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# Strategic Accounting Problem of Capital Gearing in Croatia

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***Abstract:*** The authors attempt to broaden the knowledge on the capital structure theory exploring determinants that force gearing to differ considerably. They found gearing is significantly negatively correlated with the size of the company, its profitability and tangibility. The results are based on a sample of 86 Croatian companies and are comparable to prior research[1] in the field.

***JEL Classification***: G32, G3

***Key words***: capital structure determinants, gearing, financial management, strategic accounting

## Introduction

Efficient financial governance of a company has become essential in today's globalising world where different risk aversions and required capital returns determine the firm's appropriate capital structure. Firm's capital structure composition in fact explains the financial risk level to which company is exposed on the market. Under the key assumption that the capital market is perfectly efficient Modigliani and Miller (1958) point up that the firm's capital structure doesn't matter for the firm's value. In their opinion, the value of the firm is exclusively dependent upon firm's business performance and faced business risk. Modigliani and Miller (M&M) showed that the *financing* decision doesn't matter in perfect capital markets. Their *Proposition I* states that the total value of a firm is the *same* with whatever debt-equity ratio (assuming no taxes). On the other hand, the traditional view suggests that optimum gearing level is important for the firm's value. Finding optimum

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gearing level leads to minimum cost of capital maximizing the firm's total capital value on the market. Optimal capital structure existence for any firm on the market suggests that financial managers' and strategic accountants' primary task is to find the optimum or equilibrium gearing level. With the intention to spot the capital structure that minimizes the cost of capital, management must show consideration for the level of debt (in the capital structure) effect upon the costs of each capital component. An important characteristic of debt is that interest payments are tax deductible whereas dividend payments are not. Turning upon the capital market non-stationarity state explains why still today, in the Internet era and nearly perfect information mobility, finding an optimal capital structure for financial managers remains a quest. In the real world, optimal capital structure of the firm promptly changes as capital market conditions and the players on it change their position. Like any other balance, optimal capital structure is not perpetual. Different risk aversions and required rate of returns between lenders and shareholders remain to be a reason for the academic debate over optimum gearing. The authors attempt here to broaden the knowledge on the capital structure theory exploring determinants that force gearing to differ considerably. The correlation between gearing level and potential variables of influence is tested for a sample of 86 Croatian firms comparing to the results of prior research in other countries (particularly Bevan and Danbolt's for UK).

Gearing is the problem of financial management, but also of strategic accounting as a particular way of looking at the financial and accounting problems of a firm that transcends the classical distinctions between financial accounting, management accounting and financial management (Ryan, 1995, p.30). Croatia has still to invest efforts in strategic accounting development to provide adequate information basis for strategic decisions making towards an optimal capital structure (that's what make gearing in Croatia to be strategic accounting, not only financial management problem since gearing related decisions are often done on 'ad hoc' basis).

## Cost of Capital Theory

Cost of capital represents the firm's combined costs (debt and equity funds) required for the acquisition of fixed or permanent assets used by the firm. The cost of capital is directly associated with the firm's costs for a specific capital component - long term debt, preferred stock or common equity. The traditional cost of capital theory view excludes the short-term financing from the cost of capital calculations. Therefore, the firm's cost of capital can be viewed as a required rate of return that must be earned on an investment leaving the firm's value unaffected. In terms of the firm's balance sheet, cost of capital relates to the long-term liabilities and capital section, to the firm's capital structure (Madura, J., Veit, E.T., 1988, p.338). In the capital budgeting

