need of three-year consecutive financial statements, the sample size of the non-listed firms will be reduced to 46369, 50883 and 55745 firms in 1998, 1999, 2000 and 2001 respectively. Then, the defaulted firms designated as dissolved (no matter account

unresolved or account resolved), bankrupt or absolute receivership will be deleted from the sample, resulting in 46351, 50856 and 55700 non-defaulted firms in 1999, 2000 and 2001 respectively.

Since the financial statement of the listed firms have to be examined by the auditors permitted by the office of the Securities and Exchange Commission (SEC), this study investigates only private corporations which their financial statements were approved by auditors permitted by the office of the SEC. Therefore, the potential problems associated with different accounting standards between listed and non-listed firms will be controlled. At this point, the sample size will be reduced to 1783, 1971 and 2135 firms in 1999, 2000 and 2001 respectively. However, in the sample period, the SET have set the criteria of 100 million baht minimum paid-up capital after IPO for firms that would like to be listed, although the minimum paid-up capital have raised to be 200 million baht nowadays. In order to be able to compare the capital structure decisions between listed and non-listed firms, we exclude the non-listed firms having less than 100 million baht paid-up capital. With these sample selection criteria, the private firms in the sample can be assumed with the intentions not to be listed. Then, the sample size will be reduced to 638, 720 and 785 firms in 1999, 2000 and 2001 respectively.

Finally, after controlling the industry classification, each non-listed firms to be matched with SET-listed firms must have the least differences in total assets. In total 631 SET listed observations (firms-year) and 631 non-listed matched observations (firms-year) are used in the sample. In detailed, each subsample consists of 209, 213 and 209 firms in 1999, 2000 and 2001 respectively.





## Biography

My name is Mr. Dhanawat Siriwattanakul. I was born on December 31<sup>st</sup>, 1972 in Bangkok. I have graduated from the faculty of engineering majoring in civil engineering with the second class honour of bachelor of engineering in 1993. I have graduated from Sasin, Chulalongkorn with distinction of the master of business administration majoring in finance and marketing in 1998. Now, I am lecturer at the department of finance of the faculty of business administration of Kasetsart University.