



The Fifth International Conference on
Entrepreneurship and Business Management

PROCEEDING

ISBN No. 978-979-9234-59-9

**“Entrepreneurship
and Management
in Turbulent Global Environment:
From Start-Up
to Global Business”**

**Tainan, | 17-18
Taiwan | NOV 2016**

Conference Venue:
**International Conference Hall, 10F
Library, Kun Shan University**

Organized and hosted by:



 <http://icebm.untar.ac.id>

PREFACE

The International Conference on Entrepreneurship and Business Management (ICEBM) is a conference that aims to facilitate the exchange of best practices information and knowledge dissemination in the field of entrepreneurship, business, and management. The ICEBM is organized by Tarumanagara University and collaborating universities as well as related institutions. The conference provides the forum for various groups of professionals including practitioners, researchers, academicians, practitioners, government officials, individuals in society, and graduate/ postgraduate students.

Following the success of the Fourth ICEBM that was held in Bangkok, this year the Fifth ICEBM is held in Tainan in collaboration with Kun Shan University, Ciputra University, Udayana University, Kristen Krida Wacana University and Trisakti School of Management. The main theme of the Fifth ICEBM is “Entrepreneurship and Management in Turbulent Global Environment: From Start-Up to Global Business”.

The turbulent global environmental forces are constantly presenting new opportunities and threats. Entrepreneurs and managers are increasingly taking a global view of the company’s market opportunities and competitions. Mark Zuckerberg, Founder of Facebook, embraced change, created new solutions to unmet needs and managed to shape the incredible rocket growth from start-up to global giant. A primary feature of the conference is to consider the dynamics of entrepreneurship and management in the context of globalization. This posits challenges toward professionals and entrepreneurs in finding ways to vitalize the business development in the turbulent global environment.

In this Fifth ICEBM 2016, there were 126 abstracts received from the participants and 84 full papers were reviewed by ICEBM Scientific Committee. This committee comprises of 46 reviewers from 13 different institutions and 7 countries. The 84 full papers were received from 45 different institutions that came from 9 different countries: Brazil, China, Ethiopia, India, Indonesia, Malaysia, Philippines, Sweden, and Taiwan. A total of 75 out of 84 papers have been accepted. Reviewing process in this year is similar to last year where we applied a double blind peer-review process and scientific committee reviewed not just the abstracts received but also the full papers. These papers address diverse areas of application in entrepreneurship and business management. Starting from the field of accounting and finance, economics, marketing, and so forth through addressing a wide variety of theoretical and methodological approach.

This year papers that have been published to the book of proceedings will be further evaluated for possible submission to the special issue of Asia Pacific Management Review (APMR) and ASEAN Marketing Journal (AMJ). We hope that this book of proceedings could promote and stimulate further the discussion of practitioners and academics especially on business challenges and threats in turbulent global environment.

Finally, we would also like to thank all the contributing authors for their valuable work in supporting the success of the Fifth ICEBM. Thank you very much for your contribution.

Conference Chair

**Dr Keni
Prof. Chin-Chiuan Lin**

OPENING SPEECH FROM THE RECTOR OF TARUMANAGARA UNIVERSITY

Distinguished guests, ladies and gentlemen:

I am pleased to have the opportunity of addressing this important conference, widely known as the International Conference on Entrepreneurship and Business Management (ICEBM for short). After its first successful arrangement in Jakarta, followed by Bali, Penang, and Bangkok, this year's conference in Tainan, Taiwan, commemorates the fifth anniversary of the event, and I am immensely grateful for having found to date the Conference a continued success.

The purpose of the seminar actually is to provide a forum that facilitates the exchange of knowledge and experience of both practitioners and academics in entrepreneurship, business, and management. Here they can mutually share their findings. I would like to further remind all of us about the importance of the current Seminar, considering the chosen topic "Entrepreneurship and Management in Turbulent Global Environment: from Start-Up to Global Business." Basically the term start-up is still quite debated. The US Small Business Administration describes start-up as a "business that is typically technology oriented and has high growth potential." It is considered that the only essential aspect of start-up is growth! Because of this "growth potential," a start-up is able to provide its goods and services to a wider or larger market. As this happens, a start-up has no other choice but explores an unknown area or uses an innovative business model, trying to disrupt existing markets. This enables a start-up to enter a global business. From start-up to global business; one can imagine how difficult or turbulent is when a start-up involves globally or cross-border transactions of resources between two or many nations. For this reason, this Seminar actually is not just important but is even necessary in particular for those who try to understand and anticipate any possible threats and opportunities, which come along with the rapid change in the global environment.

