

Differences in Capital Structure: Strategies in Christian-managed Firms Compared to Secular Firms

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요약

박정윤 교수

본 논문은 기존의 자본구조이론을 검토한 후에 성경적인 차입원리에 기초하여 크리스천이 경영하는 기업의 자본구조는 비 크리스천이 경영하는 기업의 자본구조와는 차이가 있을 것이라는 가설을 설정하고 미국 크리스천 경영기업을 대상으로 설문조사를 통하여 가설을 검증하였다.

비록 두 집단간에 통계적으로 유의한 자본구조의 차이는 발견할 수 없었으나 일부 크리스천이 경영하는 기업은 무차입정책을 추구하고 있는 것으로 조사되었다. 또한 두 집단간의 투자성과를 비교한 결과 1987년에는 크리스천 경영기업이 비 크리스천이 경영하는 기업보다 더 높은 투자성과를 보였지만 두 집단간의 통계적으로 유의한 투자성과의 차이는 발견할 수 없었다. 기업의 주된 목표가 주주의 부를 극대화하는 것으로 알려져 있으나 표본으로 사용된 미국 크리스천 경영기업의 대부분이 그리스도의 영광을 위해 경영의 목표로 삼고 성경적인 원리에 기초하여 기업을 경영하는 것으로 확인되었다.

I . INTRODUCTION

Every business needs capital to keep its operation going. Capital is required for inventory and accounts receivable, for fixed assets such as plant and equipment, and other miscellaneous investments. As a result, most firms rely on a mixture of debt and equity capital to finance their operations. This mixture defines the firms' capital structure. In examining capital structure, one finds that there is no one theory of capital structure. If a firm uses debt to finance some portion of its operation, it is said to be a levered firm, and if it has no debt, then it is an unlevered firm. Therefore, an important decision that the firm must make is whether or not it should use debt, and if it uses debt, how much debt should it use. In other words, how do firms choose their capital structure? The answer appears to be, "No one knows." That is why it is called the "capital structure puzzle." It is true that very little is known about capital

structure. However, many theories that provide helpful insights have evolved to explain capital structure.

One of the earliest writings on this subject was David Durand's study in 1952.¹ In his work, he discussed three approaches that had been identified up to that time: the Net Income (NI) approach, the Net Operating Income (NOI) approach, and the middle ground or traditional approach. The differences between the approaches are

1. David Durand, "Costs of debt Equity Funds for Business: Trends and Problems of Measurement," *Conference on Research in Business Finance*, (New York: National Bureau of Economic Research, 1952).

based on differing assumptions on how investors view the firm's debt and equity. The NI approach assumes a constant cost of debt and therefore that the firm's average cost of capital decreases with debt. The NOI approach regards the use of debt as increasing the risk to equity cash flows and, if true, then capital structure decisions are unimportant. The traditional model suggests that up to some moderate amount of debt risk on debt or equity do not noticeably increase and are constant to a point, but beyond that point both debt and equity cost will begin to rise sharply. Therefore the traditionalists believe there is some optimum level of debt that maximizes the value of the firm.²

Myers, in his article, identified two ways of thinking about capital structure.³ One is the static tradeoff framework. In this concept, the firm is viewed as setting a target debt-to-value ratio and gradually moving towards it. The second approach is the old-fashioned pecking order framework, in which the firm prefers internal to external financing, and prefers debt to equity if it issues securities. However, none of these methods seem to completely explain actual financing behavior.

There is another way of thinking about capital structure; it is a concept based on biblical perspectives. This biblical perspective is different from the secular (or non-biblical) ways of thinking about

2. Eugene F. Brigham & Louis. C. Gapenski, *Financial Management: Theory and Practice* (5th ed.), (New York: Dryden Press, 1988), 373-375

3. Stewart, C. Myers, "The Capital Structure Puzzle," *The Journal of Finance*, Vol. XXXIX, No. 3, (July, 1984), 576.

capital structure. Therefore, the financing behavior of those firms that do not follow biblical financial direction will be different from those of Christian-managed firms whose management believes that such biblical

financial direction should apply to the financial affairs of the management of the firm. There are several biblical principles of debt financing and capital structure that can be identified. The question that arises is whether Christian-managed firms, as a result of following these biblical principles, behave differently in creating and controlling financial structure than the firms that do not apply these principles.

