# THE IMPACT OF FINANCING DECISION, DIVIDEND POLICY, AND CORPORATE OWNERSHIP ON FIRM PERFORMANCE AT PRESENCE OR ABSENCE OF GROWTH OPPORTUNITY: A PANEL DATA APPROACH, EVIDENCE FROM KUALA LUMPUR STOCK EXCHANGE

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### Abstract

The aim of this paper is to analyze the impact of a company's level of financing policy, dividend policy and corporate structure on firm performance measured by Tobin Q of Malaysian-listed at the presence or absence of growth opportunities. The study uses panel based regression approach to address whether or not policy variable such as dividend, leverage and corporate structure play differently in explaining the market based firm performance once firm faces growth opportunities or absence of growth opportunities. The analysis is based on a sample of 100 Composite Index components Companies on Kuala Lumpur stock exchange over a period of 4 years, from 1999 to 2002. Findings suggest that firm debt policy affect firm performance differently once firm face presence or absence of growth opportunities. The relationships are unique for each scenario. Once the firm faces no growth opportunities, increase in corporate debt has adverse effect on firm performance. In contrast, firms, which face growth opportunities, resorting external funding provide a multiplier effect on firm performance. While corporate dividend policy seems to be indifferent for the firms which face growth or no growth opportunities, but provide a greater explanation for the potential impact on firm performance implying that dividend policy remain most stable in Malaysian capital market which is valued by corporate investors. Corporate structure proxied by managerial ownership may not provide any meaningful explanation for firm performance over the analysis period. However, firms based both on domestic and multinational ownership provides strong explanation for firm performance once firms face no growth opportunity. Hence this study provide a new lights on issue of corporate structure on firms performance.

**Key words**: dividend and leverage policy, corporate ownership structure, firm value, panel based regression

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#### Introduction

The influence of dividend, leverage, firms' corporate ownership structure on firm value has been topics of interest and constitutes a benchmark for important corporate finance literature that can be referred. In the perceived world of perfect market suggested by Modiglinai and Miller, the changes in corporate debt policy, dividend policy and corporate structure have no impact whatsoever on firms' value. However, in the real world with given diverse investors' expectation, perfectionist idea has been questioned.

Over the years, much of the searches have been focusing on the mere impact of dividend and debt policy on firms' value in developing countries like Malaysia, yet we there are lack of understanding as to whether or not growth pattern serves as a cornerstone for firm value formation and performance. Therefore, the objectives this study are two folds: firstly, this study examines the impact of dividend policy, debt policy on firms performance at the presence or absence of growth opportunities.. Secondly, this study also seeks to examine whether or not corporate structure and Fama-French factor like size, market to book ratio provide any additional explanation for firm's performance for similar scenario beyond traditional belief.

The reminder of this paper is organized as follows: Section 2 we will briefly discuss both theoretical foundation and empirical evidence. In Section 3, the data selection procedure and research methodology are outlined, meanwhile Section 4 present our results and analysis. And last but not least in Section 5 we summarize and conclude our research.

#### **Literature Review**

Understanding on the empirical differences in corporate performance based on accounting based measure such as ROE and ROA and market based



measure based on Tobin Q at the presence or absence of growth opportunities has received a growing attention from academics and practitioner alike in developed markets, however literature has been limited in Malaysia using Panel based regression approach to examine the impact of corporate debt or divined policy on firm performance based on Tobin Q. The seminal work on dividend policy and corporate debt policy choice was initiated in 1961 by Miller and Modigliania, who proposed that dividend policy and capital structure were irrelevant and, therefore, any changes made in dividend policy choice or capital structure make no different to firm value.

The world based on M&M's view, these two factors may not alter firm's value unless these factors alter investment opportunities (Modigliani and Miller, 1958 and Miiller and Modigliani, 1961). Jensen (1986), and Barclay and Smith (1996) suggested that there is a conflict of interest among bond holders and shareholders that lead to agency problem. As a results proper monitoring system is needed to safeguard the interest of the stakeholder. Agrawal and Jayaraman (1994) support the idea that dividend payment and leverage policy are substitute mechanism for controlling the agency cost of free cash flow hence, improve performance. However, little has been done to underline the influence of corporate debt and dividend policy on firm's performance at the presence or absence of growth opportunities. The empirical work on such issue was addressed by McConnel and Servaes (1995) who suggest that the impact of firm dividend policy, debt policy on firm value should be analyzed under the presence and absence of growth opportunities.