decision process, the firm's cost of capital is used to reach optimal capital budgeting choices[2] and optimal capital structure mix. The firm's optimal capital structure can be expressed as the one that minimizes the firm's cost of capital used to finance a firm's assets. Since the goal is to maximize the firm's value i.e. a future cash flow stream divided by the discount rate (or cost of capital) it can be done either by maximizing cash flow or minimizing the cost of capital. Two risk sources are important when we consider the optimal capital structure problem. Business risk (sales price volatility, demand variability, input price variability, high fixed costs, technology, competition, management depth and breath) is the firm's risk of being unable to cover operating costs related to the sales volatility and operating leverage risk. Financial risk (higher required return on equity by investors) is the risk of incapacity to meet up fixed financing costs. Using debt to finance the firm's assets i.e. the so-called optimal financial leverage problem is the central source of financial risk. Determining the firms' cost of capital is important for two motives. The cost of capital information serves to managers as starting point in selecting proper capital budgeting projects and as a tool for maximizing the firm's common stock value. Madura and Veit see the cost of capital as a weighted average cost of each component of capital, wherein the firm determines the target weights. Historic weights should not be used, they believe, since the firm, the capital markets and the economy change over time, resulting in changing relative costs of the components of capital. Each component in the firm capital structure is associated with a specific cost, whenever we talk about debt, preferred stock or common stock used by a firm. An important characteristic of debt is that interest payments are tax deductible (principal repayments not) whereas dividend payments are not. Financing the firm through short-term debt forces managers to expel free cash flow while long-term debt discourages managers from raising new capital. These facts can be considered as non-tax arguments for increasing gearing. Several non-tax arguments speak in favour of restraining gearing according to Brealey and Myers (1996):

- debt increases the risk of bankruptcy,
- direct bankruptcy costs,
- indirect bankruptcy costs,
- firm selling products requiring maintenance may achieve a higher selling price by constraining debt,
- debt encourages managers to 'gamble' on shareholders' behalf,
- debt reduces the incentive for shareholders to contribute more capital,
- debt makes a firm vulnerable to attack by competitors in product markets.

Graham and Harvey (1995) identified main factors influencing a company's capital structure:

- financial flexibility,
- credit rating,
- volatility of earnings and cash flow,
- tax advantage of interest deductibility,
- transaction costs and fees for issuing debt,
- debt levels of other firms in our industry,
- the potential costs of bankruptcy or financial distress.

Harris and Raviv (1990) found empirical evidence for:

- firms within an industry are more similar in gearing ratios than those in different industries,
- industries tend to retain their relative gearing rankings over time,
- pharmaceuticals, instruments, electronics and food have consistently low gearing,
- paper, textiles, steel, airlines and cement have consistently low gearing,
- regulated industries - telephone, electric and gas utilities and airlines are among the most highly geared firms.

The cost of equity capital continuously rises as leverage increases because of the shareholders apprehension for the future variability in their earnings reflecting in higher required return. The cost of debt is directly associated with the creditors aversion toward insolvency risk as earnings drop down in relation to the interests that must be paid. Finding the lowest overall cost of capital at different leverage level is a key for optimal capital structure achievements.

## Choosing an Optimal Capital Structure - Gearing Level Problem

The problem of optimal gearing is one of the most important problems of contemporary corporate finance as well as of strategic accounting. Strategic accounting has been developing as a particular way of looking at the financial and accounting problems of the organisation that transcends the classical distinctions between financial accounting, management accounting and financial management. It focuses upon certain key elements of the ways business generates economic value: commitments, capabilities, cash and control – '4C-cycle' (Ryan, 1995, p.30-37). Briefly, financial analysis of the problems associated with '4C-cycle' is the core of strategic accounting and the gearing problem is certainly closely related to the cycle components (undertaking commitments, developing firm's capabilities, influencing the cash flows, budgeting process). In fact, it affects the firm's valuation although

that's not accepted by Modigliani and Miller under their assumptions of perfect market.

The propositions on capital structure made by Modigliani and Miller (M&M) are among the most important contributions in the theory of corporate finance. The theorems were first stated in the seminar papers (1958, 1963) on the cost of capital, corporate valuation and capital structure. The first versions were very simple. They assumed that debt could be only of the risk-free type, and that all firms belonged to the same risk class. The latter assumption meant that the expected future cash flow in all firms should be perfectly correlated, and only allowed to vary by a scale factor. So, $CF_{i,t} = \alpha CF_{j,t}$, where CF is cash flow in firm i and j, respectively, $\alpha$ is the scale factor, and t counts the future periods. These assumptions are certainly unrealistic, but fortunately, later developments in the theory of corporate finance have made them redundant. So, according to M&M Proposition I (no tax scenario), debt-equity ratio doesn't matter to the value of the firm. To obtain M&M Proposition I, Harwey (1995) made the following assumptions:

- homogeneous expectations
- homogeneous business risk
- perpetual cash flows
- perfect capital market
- perfect competition (everyone is a price taker)
- firms and investors can borrow and lend at the same rate
- equal access to all relevant information
- no transaction cost (taxes or bankruptcy costs).