In Section II, the current theories of capital structure, which the authors believe represent secular views, will be examined. Several biblical principles regarding debt are then examined in Section III. In Section IV, several hypotheses are established concerning the relationship between the secular and biblical viewpoints. Those hypotheses are tested and the results evaluated in Section V. Finally, in Section VI, conclusions concerning the tests and hypotheses are made and recommendations for further research are suggested.

II. TRADITIONAL THEORIES OF CAPITAL STRUCTURE

The tradeoff theory combines Modigliani and Miller's (MM) insights with analysis of taxes and financial distress. Optimal capital structure is explained by tradeoff between the costs and benefits of utilizing debt versus equity in the firm's capital structure. The possible benefits are (1) a tax shield provided by interest expenditures, (2) advantages of

signaling, and (3) the capacity to collateralize loans. The costs of debt include (1) direct bankruptcy costs and (2) agency costs.

The pecking order theory is as follows⁴:

1. Firms prefer internal financing.
2. They adapt their target dividend payout ratios to their investment opportunities, although dividends are sticky and target payout ratios are only gradually adjusted to shifts to the extent of valuable investment opportunities.
3. Sticky dividend policies, plus unpredictable fluctuations in profitability and investment opportunities, mean that internally-generated cash flows may be more or less than investment outlays. If they are less, the firm will first draw down its cash balance or marketable securities portfolio before seeking external financing.
4. If external financing is required, firms issue the safest security first. That is, they start with debt, then possibly hybrid securities such as convertible bonds or preferred stock, and then will sell common equity as a last resort.

People feel comfortable with the tradeoff theory of capital structure because it sounds plausible and yields an interior optimum debt ratio. In addition, it rationalizes “moderate” borrowing. The tradeoff theory of capital structure successfully explains many industry differences in capital structure, but it does not explain why the most profitable firms

4. Ibid. 581.

within an industry generally have the most conservative capital structure.⁵

The pecking order theory explains why the most profitable firms generally borrow less. Neither of the two theories, however, appears to be consistent with what the Bible says about debt financing.

III. BIBLICAL PRINCIPLES OF DEBT FINANCING

The concept of debt is very similar to that of “trespass” in the Bible. The Greek “opheilema” is used to mean both debt and sin. It means being in debt to, or having wronged another, and not yet made amends. There are several biblical principles regarding debt financing.

Principle 1: Both borrowing and lending are permitted in scripture, but borrowing is discouraged.

Some Christian teachers have taken the position that all borrowing is prohibited based on Romans 13:8: “Owe nothing to anyone except to love one another; for he who loves his neighbor has fulfilled the law.” Others, however, disagree with this position and hold that Romans 13:8 does not mean that Christians should never borrow anything. They believe Paul was arguing that all men should pay their taxes and debts and show respect to government officials.

Principle 2: The debtor is in servitude to the one who lends to him.

5. Richard A. Brealey and S. C. Myers, *Principles of Corporate Finance*, 5th ed. 1996, 497.

The book of Proverbs reads: "The rich rules over the poor, and the borrower becomes the lender's slave." Even if a debt is current (all payments up to date), the borrower is potentially in a position of servitude. But if a debt is delinquent, the lender is given an implied authority from God. In the time of Christ, the authority of the lender was extended to imprisonment, slavery, and confiscation of the borrower's total worldly possessions. The same basic rule was applied in American law even into the early twentieth century. Almost every major city has records from the debtor's prison in its library.⁶

Principle 3: Since debt is abnormal, the occasion of borrowing should be held to a minimum.