While corporate ownership structure which play an important role in aligning the interest of stakeholders. Jensen (1986) suggest that managerial discretion on the important decisions making, can be turned into profit maximization if the managers are made part of the owners, hence maiming shareholders value.

However, the question remains illusive with regards to the proxy measure for growth opportunities. In the past a number of measures have been proposed to proxy growth opportunities such as price to earnings ratio, Market to book value ratio, and sales growth (McConnel and Servaes, 1995, Smith and Watts, 1992; Lasfer, 1995). However most commonly used measure to proxy the growth opportunities is PE which remain the most viable investor's choice.

Although dividend payout policy and leverage policy play an important role in impacting on firm value, the availability of investment opportunities may strongly influence a company's performance in a number of ways. In the first stance, there may be underinvestment due to firm commitment for serving the debt and continuing paying the dividend payment. As a results we may be rejecting some of the positive NPV projects. Secondly, once the firm face no growth opportuneities it would have been better for firm to finance firm activities through equity funding ( Myer, 1977; McConnel and Servaes, 1995). This may result a negative relationship between firm value and dividend payment (Lang and Litzenberger, 1989; Gonzalez, 1995). Grullon, Michaely, and Swaminathan (2002), find that firms anticipating declining investment opportunities are likely to increase dividends,

Jensen et al. (1992) suggested that corporate debt and dividend policy are interrelated directly, while they are also indirectly related through firm's operating characteristics. of the firm. While managerial ownership which serves as a monitoring substitute for agency relationship provides an important value driving mechanism for the firm. This idea was addressed by Chen and Steiner (1999) who documented the evidence that managerial ownership serves as the monitoring substitute effects between managerial ownership and corporate debt and dividend policy.

Beyond the impact of debt and leverage policy on firm value, corporate ownership structure, such as family concentrated ownership, domestic based ownership and multinational based ownership may have important impact on firm's performance. Literature on this phenomena has been very limited and no documented evidence on this has been observed.

# Data and Methodology

A sample of 100 Composite Index (CI) components firms was selected over the period through 1999 to 2002. The choice of particular period was off significant to this study as Malaysian companies start recovering from 1999 after the economy faced tremendous financial down turn which swept through Asia. Therefore this excluded crisis period (1997 and 1998) to avoid any negative down turn impact on firm value irrespective of firms' growth opportunities availability. Further to initial sample 100 CI components companies, sample firms are further divided into 3 quartiles based on PE ratio.

First quintile (40%) represent of absence of growth opportunity (lower growth)

Second quintile (20%) is the average quintile of growth opportunities (average growth)

Third quintile (40%) is considered as presence of growth opportunities (higher growth)

# Methods

This study uses Panel based regression model to examine the impact of a firm's dividend and debt policy and corporate structure on firm value at the absence or presence of investment opportunities. Based on the documented evidence, various measures have been used to proxy growth opportunities For instance, Lasfer (1995) used the market value of equity to the total asset ratio while Smith and Watts (1992) used the market asset value to the cash flow



ratio to proxy growth opportunities. McConnel and Servaes (1995) used the rate of sales growth for similar measure. More recently, La Porta et. Al, (2000) also used rate of sales growth as the measure for growth opportunities. However, in this study I use P/E ratio as the measure for investment opportunity for three reasons. Firstly, P/E ratio provides a theoretical explanation for firm valuation at the perceived world of growth opportunities. For example P/E ratio is the function of firm's payout out policy and pattern of internal funding for growth activities of the firm. Secondly, P/E ratio is readily observed from publicly available information. Thirdly, P/E ratio is commonly employed tool by general investors in determining investment decision based on their perceived future prospects of the firm growth and value. To provide objective measure for factors explaining firm's performance based on Tobin Q, I use two important policy variables namely dividend and leverage. Besides I also used corporate ownership structure to address agency problem concern which may have an impact on firm's performance given the growth prospect of the firm. The functional form of model is given by:

TobinQ = f (dividend, leverage, Corporate ownership structure, sizel absence of growth)

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#### **Operational Model**

The following two models are developed to examine the impact of leverage, dividend policy and corporate ownership structure on firm's performance measured by Tobin Q.