Distinguished guests, ladies, and gentlemen:

I would like to conclude with the following notes. Firstly, while we organize the event co-hosting with Kun Shan University, this year's conference becomes special for the support of 4 other universities: Universitas Udayana, Universitas Kristen Krida Wacana, Ciputra University, and Trisakti School of Management (TSM). They provide assistance in the preparation and execution, leading this event to a success. I am thankful for their kind contribution. Secondly, our thanks also go to Kun Shan University for its utmost support and wonderful cooperation. I sincerely thank the Faculty of Economics of Tarumanagara University, in particular the organizing committee for their hard-work and dedication, making this important conference successfully possible. Finally, I would like to express my gratitude for the presence of distinguished speakers and a number of active participants from several countries. I wish you all a productive and fruitful seminar. Thank you.

Prof. Dr. Agustinus Purna Irawan

OPENING SPEECH FROM THE PRESIDENT OF KUN SHAN UNIVERSITY

First of all, it is an honor and a pleasure to hold the International Conference on Entrepreneurship and Business Management (The Fifth ICEBM 2016). I and staff of Kun Shan University to interact with all of you distinguished scholars and business elites at this marvelous conference.

In 2016, the government of R.O.C. (Taiwan) proposed a "new southward policy" not only to revive the foundation of the "go south" policy, but also to build new social and educational ties. Specifically, the policy focusing on strengthening relations between Taiwan and South and Southeast Asian nations would be set up. The policy would not be confined to trade and investment but would also include people-to-people, cultural, educational, research and other types of exchanges. This policy shows commitment to make Taiwan more ASEAN-oriented. Clearly, more business knowledge and understanding of South and Southeast Asian countries is necessary to Taiwanese researchers and business men/women. Therefore, it is an honor to host the Conference working together with the excellent partners of Universities in ASEAN. I look forward the Conference would become the best forum to share ASEAN-related knowledge. After the Conference, I sincerely hope that KSU will build a best academic and Business partners with the Tarumanagara University (UNTAR).

Finally, I highly recommend that please take the break to explore this amazing city of Tainan. Enjoy the Conference and take advantage of the opportunities it offers.

Prof. Yan-Kuin Su

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**DOES THE AGENCY COST MEDIATE THE INFLUENCE OF DETERMINANTS OF
CAPITAL STRUCTURE ON THE CORPORATE DEBT RATIO?
(AN EMPIRICAL STUDY OF THE DIFFERENCES IN DEBT RATIO BETWEEN THE
LISTED COMPANIES OF MANUFACTURING SECTOR AND THE NON-
MANUFACTURING SECTOR IN INDONESIAN STOCK EXCHANGE)**

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Abstract

The purpose of this study is to investigate the mediating effect of agency cost toward the capital structure differences between the industrial companies of manufacturing sector and non-manufacturing sector listed in the Indonesian Stock Exchange (IDX). This study proposed descriptive research by applying path analysis to analyze mediating effect on influences of capital structure determinants toward debt ratio. The results depicted that the insider ownership and dividend yield in both sectors were not significant have positive effect on the agency cost. While growth opportunity and firm size significant positively effected on agency cost. The agency cost has significant positive effect on debt ratio. Based on the result of path diagram, this study found that the agency cost mediated the effect of determinants of capital structure on the corporate debt ratio. This study concluded that there were significant differences of agency cost effect on debt ratio between the companies in both sectors. The effect of intervening variable of agency cost on debt ratio of manufacturing sector was higher than the non-manufacturing sector. Debt ratio in both sectors has no significant differences.