Debt is not regarded normal to God's people. In Deuteronomy 28, it is promised that if Israel fully obeys the Lord and carefully follow all his commands, the Lord will set the nation high above all the nations on earth. Then the nation shall lend to many nations but shall borrow from none.⁷ However, if Israel does not obey the Lord and does not carefully follow all his commands and decrees, the alien shall lend to the nation, but the Israelites shall not lend to any nation.⁸ Therefore, it appears apparent that lending to others is a signal of blessings resulting from obedience and that borrowing from others is a signal of curses resulting from disobedience. Although this passage was binding on the Israelites as a nation, its principle seems to be applicable to the

6. Larry Burkett, *Debt-free Living*, p. 54.

7. See Deuteronomy 28:12.

8. Deuteronomy 28:44.

modern Christian, not only as an individual, but as the manager of an organization.

Principle 4: Avoid surety.

Surety is the pledge or formal promise made to secure against a loss, damage or default. The most common form of surety is co-signing for the loan of another, thereby promising to pay the debt if the primary party does not do so. But surety can be any form of borrowing which requires one to sign an unconditional guarantee to pay. A survey of the book of Proverbs reveals many references to surety and shows that it is a reflection of unwise behavior.⁹

Principle 5: Stay out of long-term debt.

The longest term of debt God's people took on in the Bible was about seven years. During the year of remission (the seventh, or Sabbath year), the Israelites were instructed to release their brothers from any indebtedness. "At the end of every seven years you shall grant a remission of debts: And this is the manner of remission: every creditor shall release what he has loaned to his neighbor and his brother, because the Lord's remission has been proclaimed."¹⁰ Of course, lenders took the length of time remaining until the Sabbath year into account in making loans. God created the year of remission for a logical reason: If we stay in debt long enough, we will get wiped out. If the Lord deemed it prudent for the Jews to limit their borrowing to seven years or less, its principle seemed to be applicable to modern

9. See Proverbs 6:1-5, 11:15, 17:18, 20:16, and 27:13.

10. Deuteronomy 15:1-2.

Christians.

Principle 6: Repay what you owe.

Principle 6 is more than just a principle; it is a commandment. A principle is an instruction from the Lord to help guide our decisions. A commandment, however, is a law and an absolute. The scripture is very clear when it equates the breaking of a promise to sin. Psalm 37:21 refers to the person who does not repay his debts as an evil person: “The wicked borrows and does not pay back, but the righteous is gracious and gives.” When it comes to borrowing, the supreme commandment is to repay debts.

Principle 7: Do not turn away from those who want to borrow.

While borrowing is discouraged in the Bible, lending is encouraged not only with interest, but without interest. When one lends money to those who are needy he is not supposed to charge them interest. In addition, he is not permitted to take a man's livelihood as security for debt when he makes a loan of any kind to his neighbors.¹¹ Jesus Christ also asked his disciples not turn away from those who want to borrow.¹² When the borrower is not in a position to repay his debts, Christians should be ready to forgive the debts.¹³ This principle appears to be consistent with the spirit of cancellation of debts every seven years in the Old Testament.

These are the seven principles of borrowing and lending. The first

11. Exodus 22:25-27 and Deuteronomy 24:6

12. Matthew 5:42

13. Matthew 18:21-35

six principles deal with borrowing; the last principle is in relation to lending. Although both borrowing and lending are permitted in scripture, Christians seem to be instructed to live as lenders rather than as borrowers. There are potential dangers associated with any use of borrowing.¹⁴ The use of borrowing can easily cloud one's view of God's direction for his life. Also, often a business that is in financial distress because of poor management or other problems will sustain itself by borrowing instead of resolving the real problems. Another peril caused by borrowing is that it can create unnecessary pressures. Stress from debt will have a negative impact on management's health, just as (excessive) debt can impair the financial health of an enterprise.