M&M Proposition II implies that, in general, the higher the debt-equity ratio, the higher the expected turn on equity.

So, in M&M's view, if there are no taxation benefits in holding debt, then a firm's weighted average cost of capital will remain constant as the firm increases its level of gearing and therefore, there's no optimal level of gearing (Ryan, B. 1995, p. 131).

If the value of the firm is independent of the financing decision (the value of the leveraged firm is equal to the value of the unleveraged firm plus the present value of the debt tax advantage) and the investors required return is same for leveraged and unleveraged firm with the weighted average cost of capital lower (WACC - less taxes) for leveraged firm, 100% debt financing should be a logical choice? There are a number of practical challenges that must be taken into account that make such a choice not a good one:

- cost of financial distress - direct cost of bankruptcy, indirect cost of bankruptcy or near bankruptcy,

- payments to third parties (attorneys, accountants, consultants),
- disruption in management - management spends time on bankruptcy not investment decisions,
- employee costs - moral is low, turnover increases as future is uncertain,
- customers may quit buying - quality concerns, service concerns,
- share buybacks can cause financial distress and turn market against the firm (Terry, A. 2000.)

Miller and Modigliani's famous approach led to two alternative routes to quantifying the impact of a change in leverage on firm's value. These are namely the capital asset pricing model (CAPM) and adjusted present value (APV) theory. Both routes are still widely used by corporate finance professionals around the world. Although the approaches are different, they each form a part of an elegant conceptual framework that has stood the test of time. No other broadly accepted theory of firm's value has emerged which purports to be able to systematically predict the impact of leverage on firm's value. Unfortunately it often doesn't work in practice. There are numerous examples of this. Studies have established that highly leveraged buy-outs in the US that have subsequently undergone financial distress have, on average, actually increased entity value compared with the moment immediately before the leveraged buy-out was announced. That is to say that the cost of financial distress (usually including the replacement of the leadership team) is outweighed by the financial benefits and disciplines of the leveraged transaction itself. Hence, it may be in the interests of shareholders to risk 'controllable' default (and loss of the leadership team) in the narrower interests of shareholder value. These effects demonstrate that too low a level of default risk is value destroying. The size of this effect can be much greater than predicted by either CAPM or APV theory (Williamson, M., Francis, S., 2002).

According to Williamson and Francis, the optimal capital structure at most or ideally at all times could be achieved by a financial strategies which simultaneously:

- minimize the average cost of capital (inclusive of hedging activities)
- maintains adequate liquidity at all times (not only in reality but also in the perception of major investors and broader stakeholder community)
- ensures adequate flexibility to finance value-enhancing investments required by the corporate strategy. These are principally acquisitions and other large capital expenditures.
- the overall effect of financing and risk management activities is to create an equity risk that is trading in a manner consistent with the corporate strategy or equity story communicated by management.

When a firm with solely common equity as funding source is adding debt to its capital structure this shall reduce the firm's cost of capital and increase the value of common stock because the after tax cost of debt is greatly lower than the after tax cost of equity. However, this is true only to certain magical point when the benefit of adding less expensive capital component is extra offset by the rising cost of debt and equity (bankruptcy related costs). It is often very difficult to unravel the optimal capital structure quest and find a magical point, as firms in order to enjoy the lower WACC must balance between the debt tax advantage and the cost of financial distress. The point between the optimal capital structure determined by the market and the target capital structure is often almost impossible to find.

Despite it's not an easy job, companies will try to select debt and equity levels that enable getting closer to their optimal capital structure. It will certainly differ from firm to firm depending on a number of elements of influence. So, we'll try to explain some of variables of influence based on empirical research performed with the goal to identify the determinants of capital structure.