Model 1 (absence of growth)

Tobin's Qit =  $\beta_0 + \beta_1 DIVTAit + \beta_2 DTAit + \beta_3 DOWNit + \beta_4 SRGRit + \beta_5 MULTIit + \beta_6 DOMit + \beta_7 MBit + \beta_8 FAMit + \varepsilon_i$ 

Model 2 (Presence of growth)

Tobin's  $Qit = \beta_0 + \beta_1 DIVTAit + \beta_2 DTAit + \beta_3 DOWNit + \beta_4 SRGRit + \beta_5 MULTIit + \beta_6 DOMit + \beta_7 MBit + \beta_8 FAMit + \varepsilon_i$ 

One of the key feature of market based performance measured by Tobin Q is that in panel based regression approach, we allow each individual firm in each category to have a distinct intercept. These intercepts accommodate all aspect of unobserved heterogeneity that are fixed over the panel data period. Therefore panel based regression with fixed effect is adopted to analyze the impact of dividend, leverage policy and corporate structure on firm performance.

#### Variable measurement

Tobin Q is the market based performance measure and it's the ratio of (MVE+total debt)/TA

DIVT is the total dividend for the year to average total asset.

DTA is the debt to asset ratio represents the leverage and capital structure of the firm

DOWN is the percentage of director ownership in the firm

MULTI is the dummy variable taking value of one if the firm is widely held by multinational firm or zero for otherwise

DOM is the dummy variable taking value of one if ownership dominated domestic ownership firm.

FAM is the used to proxy family domination. It takes value of one if both chairman and directors are concentrated within the family.

#### **Parametric Test Model**

This paper employs a simple parametric test of mean difference of the characteristics of firms which face no grow opportunities and a group of firms which face growth opportunities. The functional form of simple parametric test is given as:

t-value = [  $\mu(gf)$ -  $\mu(ngf)$ ]/[ $\sigma(gf)/n(gf)$ +  $\sigma(ngf)/n(ngf)$ ]

where,  $\mu(\text{gf})$  is mean value of characteristics of growth firm

 $\mu(ngf)$  the mean value of the characteristics of no growth f irm

 $\sigma(\mbox{gf})$  is the standard deviation of the characteristics of growth firm

 $\sigma(ngf)$  is the standard deviation of the characteristic of growth firm

 $n({\rm gf})$  is the number of firm in no growth category

n(ngf) in the number of in no growth category

the mean difference of the important characteristics (TobinQ, DTA, DIVTA, DOWN, SRGR, MB) of the two group are tested.

#### **Development of Hypotheses**

Ho1: firm performance measured Tobin Q will not be affected by changes in firm's dividend and leverage policy irrespective of whether or not firm face investment opportunities

Alternatively, firm's performance will be affected by the changes in firm's dividend policy and leverage policy when a firm faces growth opportunities. Once a firm face growth opportunities, based on pecking order hypothesis the firm may go for internal funding, if not, goes for debt financing, while equity funding will be a last resort for such funding. But based on trade-off theory, it asserted that the use of debt in the company's capital structure tend to minimize company's cost of capital to the point it reach to optimum capital structure. Hence increase n firm leverage will have positive impact on performance as long as cost of debt remain lower than return on investment. But beyond the optimum point, due to agency cost debt and bankruptcy cost, having the debt will have negative impact on firm



performance. Conversely, if firm faces no growth opportunities it would have been better for firm to finance firm's activities through equity funding and providing dividend payment to shareholders may result a positive feedback about firm ability to cash flow the firm generates. It is also generally consensus view that investors expect a stable dividend policy. Therefore, irrespective of whether or not firm faces growth opportunities, firm tends to maintain dividend payment. Therefore, a positive association is expected between firm dividend policy and firm performance measured by Tobin Q.