IV. COMPARISON OF TWO APPROACHES AND HYPOTHESES

The differences in the two approaches toward debt policy lie mainly in the source of the knowledge base. The secular approach relies heavily on pragmatism. A biblical approach, however, draws its principles from biblical wisdom as the source. Christians have to establish a basis for their actions in life whether in their personal affairs or as a manager of an organization. In Matthew 6, Jesus says that there are two kinds of treasures one can choose:¹⁵ treasures on earth or treasures in heaven. It should be easy to decide which to work towards, He implied, because treasures on earth are corruptible (and

14. Larry Burkett, *Business by the Book* (Thomas Nelson Publishers: Nashville, 1990), 161-165.

15. Matthew 6:19-20

therefore insecure), whereas treasures in heaven are incorruptible (and therefore secure). After all, If one's object is to accumulate treasure, he should presumably concentrate on the kind which will last and can be stored without either depreciation or deterioration. While secular firms would focus on short-term wealth maximization, Christian firms would focus on long-term heavenly wealth maximization.¹⁶ Wealth in heaven seems to refer to such things as the development of Christlike character, increase of faith, hope and charity, growth in the wisdom and knowledge of Christ, the active endeavor to introduce others to Christ, and the use of one's money for Christian causes. It seems the while Christian managers should emphasize and pursue heavenly treasures (though not to the exclusion of profit), secular managers tend to focus on and pursue earthly treasures. Therefore, the first null hypothesis can be stated as follows:

H10: There is no difference in primary objectives between Christian-managed firms and secular managed firms.

There is a difference in attitude toward debt financing between Christian-managed firms and secular managed firms. Secular businesses typically want to borrow as much as possible as long as there are gains from leverage.

Christian-managed firms, however, should be reluctant to borrow based on Principle 2 and Principle 3. Instead, Christian-managed firms would prefer stock financing to debt financing. Thus, the second null

16. Scott, John R. W. *The Message of the Sermon on the Mount*. (IVP: Downers Grove), 1978. p. 156.

hypothesis can be established as follows:

H2o: There is no difference in the debt ratio of Christian-managed firms and secular managed firms.

While secular managed firms would prefer long-term debt, Christian-managed firms would prefer short-term debt based on Principle 5. Therefore, the third hypothesis can be stated as follows:

H3o: There is no difference in the ratios of short-term debt over long-term debt between Christian-managed firms and secular managed firms. While borrowing is discouraged, lending is encouraged. Business firms are both borrowers and lenders since they buy and sell raw materials and products on credit. Accounts payable can be regarded as a form of very short-term borrowing. Likewise, accounts receivable may be considered as a form of very short-term lending. If Christian firms prefer lending to borrowing based on Principle 2, Principle 3, and Principle 7, the magnitude of accounts receivable should be greater than that of accounts payable. Thus, the following null hypothesis can be set up.

H4o: The ratio of accounts receivable to accounts payable is one-to-one for Christian-managed firms.

V. DATA AND RESULTS

A list of 80 self-identified Christian-managed companies was obtained at one of the annual meetings of the Fellowship of Companies for Christ and from the presidents of organizations that are

actively involved in various Christian ministries. A closed-end questionnaire was made of 16 questions to get relevant information needed to test hypotheses. Questionnaires were then mailed out to those 80 companies. Fifteen responses were received; ten of them were completely useful, but the rest of them provided only partially usable information.

Table 1 shows the size of the sample firms in terms of annual sales volume and number of employees. Six companies had annual sales ranging from \$1 million to \$10 million. Four companies had annual sales over \$20 million. Most of the sample firms, however, had less than 50 employees. Fourteen firms of the fifteen were privately held. This might imply that they had difficulties with financing through issuing stocks, or it could suggest that the owners of these firms preferred to retain ownership privately (or among a small group of owners) in order to maintain their control.

Table 1: Size of Sample Firms

Sales Volume	# of Firms	%	# of Employees	# of Firms	%
Less than 1	2	13	Less than 50	7	46
1-10	6	40	50-199	4	27
10-20	3	20	200-999	4	27
Over 20	4	27	Over 1000	0	0
Total	15	100		15	100

*Unit of Sales Volume: Million Dollars

Table 2 shows the debt policies for the sample firms. The tradeoff policy (moderate debt policy) was adopted by six companies (40%),

conservative debt policy (low debt policy) by four (27%), no-debt policy by three (20%), and aggressive debt policy (high debt policy) by two (13%). It is noteworthy that there were some Christian-managed firms that pursued no-debt policy.