## Data and Methodology

The database for the empirical analysis consists of balance sheet and profit and loss account (their full or short form) of the 86 companies in Croatian manufacturing industry in 1995/96. The random sample comprised a thousand of companies. The rate of return was 14%. Since all the companies did not enclose full statements, the companies with some missing data were exempted from the further research. The regression analysis is based on the research of Rajan and Zingales (1995) and Bevan and Danbolt (2000) and their analysis of gearing in UK companies in 1991, with some changes in variables definition because of unavailable data for Croatian companies. Three of four independent variables were adopted from their research and tested on the sample of Croatian companies. The fourth one – market-to-book ratio couldn't be included in the model because of unavailable data on market value of equity. The others are comparable to their analysis as follows:

- size (the proxy is the natural logarithm of sales),

$$F=\ln(\text{sales}) \quad (1)$$

- profitability (the ratio of earnings before tax to the book value of total assets),

$$G=\text{earnings before tax} / \text{total assets} \quad (2)$$

- tangibility (the ratio of the book value of depreciated fixed – tangible assets to the book value of total assets)

H= tangible assets / total assets (3)

Bevan and Danbolt (2000) used four gearing measures in their analysis:
- non-equity liabilities to total assets (total debt plus trade credit and equivalent to total assets) on the book and market value basis (market value of non-equity liabilities is calculated by adjusting the total assets value, by subtracting the book value of equity and adding the market value of equity),
- debt to total assets (again on book and market value basis),
- debt to capital (capital is calculated as total debt plus equity, including preference shares). The ratio on the market value basis is calculated by adjusting for the market, rather than the book, value of equity.,
- adjusted debt to adjusted capital (adopted by Rajan and Zingales in their analysis) is calculated as the book value of total debt less cash and marketable securities to total debts plus book or market value of the equity plus preference shares plus provisions and deferred taxes, less intangibles.

The dependent variable in our cross-sectional analysis is defined as:
- total long-term and short-term liabilities to the book value of total assets

C= (long-term + short-term liabilities) / total assets (4)

Such gearing measure is the closest to the first one of those previously listed: non-equity liabilities to total assets. The nominator comprises all non-equity liabilities since the balance sheet of small enterprises in Croatia doesn't separate loans and borrowings from other kind of liabilities. Short-term component is included in the nominator because it makes considerable part of total liabilities (84% for sampled companies) and is a typical way of Croatian companies financing. In a number of cases long-term debts were zero with a huge amounts of short-term borrowings and other liabilities. Although the optimal gearing level is usually defined by long-term debts to assets (equity) ratio, Bevan and Danbolt proved that the exclusion of short-term liabilities (that make 82% of total liabilities for sampled companies in their research) precludes analysis of a major element of gearing in UK companies also.
- total long-term and short-term liabilities to the book value of equity

E= (long-term + short-term liabilities) / equity (5)

So, the nominator is the same as in the previous ratio, with equity instead of assets in the denominator. This ratio is widely used in the researches of Croatian companies indebtedness as well as in practice.

## Strategic Accounting Problem of Capital Gearing in Croatia - Analysis and Results

It's hard to imagine successful financial management that doesn't have capital structure optimalization in the centre of interest. The gearing problem becomes even more complex in particular transition environment like Croatian economy is. The companies are overdebted and they look desperately for 'fresh' capital hoping to attract foreign partners to invest or trying to get some expensive bank loan to survive. With high risks, low earnings, insufficient cash flows for debt repayments, additional resources are needed but hardly provided and the magic circle goes on. That makes driving a business in Croatia to be a real challenge. Survival can't be achieved in any case without right strategic decisions supported by strategic accounting information. Gearing calculation is among the central topics of accounting analysis. It's crucially important to create the gearing policy based on reliable strategic accounting information considering its predicted business consequences and its contribution to maximizing the firm value, instead of leaving it to 'ad hoc' solutions as it is often the case with Croatian enterprises. Although the firm's gearing level will be under the influence of its particularities, and will probably differ considerably over firms, there are some common relations. So, determinants of capital structure defined by prior researches and tests on UK companies, are empirically tested for the sample of Croatian companies.

The cross-sectional analysis of gearing in Croatia consists of two models. The first one is comparable to Bevan and Danbolt's analysis according to the first definition of gearing. The other one is based on the gearing ratio: debts to equity.