# Ho2: firm value measured by Tobin Q will not be affected by firm corporate structure

The corporate structure in this study is measured by domestic based corporate ownership, multinational based corporate ownership and family based ownership. Firm with domestic shareholding may have performed well if firm faces no growth opportunities. While a positive association between firms which has substantial stake by multinational firm may perform better once a firm faces growth opportunities. This analogy suggest that a multinational based firm may have ability to diversify it investment activities resulting a reduced risk and maximum return from these activities. While family based on ownership may have positive impact on firm performance from agency perspective. If the firm is dominated by family members, the possibility that they strive for the best for their own interest hence reducing agency cost. Therefore, it is expected that there is a positive relationship between family ownership and firm performance.

H03: firm performance may not be affected by management ownership irrespective of whether or not firm face investment opportunities.

Based on Jensen and Meckling (1976), making manager part of the owner may align their interest with that of shareholders, therefore, once a firm faces growth opportunities, with reduce agency cost, opportunities will serves as a positive leverage for firm performance hence a positive association is expected between firm's performance and director ownership.

#### **Results and Discussion**

#### **Descriptive Findings**

variables	Mean-nogrowth firm	Mean-growth firm	Mean diff (t-value)
Tobin Q	1.402	2.217	1.69*
DTA	47%	80%	-1.148
DIVTA	4.088%	13.94%	-1.11
DOWN	9.57%	6.52%	.092
SRGR	9.35%	7.23%	1.822*
MB	1.072	2.527	4.68**
** significant at 1% level, * significant at 10% level			

Table 1

Table 1 details the test result on the characteristics of firms which face (do not face) growth opportunities over a panel period. These are based on the mean difference respectively for TobinQ, DTA, DIVTA, DOWN, SRGR and MB. A simple parametric test was performed to observe the differences in the two group. The results suggested that both growth and nogrowth firms are distinctly different from one another in a number of dimensions. Firms which face no growth opportunities recorded lower value of MB, DTA and DIVTA compared to their counterparts which face growth opportunities. Besides, firm which faces less growth opportunities register higher level of managerial ownership as compared to latter group. The mean difference are statistically significant the conventional level. But surprisingly the dividend payment for growth firms appears higher than no growth firm. It is contrary to the view that the firm which faces growth opportunities may lower the dividend in order to fund the internal growth is not observed. This implies that Malaysia firm maintained dividend payment irrespective of the pattern of growth prospect the firms face. While amount of leverage for growth firm is much higher than no growth firms, recording leverage ratio of 47% and 80% respectively but difference is not statistically significant at the conventional level.

# **Panel Based Regression Findings**

Tables 2 and 3 summarize panel based regression estimates separately for presence or absence of growth opportunities over the analysis period. Two major policy variables for financing and dividend policy were surrogated by debt to asset (DTA), dividend to total asset. While ownership structure is proxied by firms' domestic and foreign ownership, director ownership.

Table2 – present result based on Panel based pooling regression. Initially the model includes 8 variables out of which only MULTI, DOM, DTA DIVTA, MB, are appeared to be significant at the conventional level for firms which face absence of growth opportunities (lower quintile growth opportunities) prescribed based on PE ratio. Model is fit with the F-value of 4.11, significant at level 1%



with adjusted  $R^2$  of 48.08%. The Sign of the coefficients were as expected.

The negative and significant coefficient for DTA suggests a negative impact of debt on firm performance when firm experience low growth opportunities. It is inline with contention that leverage will have an adverse effect on firm value if there is no growth opportunity available which results firm to act like cash cow. This will also create a conflict of interest between shareholders and bond holders resulting a transfer of wealth from bond holders to shareholders in the form of dividend distribution at the expenses of bondholders. While a positive and significant association between dividend payment and firm Tobin Q suggest that once firm face lower level of growth opportunities, it is better that company payout slack cash available to the shareholders rather than misappropriating those funds by managers for non-pecuniary benefit. However, it may not be true for the firm which faces presence of growth opportunities. Besides, firm ownership concentrated by domestic and multinational participation also provides strong support for better firms' performance. This provides additional insight about the firm performance beyond the traditional explanation of firm value by debt and dividend policy. These observed relationship raise additional question as to whether or not dividend payment disciplines management behavior once it faces no investment opportunities. While no influence of management ownership on firm performance has been observed. Therefore, ownership concentration by management may not support the agency theory which stress that the positive effect of managerial autonomy for the firms which face little growth opportunities.