Table 2: Debt Policies for Sample Firms

Kinds of Debt Policies	Number of Firms	Percentage
No-debt Policy	3	20%
Conservative Policy	4	27%
Trade-off Policy	6	40%
Aggressive Policy	2	13%
Total	15	100%

The four null hypotheses were tested against the information acquired from these firms. The purpose of the first hypothesis was to see if there were any differences in their corporate objectives between Christian-managed firms and secular firms. The sample firms were asked to send us a copy of a written statement of their corporate values or a written mission statement. Four companies sent their written mission statements. Their common primary objective was to glorify Jesus Christ. They sought God's wisdom in the interpretation and application of biblical principles to their businesses. It seems, therefore, profit was not their primary motive for their businesses. In this regard, we may reject the null hypothesis that there are no differences in their objectives between Christian-managed firms and secular firms.

Table 3 shows the debt ratios (total debt/net worth) for sample firms and corresponding industries to which they belong. The comparable ratios were obtained from Industry Norms and Key Business Ratios.¹⁷ The means of the ratios for the sample firms in 1987 and 1992 were higher than those of the respective industry means. Two sample T-tests were done to see if there was any difference in debt ratios between Christian-managed firms and secular firms.¹⁸ The value of the test statistic for 1987 is: $t=1.3$. Since p -value of 0.29 is greater than the significance level $\alpha=0.05$, the null hypothesis cannot be rejected, and it can be concluded that there is no significant difference in their debt ratios. The same was true for 1992.

Also, the z -value was calculated to see where the Christian-managed firms are located in the distribution of debt ratios of corresponding industries. Three of them had very low debt ratios compared with those of industries to which they belong (Firm 1, Firm4, and Firm5). Their negative z -values indicate that the three companies belong to five or ten percent of the distribution of the debt ratios for the corresponding industries with low debt ratios.

17. This is issued by Dun & Bradstreet Information Services

18. The non-pooled test was employed since we were not sure that the two sampled populations had equal variance.

Table3: Debt Ratios (Total Debt / Net Worth)

Years / (SIC)	Sample Firms		Industries		z-value	
	1987	1992	1987	1992	1987	1992
Firm 1 (2842)	0	0	0.74	0.67	-1.81	-1.47
Firm 2 (3489)	1.60	1.20	2.01	0.89	0.40	0.19
Firm 3 (3829)	5.90	7.60	0.59	0.66	9.12	14.41
Firm 4 (2499)	0.37	0.03	0.81	0.68	-0.85	-1.19
Firm 5 (3799)	-0.14	0.23	0.73	0.72	-1.73	-0.93
Firm 6 (3315)	0.71	1.02	0.61	0.93	-0.30	0.16
Firm 7 (2821)	4.00	0.40	0.93	0.87	6.30	-0.99
Firm 8 (2821)	1.09	0.84	0.93	0.87	0.27	-0.29
Firm 9 (8911)	1.69	0.77	0.75	0.74	1.45	-0.14
Firm 10 (5085)	0.84	1.19	0.91	0.92	-0.29	0.21
Mean	1.61	1.33	0.91	0.80		
S.D.	1.91	2.25	0.40	0.11		

Table 4 shows the ratios of short-term debt over long-term debt for Christian-managed firms and their corresponding industries. The two sample T-tests were done to see if there were any differences in the ratios between the two samples. Since statistic t-value is 23.03 and p-value of 0.011 is less than the significance level of $\alpha=0.05$, the null hypothesis is rejected, and the conclusion can be made that the ratios for Christian-managed firms are significantly different from those for secular firms. This is contrary to what was expected.