Table 1.: Descriptive Statistics

| Variable | Mean | Median |
|---|---|---|
| C (non-equity liabilities to assets) | 0.3550 | 0.2690 |
| E (non-equity liabilities to equity) | 0.5331 | 0.3542 |
| F (logsales in thousands of kunas) - size | 10.053 | 10.342 |
| G (profitability) | -9.395E-03 | 5.705E-03 |
| H (tangibility) | 0.6012 | 0.5540 |

n=86

According to descriptive statistics (table 1), non-equity liabilities accounted for 36% of the total assets and 53% of the equity in 1995. It's crucial to understand that such low gearing ratio doesn't mean Croatian companies are rich of equity capital considering serious overdebtedness and insolvency problems. The reasons were the revaluation procedures that have overvalued the equities while undervalued the liabilities (Tadijančević, 1995, p. 33-34). So, we do not proceed the analysis in that direction; instead concentrate on relations of potential variables of influence to gearing ratio, avoiding in such a manner the consequences of revaluations. Turnover of companies in the sample was around twenty-three millions of kunas, return on assets had a negative sign and depreciated fixed assets (tangibles) accounted for 60% of the total assets.

The regression model is adjusted Bevan and Danbolt's model. Bevan and Danbolt used the three-year average for independent variables but the results were almost the same to the ones obtained on one-year basis as it is used in our research. In addition, their market-to-book variable is exempted due to unavailable data. So, the model is structured as it follows:

$$Gearing_i = ß_1 + ß_2 Logsale_i + ß_3 Profitability_i + ß_4 Tangibility_i + \varepsilon_i \quad (6)$$

The OLS results are presented in table 2 (also see appendix).

Table 2.: Cross-sectional Analysis of Gearing in Croatia, 1995and UK, 1991

| Gearing | Constant | Logsales (F) | Profitability (G) | Tangibility (H) |
|---|---|---|---|---|
| C | 0.92386[2] | -0.05189[2] | -0.16646 | -0.16646[1] |
| E | 0.84305[1] | -0.03385 | -1.86855[2] | 0.02124 |
| BD | 0.6052[2] | 0.0126[2] | -0.7768[2] | -0.2300[2] |
| BDd | 0.2041[2] | -0.0043[1] | -0.2310[2] | -0.0481[2] |
| RZ | | 0.026[2] | -0.34 | 0.41[2] |

1=significant at 5% level

2=significant at 1% level

C=non-equity liabilities to total assets

E=non-equity liabilities to equity

BD= Bevan and Danbolt's regression model

BDd= Bevan and Danbolt's decomposed regression model – gearing measured as short-term borrowings to total assets

RZ= Rajan and Zingales' regression model

*Gearing is measured at book values (BD and RZ regression models based on market value are not presented since they aren't comparable to our research due to unavailable market value data).

Size of the company is expected to have positive impact on gearing. Large companies bankrupt less often, have a credit rating and better access to non-bank debt financing. According to Rajan and Zingales, Bevan and Danbolt, size of the company is significantly positively related to gearing measured at book values, while there's no correlation with gearing measured at market values. So, they concluded that the size of the company appears to have only limited impact on the capital structure. Our investigation discovered significant negative correlation to gearing measured as the ratio of non-equity liabilities to total assets. The same impact is noticed by Bevan and Danbolt when they decomposed gearing ratio and analysed short-term bank borrowing. According to their explanation, small companies are supply constrained, they do not have sufficient credit rating needed for access to long-term borrowing and are forced to use short-term borrowings. In addition, such result could be explained considering particularities of a transition economy like Croatian. During transition, a lot of people became unemployed and tried to survive by running their own business. As a consequence, a number of small enterprises were founded with a minimum equity. They desperately needed additional financial resources that were obtained mostly through expensive bank loans on the short-term basis.

The negative relation between profitability and gearing is explained in the theory (Stiglitz and Weiss, 1981) as the consequence of information asymmetry and inability of lenders to distinguish good and bad risks what results in the increase of the general cost of borrowing independently of the actual risk. That makes the profitable companies with good risks to avoid external financing. Myers and Majluf (1984) pecking-order theory also suggests that based on asymmetric information, companies will prefer internal to external capital resources, i.e. retained earnings to debt finance. Profitability is significantly negatively related to gearing in Croatian companies (measured as the ratio of non-equity liabilities to equity) and that's in accordance with prior research (Toy et. al., 1974, Kester, 1986, Titman and Wessels, 1988, Rajan and Zingales, 1995, Bevan and Danbolt, 2000). The regression coefficient is negative, but not statistically significant if gearing is calculated with total assets instead of equity in the denominator. Prior research concluded that profitability has the strongest explanatory power of gearing levels, regardless of the gearing definition, but still, if calculated at book value, Rajan and Zingales' coefficient wasn't statistically significant.