#### Table 2. TOBIN-Q no growth firm based on per

Dependent Variable: Q Method: Panel Least Squares Date: 12/08/08 Time: 10:46 Sample: 1999 2002 Periods included: 4 Cross-sections included: 40 Total panel (unbalanced) observations: 159

	Coefficient	Std. Error	t-Statistic	Prob.
С	0.613431	0.261072	2.349663	0.0206
MULTI	0.508128	0.249735	2.034667	0.0443
DOM	0.524656	0.244433	2.146420	0.0340
FAM	0.459437	0.321139	1.430648	0.1553
DTA	-0.587501	0.280840	-2.091939	0.0387
DIVTA	1.450337	0.238472	6.081801	0.0000
MB	0.547619	0.094238	5.811019	0.0000
DOWN	-0.004762	0.004258	-1.118341	0.2658
SRGR	-9.87E-05	0.001472	-0.066998	0.9467
	Effects S	pecification		
Cross-section fixed (dummy variables)				
R-squared	0.635283	Mean dependent var		1.401975
Adjusted R-squared	0.480853	S.D. dependent var		0.969157
S.E. of regression	0.698295	Akaike info criterion 2.364		2.364050
Sum squared resid	54.12541	Schwarz criterion 3.29		3.290512
Log likelihood	-139.9420	Hannan-Quinn criter.		2.740276
F-statistic	4.113738	Durbin-Watson stat		2.620241
Prob(F-statistic)	0.000000			

Table 3 below present panel based results based on presence of growth opportunities. Initially the model includes 8 variables. Once the firm faces growth opportunities measured by PE ratio, finding provides new insight about debt and dividend policy and its impact on firms performance. The findings

suggest that debt policy and dividend policy provide strong support for a superior performance. While MB and sales growth are another source of performance firms which face higher growth opportunities and provide strong explanation for firm performance once the firms face growth opportunities. Moreover, firm corporate structure presented by director ownership, dominance of multinational and domestic based holding and family ownership are not appear to be significant factors in explaining firm performance for firms which face growth opportunities. The model is fit with a F-value of 151 and adjusted R-Square of 97.7%. The Sign of the coefficients were as expected. Both policy variables namely DTA and DIVTA appear to have positive and significant impact on firm's performance. As predicted, firms which face growth opportunities, leverage effect help optimizes firms' performance. This is consistent with corporate finance theory. While a positive association between dividend and firm value has been natural phenomena as investor generally prefer to have dividend in the form of cash distribution irrespective of whether or not they face higher or lower growth opportunities. Firms also tend to maintain stable dividend policy irrespective of growth pattern of the firm (Linter 1965). Though in hypothetical term, once the firm face growth opportunities, the rate of retention should have been increased in order to facilitate growth funding. Nonetheless, in Malavsian context firm tends to use external funding to finance growth opportunities in order to maintain stable dividend policy. Therefore, there can be a paradoxical explanation for these findings. One hand, increase in growth opportunities may demand for external debt to finance the growth opportunities, maintaining dividend payout, in order to signal about firm's ability to distribute cash on the other. Besides, a significant inverse relationship was observed between domestic based ownership and firms' performances based on Tobin Q.

#### Table 3. TOBIN-Q for growth firm based on per

Dependent Variable: Q Method: Panel Least Squares Date: 12/08/08 Time: 10:44 Sample: 1999 2002 Periods included: 4 Cross-sections included: 40 Total panel (balanced) observations: 160

	Coefficient	Std. Error	t-Statistic	Prob.
С	1.025342	0.423389	2.421749	0.0171
MULTI	-0.569988	0.466134	-1.222800	0.2240
DOM	-0.674239	0.447106	-1.508008	0.1344
FAM	-0.536625	0.527507	-1.017286	0.3112
DTA	1.591506	0.022792	69.82862	0.0000
DIVTA	0.641894	0.077036	8.332414	0.000
MB	0.156766	0.021514	7.286604	0.000
DOWN	-0.001038	0.006318	-0.164267	0.8698
SRGR	0.003812	0.002090	1.823867	0.0708
	Effects Spe	cification		
Cross-section fixed (dummy variables)				
R-squared	0.984493	Mean dependent var		2.217619
Adjusted R-squared	0.977985	S.D. dependent var		6.008643

Adjusted R-squared	0.977985	S.D. dependent var	6.008643
S.E. of regression	0.891526	Akaike info criterion	2.851560
Sum squared resid	89.01964	Schwarz criterion	3.774112
Log likelihood	-180.1248	Hannan-Quinn criter.	3.226177
F-statistic	151.2853	Durbin-Watson stat	2.482679
Prob(F-statistic)	0.000000		



# Conclusion

This paper examines the impact of firm dividend policy, debt policy and corporate ownership structure on firm value at the absence or presence of growth opportunities. The market performance of the firm is proxied by Tobin Q. It is based on a sample of 100 composite Index component firms listed in Main Board in Bursa Malaysia.