Table 4: Ratios Of Short-term Debt Over Long-term Debt

	Sample Firms		Industries	
Years	1987	1992	1987	1992
Firm 2	0.21	0.52	2.94	2.26
Firm 3	1.36	0.05	2.26	2.80
Firm 4	0.05	0.23	4.27	1.79
Firm 5	0.80	0.83	2.26	2.07
Firm 6	0.11	0.18	2.77	1.76
Firm 7	0.10	0.20	1.92	1.83
Firm 8	1.45	0.64	1.92	1.83
Firm 9	4.00	1.77	3.00	3.51
Mean	1.01	0.55	2.67	2.23
S.D.	1.34	0.56	0.78	0.62

Table 5 shows the ratios of accounts receivable to accounts payable for sample firms and their respective industries. First, one sample T-test was done for Christian-managed firms against the null hypothesis that the mean of the ratios equals one. In 1987, the t-statistic was 1.7 and $p=0.063$. Therefore, the null hypothesis can be rejected and an alternative hypothesis that the mean of the ratios was greater than one can be accepted. This is what was expected. In 1992, the alternative hypothesis at 5% level of significance can be accepted. ($t=3.93$, $p=0.0022$).

Secondly, since the means of the ratios for Christian-managed firms were higher than those for corresponding industries in 1987, two sample T-test were conducted. However, when the two sample T-test were carried out, it was found that there was essentially no statistically

significant difference between the two samples in 1987 and 1992. Although we couldn't calculate z-values due to lack of data availability, we can note that two firms (Firm 4 and Firm 9) had extremely higher ratios compared to their corresponding industry; this was not only true in 1987, but also in 1992.

Table 5: Ratios Of Account Receivable Over Account Payable

	Sample Firms		Industries	
Years	1987	1992	1987	1992
Firm 1	0.23	0.00	1.81	2.06
Firm 2	3.22	1.65	1.74	1.92
Firm 3	1.65	1.97	2.24	2.31
Firm 4	3.10	5.80	1.87	1.95
Firm 5	0.84	1.22	1.23	1.17
Firm 6	2.38	2.11	2.41	2.06
Firm 7	1.00	1.00	1.91	1.08
Firm 8	1.87	3.10	1.91	1.08
Firm 9	10.60	5.30	4.37	3.13
Mean	2.77	2.46	2.17	1.86
S.D.	3.11	1.95	0.99	0.67

Table 6 shows the rates of return on equity in percentage for Christian-managed firms and industries. In 1987, the mean rate of return on equity among the Christian-managed firms seems to be much higher than that of their respective industry rates. However, the null hypothesis which was tested by the two sample T-tests, could not be rejected at the five percent level of significance. In 1992, the means for

the two samples appeared to be the same and no significant statistical difference was found. Some Christian-managed firms however, seemed to noticeably outperform corresponding industry results (Firm 1, Firm 2, Firm 3, and Firm 5).

Table 6: Return On Equity

	Sample Firms		Industries		z-value	
Years	1987	1992	1987	1992	1987	1992
Firm 1	28.0	32.0	16.8	12.2	1.04	1.28
Firm 2	14.6	9.4	2.7	23.7	1.63	0.30
Firm 3	64.0	19.1	6.6	12.4	4.13	0.53
Firm 4	3.6	23.3	13.2	12.9	-0.93	0.54
Firm 5	-2.5	1.6	18.1	12.5	-1.53	-0.70
Firm 6	-3.1	-8.3	8.8	10.4	-2.03	-2.86
Firm 7	80.0	30.0	14.9	14.6	6.25	1.96
Firm 8	13.0	-3.0	14.9	14.6	-0.24	-2.19
Firm 9	7.2	10.7	22.2	24.0	-0.99	-0.77
Mean	22.8	12.8	13.1	15.3		
S.D.	29.8	14.4	6.1	5.0		

VI. SUMMARY AND CONCLUSION

After going over the biblical principles of debt financing and making hypotheses concerning those principles, some conclusions can be drawn in relation to the differences between firms that are managed

according to biblical principles compared to those that are managed according to secular principles.

It was evident that Christian-managed firms had objectives other than just wealth maximization. Their common primary objective was to glorify Jesus Christ. Although there were no statistically significant differences in the capital structures between Christian-managed firms and secular firms, two of the Christian-managed firms in the sample had very low debt ratios. Discovery of the fact that, on the average, secular firms had much more short-term debt than long-term debt (when compared to Christian firms) was contrary to what we expected. Christian-managed firms, however, had more long-term debt than short-term debt in 1992.