Tangibility is considered to be positively related to gearing since high amounts of tangible assets make the debt secure and such more readily available (Scott, 1977, Williamson, 1988, Harris and Raviv, 1990, Rajan and Zingales, 1995). Tangibility coefficient is significantly negative if gearing for Croatian companies is measured as non-equity liabilities to total assets and the result is comparable to Bevan and Danbolt's. If other gearing definitions were employed in their research, it turned to be positive. The positive correlation is expected (consistent with Bradley et al., 1984,

Titman and Wessels, 1988, Rajan and Zingales, 1995) when gearing is measured on the basis of long-term debts, but with non-equity liabilities in the nominator, short-term liabilities are also covered and they aren't the kind of liability expected to finance the fixed assets. They certainly take a big part of total non-equity liabilities since they managed to change the coefficient sign. That particularly stays for Croatia where trade credit and other short-term liabilities are the *popular* way to overcome current financial problems and long-term debts are raised less often, partly due to their expensiveness, hard accessibility, and partly because of concentration more on operative than strategic financial decisions.

## Conclusions

The problem of optimal capital gearing seems not to be a real 'problem' in Croatian enterprises before transition. The loans in that period were easy-to-access, cheap and without indexation, they produced high inflationary gains and that's why they were widely used. Together with transition processes, such loans became the past and gearing problem arose like in the rest of market economies. Croatian economy is far from the Modigliani and Miller's perfect capital market assumption, thus market imperfections combined with particular transition environment make the gearing to be a vital problem of Croatian companies. So, we were interested to find any relation of potential variables of influences to gearing in Croatia based on Bevan and Danbolt's (2000) and Rajan and Zingales' (1995) research on gearing in UK companies in 1991.

Therefore, we have analysed the correlation between gearing and the size of the company, its profitability and tangibility. We found it is significantly negatively correlated with explanatory variables. In short, we were interested to find out which are the companies in Croatia that have highest level of gearing, and *vice versa*. It turned out that highest gearing level is related to small companies, with low level of profitability and low tangibility. The results are in accordance with previous research, particularly with the Bevan and Danbolt's decompositional analysis and short-term component of gearing correlation to those independent variables. Although traditional gearing theory is based on long-term debts, including the short-term component helps to understand the gearing policy better, particularly in Croatian enterprises where it takes considerable part of total liabilities.

Since Croatian enterprises are starving for 'fresh' capital resources, the gearing problem should be in the *focus* of their interest for a long time. So, it's of vital importance to avoid an *ad hoc* creating of gearing policy often found in Croatian firms and to use strategic accounting information to make strategic decisions towards the optimal capital structure.