Keywords: Agency, Debt Ratio, Dividend, Growth Opportunity, Path Analysis

Introduction

Generally to achieve high firm value investors hand over the management to the agent business. To increase the value, managers often behave as opportunistic agents to make decisions that are risky by creating debt that causes high financial leverage for the company's capital structure (Ross *et al*, 2009; and Booth *et al*, 2014). The value of the firm that is affected by the distribution of ownership among insiders who enjoy the benefits and outsiders might not benefits has been expressed by Jensen & Meckling (1976). In the framework of their thinkings they showed that increasing of insider ownership will reduce debt financing and agency conflict. Lumbantobing (2015) showed that firm size and growth opportunities have significantly positive effect on corporate debt policy. The larger firm size and growth opportunities there will be more funds used to run the company's operations and realize the growth opportunities of investment through external financing. Increasing external funds when firm size and investment growth are more higher will increase the agency conflict between shareholders and managers. Commonly to reduce the agency conflict, companies use dividend policy by dividend payment to reduce dicritioner cost that available to the managers (Crutchley & Hansen; 1989). Based on the gap problem of the contradiction theories and empirical findings from various studies of capital structure, the proposed problem statement in this study is "Does the agency cost mediate the influence of determinants of capital structure toward the differences in debt ratio between industrial companies of manufacturing sector and non-manufacturing sector which listed in Indonesia Stock Exchange?"

Purpose of the Study

The special purpose of this study is to investigate and test the mediating effect of agency cost on the influences of determinants of capital structure toward the differences in debt ratios between companies of manufacturing sector and non-manufacturing sector listed in the Indonesian Stock Exchange.

Literature Review

Crutchley & Hansen (1989), Chen & Strange (2005) revealed that agency problem arises because of the separation between the owner as a shareholder with the manager as an agent. Managers often act as an agent of a personal interest rather than the interests of the company so that raises organizational conflict. The organizational conflict incurs costs that are resolution costs to the conflict of interest between principal and agent, which called as agency cost. Ross *et.al* (2009) defined that agency costs are all kinds of fees are borne by shareholders in order to prevent or surpress the agency problems and maximize shareholders' wealth. To motivate the managers perform their functions properly, the managers

should be given incentives and adequate supervision. Jensen & Meckling (1976) argued that agency cost can be reduced if managers have equity or shares ownership in company. Equity ownership by the managers is needed for all decisions taken by the managers do not only responsible to the owner of the company, but also by their selves. Lumbantobing (2008) quoted Jensen (1989) and Damodaran (2001) revealed that agency conflict can be suppressed by increasing debt so that decreases waste that can be done by managers. The use of debt makes the company obliged to pay interest and principal payable periodically, so that reduce the managers willingness to use free cash flow of existing funds in the company to finance unprofit activities.

Jensen and Meckling (1976) argued that the distribution of ownership between insider ownership and outsider can affect the value of the company. The increase in insider ownership will reduce the agency conflict through the reduction of incentives in taking advantage. The greater insider ownership, the differences of interest between shareholders and company managers will be lower, they are acting more cautious in taking a decision. Lumbantobing (2015) quoted Chen & Strange (2005) revealed that insider ownership has a positive relationship with the capital structure, which impacts on the efficiency of the debt ratio has positive influence on managerial share ownership.

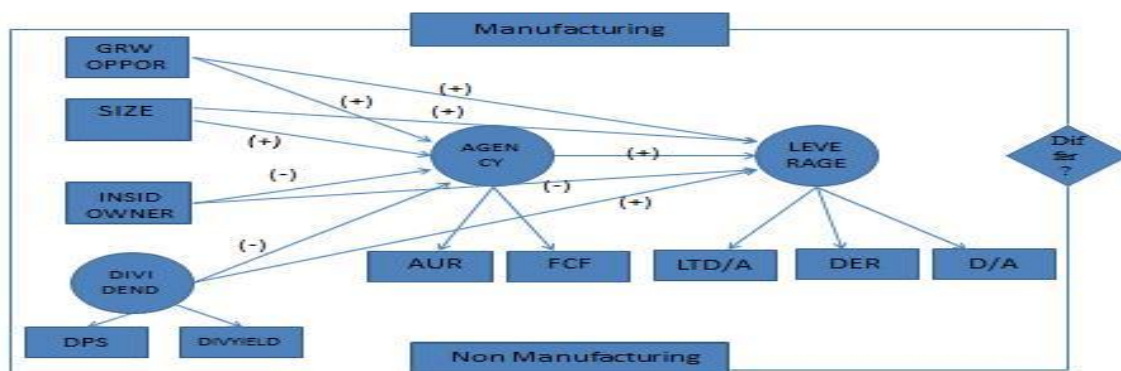
Firm size indicates the amount of total assets, sales and market capitalization. Lumbantobing (2008) quoted Barney (2002) who argued that large firms were diversified tend to take advantage of high debt capacity. To obtain additional funding from the creditor without violating debt agreements, the managers raise the political costs on the disclosure of financial statements. This led to increase agency costs along with increasing of the firm size.