The mean ratios of accounts receivable over accounts payable for Christian-managed firms was greater than one. This supports the alternative hypothesis that was made. There was however, no significant difference in the ratio between the two groups. Lastly, Christian-managed firms appeared to outperform secular firms in 1987. However, the null hypothesis that there is no difference in their returns between the two groups could not be rejected.

What are the implications of this study for existing theories of capital structure? Results of the study suggest a possible explanation of different capital structure among heterogeneous companies. If Christian-managed firms try to avoid debt financing due to their possible default and bankruptcy risks, it implies that Christian-managed firms prefer stock financing to debt financing. Therefore, a new pecking order theory may exist for these types of firms.

Although this study has limitations largely due to small sample size, it breaks new ground in that a biblical approach to explain the firms' different behaviors in managing and structuring their financing was taken. Obviously, before any definite conclusions can be drawn, further research needs to be done in this area.

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(Appendix)

Survey Questionnaire

1. Please state the standard industry code (SIC) to which your firm belongs.

2. Into which size category does your firm fit?

A. Sales

Less than 1 million	1-10 million	10-20 million	Over 20 million

B. Employees

Less than 50	50-199	200-999	1,000 and over

3. How is your firm legally organized? (Circle correct answer)

Privately held

Publicly held

4. Circle the debt policy statement that best agrees with your firm's debt policy.

A. Use no debt

- B. Use a conservative debt policy (low debt)
- C. Use an aggressive debt policy (high debt)
- D. Use a trade-off debt policy (moderate debt)

5. What is your main motive for your firm to use debt financing?

- A. Tax deductibility of interests
- B. Easy access to debt
- C. Low cost of debt financing
- D. Others

6. What was your firm's debt to equity ratio for each year indicated below?

Year	1987	1992
Debt to Equity Ratio		

7. What was your debt ratio (total debt / total assets) for each year indicated below?

Year	1987	1992
Debt Ratio		

8. What was your firm's return on equity ratio for each year indicated below?

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Year	1987	1992
Return on Equity		

9. What was your firm's ratio of short-term to long-term debt (STD / LTD) for each year indicated below?

Year	1987	1992
Short-term debt to Long-term debt Ratio		

10. What was your return on assets (net profit / total assets) for each year indicated below?

Year	1987	1992
Return on Assets		

11. What was your firm's ratio of accounts receivable to accounts payable (AR / AP) for each year indicated below?

Year	1987	1992
Accounts receivable to Accounts payable Ratio		

12. What was your net value of your firm's assets (NAV) at the close of business for each year indicated below?

Year	1987	1992
Net Asset Value		

13. As a percentage of net sales, how much did your firm invest in trading and development for your employees for each year indicated below?

Year	1987	1992
Percentage of Net sales Invested in Trading and Development		
For managers		
For Rank and File		

14. As a percentage of net sales, how much did your firm invest in various charities or other socially- responsible causes for each year indicated below?

Year	1987	1992
Percentage of Net sales Invest in Charities or other Socially-responsible causes		

15. If you have a written statement of your corporate values and a written mission statement, please send us a copy of it with your response to these questions.

16. Are you interested in receiving a copy of the results of our research? (Circle your choice)

Yes

No

Thank you!

박정윤

영남대학교 경영학과 졸업, 서울대 대학원 경영학 석사과정 수료, 아리조나 주립대 대학원 (MBA), 켄터키 대학교 대학원 (경영학 박사), 미국 르터너 대학교 방문교수 (1994-1995). 현 영남대학교 경영대학원 원장과 경영학부 교수. 저서로 “행복한 부자” (CUP, 2002), “빛진 자로 살 것인가 빌려주는 자로 살 것인가” (삼영사, 1998), 그리고 신앙간증집 “네 친숙에게 고하라” (천금출판사, 1996)와 다수. 역서로 “하나님, 돈을 어떻게 쓸까요?” (CUP, 공역), 그리고 “Are REITs Inflation Hedges?”, “성경적 차입 및 대출원리” 등 다수의 논문이 있음. 대구 동신교회 시무장로로 섬기고 있음.