I use panel based regression approach to determine whether or not presence or absence of growth opportunities in determining the firm performance. Results show interesting findings once company faces growth (or non growth) opportunities. A group of Firms which face growth opportunities, dividend policy and debt policy are important factors that explain firm performance. In the absence of growth opportunities it can be observed a positive association between firm performance and dividend payment, while negative association between firm performance and leverage ratio. While managerial ownership provides as control mechanism for agency problem provide no explanation whatsoever for firm performance whether or not the firm faces growth. These are consistent with establish corporate finance theory that explain the firm value once there are changes in corporate debt and dividend policy. Besides, firm corporate ownership dominated by both domestics and multinational holding provides some explanation for firm performance for those firm which face lower (no growth) opportunities.

#### References

- Agrawal, Anup, and Nagarajan Jayaraman (1994). "The Dividend Policies of All-Equity Firms: A Direct Test of the Free Cash Flow Theory," *Managerial and Decision Economics*, 15, 2, 139--148.
- Chen, R. Carl, and Thomas L. Steiner (2000). "Tobin's Q, Managerial Ownership, and Analyst Coverage: A Nonlinear Simultaneous Equation Model," *Journal of Economics and Business*, 52, 365-382.
- Charitou, A. and Vafeas, N., "Association between Operating Cash Flow and Dividend Changes: An Empirical Investigation," *Journal of Business, Finance* and Accounting, Jan-Mar, 1998.
- DeAngelo, H., DeAngelo, L. and Skinner, D.J. (1992), "Dividends and Losses," *Journal of Finance*, December 1992: 1837-1863
- 5. DeAngelo, H., L. DeAngelo, 2006, The irrelevance of the MM dividend irrelevance theorem. *Journal of Financial Economics*, forthcoming.
- Grullon, G., R. Michaely, and B. Swaminathan, 2002, "Are Dividend Changes a Sign of Firm Maturity?" *Journal of Business* 75, 387-424.
- Jensen M.C. (1986), "Agency Cost of Free Cash Flow", American Economic Review, 76, 323-329
- 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*, 27, June, 247-263.
- Lang, L. H. P., and R. H. Litzenberger (1989). "Dividend Announcement: Cash Flow Signalling vs. Free Cash Flow Hypothesis?," *Journal of Financial Economics*, Sept., 181-191.

- 10. La Porta, R., Lopez de Lilanes, F. and Shleifer, A. (2000), "Agency Problems and Dividend Policies Around the World," *Journal of Finance*, Vol. 56, No. 1: 1-33.
- 11. Lie, E., 2000, "Excess Funds and Agency Problems: An Empirical Study of Incremental Cash," *Review of Financial Studies* 13, 219-248.
- Lasfer, M.A (1995), Agency Cost, Taxes and Debt: The UK Evidence", the European Financial Management", 1, 265-285
- Linter J., (1956), "Distribution of Incomes of Corporations among Dividends, Retained Earnings and Taxes," *The American Economic Review*, Vol. 46, May 1956.
- McConnel, J.J. and Servaes, H. (1995), "Equity Ownership and Two Faces of Debt," *Journal of Financial Economics*, Vol. 39: 131-157.
- Meenakshi S, Jayanthi Sunder and B. Swaminathan (2006) "Payout Policy and Cost of Capital " http://ssrn.com/abstract=620382"
- Miller, M.H. and Modgliani, F. (1961), "Dividend Policy, Growth and the Valuation of Shares" *Journal* of Business, Vol. 34, No. 4: 411-433
- Myers, S. C. (1977). "Determinants of Corporate Borrowing," *Journal of Financial Economics*, 5, 147-175.