Jensen (1986) as quoted Fatmasari (2011) stated that firms with high investment opportunities tend to have a high growth rate, active investing, has a lower free cash flow and a low assets in place. In such condition the company will tend to use external funding sources in the form of high debt. Spend these assets are assumed to be lead agency costs on companies, where managers can behave wasteful in investing the cash available, as described Myers & Majluf (1984) in the pecking order theory.

Dividend policy plays an important role in determining the value of the company. Investors will feel more secure to obtain current cash dividends now more certain than waiting for future cash earned from risky capital gains (Gordon, 1959 in Lumbantobing, 2008). Further, Rozeff (1982) and Easterbrook (1984) explained that the dividend payments will reduce the sources of funds controlled by managers, thereby reducing agency costs. Although the dividend payment can reduce agency conflict, but on the other hand can lead to charges. Costs will arise when a company pays high dividends while the cash flow is obtained from internal sources is no longer adequate, prompting the company to meet the needs of debt funds (Lumbantobing, 2008).

Theoretical Framework and Hypotheses

Based on the framework constructed of theoretical concepts and review of the literature, it can be constructed a building on the model of empirical research studies on the pictographs are as below:



Source: The proposed empirical research model was developed in this study

Research Hypotheses are as below:

- H1: Agency cost mediates positive the influence of growth opportunity toward debt ratio
- H2: Agency cost mediates positive the influence of firm size toward debt ratio
- H3: Agency cost mediates negative the influence of insider ownership toward debt ratio
- H4: Agency cost mediates positive the influence of dividend toward debt ratio
- H5: The mediating effect of agency cost on the effects of determinants of capital structure toward debt ratios in the industrial companies of both sectors are different

Materials and Methods

The objects of this research were the listed companies which have been classified to the industrial sector of manufacturing and non-manufacturing sectors in Indonesian Stock Exchange (IDX), period of year 2012 to 2014. The variables in this study consist of Independent variables: (a) Dividen Yield expresses ratio of how much the company paid a dividend every year to a price per share, (b) Firm Size expresses as size of assets be measured by logarithm natural of assets total, (c) Insider Ownership is the number of shareholders, directors or executive officers of the company has a significant proportion of the company's shares, and (d) Growth opportunities describes the growth of corporate investment be measured from asset growth from year to year. Intervening variable is a proxy for agency costs measured as asset utilization ratio that describes the productivity achieved by management in acquiring the company's sales. The more effective use of the asset management company to achieve annual sales will be getting a bit of extra costs incurred for monitoring and controlling (Lumbantobing, 2008). And as Dependent variable is debt ratio measured as debt to assets that describes the ratio of total debt to assets total.

Data Analysis Techniques

Modeling in this study using multiple linear regression analysis and path analysis. The structural equation models as follows:

Structural equation 1: Agency cost model

$$AC = \alpha_1 GO + \alpha_2 SIZE + \alpha_3 IO + \alpha_4 DIV + \alpha_5 D_1 + \alpha_{15} GO.D_1 + \alpha_{25} SIZE.D_1 + \alpha_{35} IO.D_1 + \alpha_{45} DIV.D_1 + \varepsilon_1$$

which AC= agency cost; GO= growth opportunity; SIZE= size of assets, IO= insider ownership; DIV= Dividen; D₁= Dummy for industry (D₁ = 1 manufacturing, and D₁ = 0 non-manufacturing)

Structural equation 2: Debt ratio model

$$LEV = \beta_1 GO + \beta_2 SIZE + \beta_3 IO + \beta_4 DIV + \beta_5 AC + \beta_6 D_1 + \beta_{16} GO.D_1 + \beta_{26} SIZE.D_1 + \beta_{36} IO.D_1 + \beta_{46} DIV.D_1 + \beta_{56} AC.D_1 + \varepsilon_2$$

which LEV symbol for leverage or debt ratio

To analyze direct and indirect effects of determinants of capital structure toward debt ratio through intervening variable, expressed by path analysis as below:

$$AC = \delta_1 GO + \delta_2 SIZE + \delta_3 IO + \delta_4 DIV + \varepsilon_1 \quad \text{and} \quad LEV = \gamma_1 GO + \gamma_2 SIZE + \gamma_3 IO + \gamma_4 DIV + \gamma_5 AC + \varepsilon_2$$