## NOTES

[1] Efficient financial governance of a company has become essential in the today globalizing world where different risk aversions and required capital returns determine the firm's appropriate capital structure. The gearing problem is discussed from the traditional point of view as well as Modigliani and Miller's. Under the market imperfections, the firm's capital structure does matter for the firm's value. Finding optimum gearing level leads to minimum cost of capital maximizing the firm's total capital value on the market. Optimal capital structure existence for any firm on the market suggests that financial managers' and strategic accountants' primary task is to find the optimum or equilibrium gearing level. Turning upon the capital market non-stationarity state explains why still today, in the Internet era and nearly perfect information mobility, finding an optimal capital structure for financial managers remains a quest. In the real world, optimal capital structure of the firm promptly changes as capital market conditions and the players on it change their position. So, the correlation between gearing level and potential variables of influence is tested for a sample of 86 Croatian firms comparing to the results of prior research in other countries (particularly Bevan and Danbolt's, and Rajan and Zingales' for UK). Since there's a great part of short-term debts in total liabilities, the analysis of gearing in Croatian enterprises is extended by this component besides the long-term debts according to traditional theory (the same was the case with Bevan and Danbolt's research). The cross-sectional analysis of gearing in Croatia consists of two models. The first one is comparable to Bevan and Danbolt's analysis according to their first definition of gearing as non-equity liabilities to total assets. The other one is based on the gearing ratio with equity in the denominator that is widely used in Croatian accounting and financial analysis. Three of four independent variables are adopted from Bevan and Danbolt's research and tested for the sample of Croatian companies. The fourth one – market-to-book ratio couldn't be included in the model because of unavailable data on market value of equity. The others are comparable to their analysis: size (the proxy is the natural logarithm of sales), profitability (the ratio of earnings before tax to the book value of total assets) and tangibility (the ratio of the book value of depreciated fixed – tangible assets to the book value of total assets). The results are in accordance with prior research, particularly with the Bevan and Danbolt's decompositional analysis and short-term component of gearing correlation to those independent variables. The gearing problem becomes even more complex in particular transition environment like Croatian economy is. The companies are overdebted and they look desperately for 'fresh' capital hoping to attract foreign partners to invest or trying to get some expensive bank loan to survive. With high risks, low earnings and cash flows insufficient for debt repayments, additional resources are needed but hardly provided and the magic circle goes on. That makes driving a business and a gearing policy in Croatia to be a real challenge. Survival can't be achieved in any case without right strategic decisions supported by strategic accounting information. It's crucially important to create the gearing policy based on reliable strategic accounting information considering its predicted business consequences and its contribution to maximizing the firm's value, instead of leaving it to 'ad hoc' solutions as it is often the case with Croatian enterprises.

[2] Other capital budgeting theories suggests the use of the risk-adjusted discount rate as an alternative to the common firm's discount rate (cost of capital).

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# APPENDIX

STATISTIX - VERSION 7.1
UNWEIGHTED LEAST SQUARES LINEAR REGRESSION OF C

| PREDICTOR VARIABLES | COEFFICIENT | STD ERROR | STUDENT'S T | P | VIF |
|---|---|---|---|---|---|
| CONSTANT | 0.92386 | 0.21273 | 4.34 | 0.0000 | |
| F | -0.05189 | 0.02051 | -2.53 | 0.0133 | 1.0 |
| G | -0.16646 | 0.23826 | -0.70 | 0.4867 | 1.1 |
| H | -0.08105 | 0.04334 | -1.87 | 0.0650 | 1.0 |

| | | | |
|---|---|---|---|
| R-SQUARED | 0.1070 | RESID. MEAN SQUARE (MSE) | 0.07569 |
| ADJUSTED R-SQUARED | 0.0743 | STANDARD DEVIATION | 0.27512 |

| SOURCE | DF | SS | MS | F | P |
|---|---|---|---|---|---|
| REGRESSION | 3 | 0.74372 | 0.24791 | 3.28 | 0.0251 |
| RESIDUAL | 82 | 6.20676 | 0.07569 | | |
| TOTAL | 85 | 6.95047 | | | |

CASES INCLUDED 86 MISSING CASES 0

STATISTIX - VERSION 7.1
UNWEIGHTED LEAST SQUARES LINEAR REGRESSION OF E

| PREDICTOR VARIABLES | COEFFICIENT | STD ERROR | STUDENT'S T | P | VIF |
|---|---|---|---|---|---|
| CONSTANT | 0.84305 | 0.41335 | 2.04 | 0.0446 | |
| F | -0.03385 | 0.03986 | -0.85 | 0.3982 | 1.0 |
| G | -1.86855 | 0.46296 | -4.04 | 0.0001 | 1.1 |
| H | 0.02124 | 0.08420 | 0.25 | 0.8015 | 1.0 |

| | | | |
|---|---|---|---|
| R-SQUARED | 0.1929 | RESID. MEAN SQUARE (MSE) | 0.28578 |
| ADJUSTED R-SQUARED | 0.1634 | STANDARD DEVIATION | 0.53459 |

| SOURCE | DF | SS | MS | F | P |
|---|---|---|---|---|---|
| REGRESSION | 3 | 5.60120 | 1.86707 | 6.53 | 0.0005 |
| RESIDUAL | 82 | 23.4343 | 0.28578 | | |
| TOTAL | 85 | 29.0355 | | | |

CASES INCLUDED 86 MISSING CASES 0