EFFECT	GO → AC → LEV	SIZE → AC → LEV	IO → AC → LEV	DIV → AC → LEV
Direct	γ_1	γ_2	γ_3	γ_4
Indirect	$\delta_1 \gamma_5$	$\delta_2 \gamma_5$	$\delta_3 \gamma_5$	$\delta_4 \gamma_5$
Total	$\gamma_1 + \delta_1 \gamma_5$	$\gamma_2 + \delta_2 \gamma_5$	$\gamma_3 + \delta_3 \gamma_5$	$\gamma_4 + \delta_4 \gamma_5$

Data Analysis

Based on regression output of SPSS 20 statistical software package were used to analyze the data showed the results as below:

Estimate equation model 1 (agency cost) based on industry different:

$$AC = -0,071GO - 0,088SIZE + 0,138IO - 0,037DIV + 0,130D_1^{**} - 0,316GO.D_1 - 0,095SIZE.D_1 - 0,128IO.D_1 - 0,092DIV.D_1$$

Estimate equation model 2 (leverage) based on industry different:

$$LEV = -0,041GO - 0,111SIZE - 0,385IO + 0,006DIV + 0,308AC - 0,027D_1 - 0,161GO.D_1 + 0,263SIZE.D_1 + 0,434IO.D_1 + 0,111DIV.D_1 + 0,294AC.D_1$$

The effect of Growth Opportunity, Firm Size, Insider Ownership, and Dividend to Leverage which mediated by Agency Cost:

EFFECT	GO – LEV	SIZE – LEV	IO- LEV	DIV- LEV
Direct	-0,209**	0,068	-0,008**	0,080
Indirect	-0,2054	-0,07384	0,026	-0,04212
Total	-0,4144	-0,00584	0,018	0,03788

Note: **) significant at alpha level 0,05

Discussion of Results

Growth Opportunity

The results of model estimation equation agency cost shown that growth opportunities significantly negative effect on the debt ratio. These results provided evidence supporting the results of a study Fatmasari (2011) and Mao (2003),

which revealed a negative influence the growth opportunities toward debt ratios, where a company with high growth opportunities tends to use lower debt ratios.

Firm Size

The test showed that firm size has significantly negative effect on AUR, thus the larger firm size, agency cost is increasing. This result provided evidence supporting the findings of Canback (2006) and Lumbantobing (2008), which revealed that agency cost increases with firm size. While testing the model estimation showed that the debt ratio of the firm size was not significant positive effect on the debt ratio. These results did not support the findings of Lumbantobing (2008) and Homaifar *et al* (1994) which stated that the large companies that have the ability to return the debt to earn the trust of creditors to issue debt in large quantities, so the larger firm size of the company, debt capacity obtained more increasing. Not enough evidence to show that companies in Indonesia which have a large firm size will use debt as an alternative funding.

Dividend

The results of this study showed dividends were not significantly affect to agency cost that has implications not enough to confirm the opinion of Jensen and Meckling (1976), Rozeff (1982), and Easterbook (1984) which stated that the dividend be used to reduce the agency conflict between managers and shareholders. The results of this study also demonstrated that dividends has significantly positive effect on the debt ratio. These findings confirmed the results of the study Lumbantobing (2008) which mentioned positive influence on the dividend policy where the debt ratio higher, retained earnings that are used for the payment of dividends, while corporate investment remains financed by debt. Another possibility retained earnings were used for the payment of dividends, while additional debt for monitoring costs in an attempt to discipline the managers.

Insider Ownership

The results of this test has not been enough evidence showing that the administration shares the manager will increase agency conflicts which then increases the agency cost. Results of testing the model equations debt ratio also showed that insider ownership has no significantly affect to the debt ratio. These findings did not enough provide evidence supporting the argument of Jensen and Meckling (1976) who argued that greater insider ownership then the difference between the interests of shareholders with the company managers would be lower. The results of this study also did not support the findings of Chen & Strange (2005), and Lumbantobing (2015) which revealed that insider ownership has a positive relationship with the debt ratio, which impact the efficiency of the debt ratio positive effect on share ownership managerial.

Agency Cost

Results of testing debt ratio model in this study showed that AUR significant positively effect on debt ratio. In other words, the agency charges a significant negative effect on the debt ratio. These findings were consistent to the results of studies Jensen (1989) and Lumbantobing (2008), which revealed that the influence of asymmetric information tends to push the pecking order behavior so companies are profitable and face agency costs tend to use retained earnings as a first priority funding, reducing the ratio of corporate debt. These findings explained indication of companies in Indonesia with high agency costs using high debt in an effort to reduce its agency conflict (as disclosed Damodaran, 2001).

Testing the mediating effect the agency cost on influence of determinants of capital structure to debt ratio.

Based on the above table indicated that the agency costs significantly mediate the positive effect of the growth opportunities to debt ratio. The positive effects on the growth opportunities, the company debt ratio will be positive when the company's agency cost increases. These findings supported the study of Jensen (1986), and Wahyudi (2005) which stated that companies with high growth rate of investment opportunities tend to use external funding sources in form of high debt. Spending these assets can lead agency costs on companies, where managers can behave wasteful to invest available cash. As for the indirect effect of firm size and dividend on the ratio of debt through the agency cost indicated that the agency cost was not significantly mediate the effect of firm size and the ratio of dividends to the company's debt ratios. For insider ownership variables, the results indicated that the agency cost significantly mediates the negative effect of insider ownership to debt ratio of the company. The increase in insider ownership will reduce the agency conflict in which lower differences of interest between shareholders and managers. The managers will act more cautiously in making decisions, including the use of debt.

Dummy

The test results estimation equation model of agency cost showed a significant effect on agency cost manufacturing than non-manufacturing companies. However, there was not enough evidence of differences in the effect of firm size, insider ownership and dividends to the agency cost between manufacturing and non-manufacturing sectors. As for the variables of growth opportunities, there are significant differences in growth opportunities to influence agency costs at

manufacturing and non-manufacturing sectors. This shows the effect of growth opportunities on agency cost in non-manufacturing sector was higher than the manufacturing sector. Testing models debt ratio by industry showed there was not enough evidence to debt ratio differences between manufacturing and non-manufacturing. But there were significant differences in the effect of agency costs between manufacturing and non-manufacturing against the debt ratio. These findings suggested the influence of agency cost to the debt ratio on manufacturing sector was higher than the company's non-manufacturing sector.

Conclusions

These results indicated opportunities for growth and firm size significantly positive effect on the agency cost, while insider ownership and dividends were not significantly affect to the agency cost.

The results demonstrated the growth opportunities and agency costs significant negatively effect on the debt ratio, while the dividend significant positively effect toward the debt ratio. However, these findings have not been sufficient evidence showed that companies with firm size and a high proportion of insider ownership would have a high debt ratio as well.

The results indicated that the agency costs significantly mediate the direct effect of growth opportunities, firm size, insider ownership and dividend toward the debt ratio. With the indirect relationship through the agency cost is low, the increase in growth opportunity, firm size, the dividend will reduce the ratio of corporate debt. While the influence of insider ownership will improve the ratio of corporate debt.

The results showed differences in the effect of agency costs for differences debt ratios manufacturing company with a non-manufacturing company. Agency costs more significant effect on the debt ratio of manufacturing sector than non-manufacturing sector. Effect of growth opportunities on agency cost non-manufacturing companies was greater than the cost of agency manufacturing companies. However, this study has not been enough research evidence indicates a significant difference corporate debt ratio of both sectors industrial companies.

Recommendations

These results revealed that the positive effects of firm size on the debt ratio will be negative when agency costs increase, so does the findings that show the negative effects of growth opportunities and dividend against the debt ratio will be negative when the agency cost decreases; the recommendations can be given to the study this is for large companies manufacturing and non-manufacturing that want to lower the ratio of debt need to reduce their agency costs when the conditions of the companies gained high growth opportunities. Thus, maximization the value of the company through optimization of excellent capital structure based on the agency theory can be realized.

References

- Barney, Jay (2002), *Gaining and Sustaining Competitive Advantage*. Second Edition. Prentice-Hall
- Chen, Jian., Roger Strange (2005). The Determinants of Capital Structure: Evidence from Chinese Listed Companies. *Economic Change and Restructing*, Vol 38, 11-35.
- Crutchley, C.E. and R.S.Hansen (1989). A Test of the Agency Theory of Managerial Ownership, CorporateLeverage, and Corporate Dividends. *Financial Management* Vol 18, pp.36-46.
- Damodaran, Aswath (2001). *Corporate Finance Theory and Practice*, New York: Willey & Sons.
- Easterbrook, F.H. (1984). Two Agency-Cost Explanations of Dividends. *American Economic Review*. Vol.74 No.4, pp.650-659.
- Euis Soliha dan Taswan (2002). Pengaruh Kebijakan Hutang Terhadap Nilai Perusahaan Serta Beberapa Faktor yang Mempengaruhinya. *Jurnal Bisnis dan Ekonomi*, September Vol. 9 No. 2, page 120-148.
- Fatmasari, Rinni (2011). Hubungan Antara Growth Opportunity Dengan Debt Maturity dan Kebijakan Leverage Serta Fungsi Covenant Dalam Mengontrol Konflik Keagenan Antara Shareholders Dengan Debtholders. *Buletin Ekonomi dan Perbankan*, January, page. 320-337.
- Gitman, Lawrence J. (2003), *Principles of Managerial Finance*, Edisi 10, USA: Person Education, Inc.
- Homaifar, Ghassem, et al (1994). An Empirical Model Of Capital Structure Some of Evidence. *Journal of Business Finance and Accounting*, Vol 21, pp. 1-14.
- Jensen, G.R., D.P. Solberg, and T.S. Zorn (1992), Simultaneous Determination of Insider Ownership, Debt and Dividend Policies. *Journal of Financial and Quantitative Analysis*. Vol.21, pp.131-144.
- Lumbantobing, Rudolf (2008), *Studi Mengenai Perbedaan Struktur Modal Perusahaan Penanaman Modal Asing Dengan Perusahaan Penanaman Modal Dalam Negeri yang Go Public di Pasar Modal Indonesia*. Dissertation, University of Diponegoro, Semarang.

- Lumbantobing, Rudolf (2015). Belajar Dari Realitas Empiris Teori Dasar Struktur Modal Dan Teori Kontingensi Pada Perusahaan Terbuka Untuk Membangun Daya Saing Perusahaan Melalui Pengembangan Ekonomi Kreatif. *Proceeding Seminar dan Call For Papers*, Ukrida National Conference, Belitung, 3-4 September 2015, 227-242.
- Mao, Connie X. (2003). Interaction of Debt Agency Problems and Optimal Capital Structure: Theory and Evidence. *Journal of Financial and Quantitative Analysis*, Vol 38, No 2, pp 339-423.
- Michael C. Jensen (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Take Overs. *Harvard Business School*, May Vol 76 No. 2, pp. 323-329.
- Michael C. Jensen dan William H. Meckling (1976). Theory of The Firm, Managerial Behaviour, Agency Cost and Ownership Structure. *Journal of Financial Economics*, October Vol. 3, No. 4, pp. 305-360.
- Myers, Stewart C., and Nicholas S Majluf (1984). Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have. *Journal of Financial Economics*, Vol. 13, pp. 187-221.
- Rozeff M (1982). Growth Beta and Agency Cost as Determinants of Dividend Payout Ratios. *Journal of Financial Research*, Vol 5, pp. 249-259.
- Ross, Stephen A., Randolph W. Westerfield., Jeffrey Jaffe., Bradford D. Jordan (2009), *Modern Financial Management*, International Edition. Singapore: McGraw-Hill Education.
- Staffan Canback, Philip S, David Price (2006). Do Diseconomies of Scale Impact Firm Size And Performance? A Theoretical And Empirical Overview. *Journal of Managerial Economics*, February Vol. 4 No. 1, pp 27-70.
- Stice, Eric Ragan, Jennifer Randall, Patrick (2004). Prospective Relations Between Social Support and Depression: Differential Direction of Effects for Parent and Peer Support? *Journal of Abnormal Psychology*, February Vol 113(1), pp. 155-159.
- Wahyudi, Sugeng (2005), *Pergeseran Strategi Pengembangan Bursa Efek Jakarta (BEJ): Pertumbuhan Liberal Menuju Pertumbuhan Yang Berkeadilan*. Professorship inauguration speech in Management Science at Faculty of Economics, University of Diponegoro, Semarang: December 15, 2005.

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ISBN 978-979-9234-59-9



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