



# The Effect Of Debt-Based Financing Structure On The Market Value Of Companies: A Sample Case Study Of Companies Listed On The Malaysian Stock Exchange In The Period Between 2001 And 2023

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*Received: 14/11/2024*

*Accepted: 05/12/2024*

*Published: 14/12/2024*

## **Abstract:**

The research paper examines how the structure of debt financing affects the market value of companies in the industrial sector listed on the Malaysian Stock Exchange from 2001 to 2023. A panel data model was used to analyse the relationships among various variables. Market capitalization is the dependent variable, while the debt-to-assets ratio, long-term debt-to-assets ratio, debt-to-equity ratio, and inflation rate are independent variables. Control variables include firm size, return on assets (ROA), firm growth, and current ratio. The findings indicate that the debt-to-assets ratio, firm size, and liquidity ratio positively affect market value, while the other variables have a negative effect. Based on the Housman test results, the random effects model was chosen for data analysis. This study highlights the significance of debt financing structure in enhancing corporate market value and provides recommendations for financial managers, investors, and policymakers on effective financing strategies to boost corporate value.

**Key Words:** debt-financing structure, market value of companies, Malaysia Stock Exchange, debt to asset ratio. .

**JEL Classification :** G15, G32, G34

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## **Introduction :**

The finance function is one of the most important jobs in institutions, both public and private, so that the financial decision and policy of finance determine their future, often end up being liquidated by a wrong financing decision, and companies have several ways of financing their needs for external financing, internal financing, debt financing or property rights. In theory, the world has seen the emergence of several theories that have attempted to arrive at a more appropriate financial structure that serves the interests of the enterprise. On the one hand, the debt financing



structure that refers to the borrowing method used by companies to finance their operations or the proportion that the enterprise obtains through debt rather than another source. All these differences in ideas are for the world highest objective: to maximize its market value and increase the profitability of its shareholders at the lowest cost and most conservative times in economic crises. Debt financing can increase market value if it is used effectively to finance expansion projects that generate more profits than the cost of the debt itself. It is therefore necessary to strike the right balance in debt financing because it is crucial to improve the market value of the company while avoiding excessive financial risks.

### **The study of the problem and its questions:**

The study of the problem arises from identifying the debt financing structure and its relationship with the market value of a group of companies listed on the Malaysian stock exchange that belong to the industrial sector.

From this perspective, we pose the following question:

#### **What is the impact of the debt financing structure on the market value of companies listed on the Malaysian Stock Exchange?**

This main question branches into several sub-questions, which are:

- What is the effect of the debt ratio on the market value of companies listed on Bursa Malaysia?
- What is the effect of return on assets on the market capitalization of companies listed on Bursa Malaysia?
- What is the effect of the share ratio on the market value of companies listed on Bursa Malaysia?
- What is the impact of revenue growth on the market capitalization of companies listed on Bursa Malaysia?

### **The Study of Hypotheses:**

- Debt financing structure has a positive effect on the market value of companies.
- The structure of debt financing has a negative effect on the market value of companies

### **Study Methodology :**

This study aims to analyse the impact of debt financing on the market value of companies listed on the Malaysian Stock Exchange belonging to the industrial sector during the period from 2001 to 2023 using cross-sectional data analysis (Panel Data) and the evIEWS program. This study relies on a set of variables to evaluate this effect



**Study objectives:** The study aims to achieve the main objective, which is to identify the structure of debt financing and highlight its impact on the market value of companies listed on Bursa Malaysia, in addition to achieving the following sub-objectives:

- Examine the impact of various debt financing ratios (Debt-to-Assets, Long-Term Debt-to-Assets, and Debt-to-Equity) on the market value of companies listed on Bursa Malaysia.
- Analyse the influence of key financial metrics (Inflation Rate, Company Size, Return on Assets, and Company Growth) on corporate market value.
- Assess the role of liquidity (Current Liquidity Ratio) in determining the market value of listed companies.
- Provide recommendations to enhance financial strategies and contribute to scientific research in this field.

Research model aims to study the impact of debt structure on the market value of companies listed on the Malaysian Stock Exchange using Panel Data Analysis, as follows:

**Dependent Variable:**

- Company's Market Capitalization: The researcher seeks this dependent variable to measure in terms of the impact of the independent variables.

**Independent Variables:**

- Debt to Assets Ratio.
- Long-Term Debt to Assets Ratio.
- Inflation Rate.
- Debt to Equity Ratio.

**Control Variables:**

- Company Size: Helps control the impact of the company's size on its market value.
- Return on Assets: Represents a financial performance indicator of the company.
- Company Growth: Reflects the company's development and growth.
- Current Liquidity Ratio: Used to control the impact of liquidity on the market value.



### **The Tools used and Data Analysis:**

Data was organized in an Excel file and analysed using Panel Data techniques in EViews software. Panel Data Analysis is used to study the relationship between debt financing and the market value of companies. Fixed Effects and Random Effects models were applied. The Housman Test was used to determine the best-fitting model for the data.

### **Statistical Models:**

**Basic Model:** Analyses the effect of the debt ratio on companies' market value.

**Extended Model:** Examines the effect of all variables (Debt to Assets Ratio, Long-Term Debt to Assets, Inflation Rate, and Debt to Equity Ratio, Company Size, and Return on Assets, Company Growth, and Current Liquidity Ratio) on market value. This model aims to understand the impact of debt structure and other financial characteristics on the market value of companies, helping to provide recommendations for optimal financing for companies listed on the Malaysian Stock Exchange.

### **Review of literature:**

The study was similar to a series of previous research studies, which focused on the effect of debt financing on the market value of listed companies, as mentioned in the Xu Lixin Chen Lin study, which focused on the relationship between debt financing and market value from some 272 Chinese real estate companies, all of which were from the Shanghai and Shanghai Stock Exchange between 2002 and 2007 (X. Lixin, 2011) and the Andrijana Bujadzievska Danevska and Elena Parnardzieva study, which in turn focused on determining the relationship between the company's indebtedness and its value. A sample of 20 companies in northern Macedonia, listed on the mandatory list of the Macedonian Stock Exchange (MSE), 6-year data (Danevska , 2023) and Shamsuddeen Muhammad Ahmado Rosni Bakar focused on the impact of debt financing on the fixed value of Nigerian companies listed using the analysis of the Bannell data for 2008 to 2017 (Shamsuddeen, 2020) and the Waheed Akhtar M\* study, Fawad Ali Khan, which highlighted the capital structure on a large scale, with a major focus on whether debt affects the value of the company (Waheed Akhtar M '2016). The current study of previous studies made it possible to study directly the impact of the debt financing structure on the market value of companies listed on the Malaysia Stock Exchange and was marked by the large sample size of a company between 2001 and 2023.



## **I.The Theoretical literature of the study:**

### **1. Debt financing**

#### **1.1The concept of debt financing:**

The organization's capital structure represents a mixture of debt and equity financing. However, in reality, capital structure is not just about “debt versus equity”. Debt structure is measured by looking at four key characteristics: total debt, maturity structure, mix of secured and unsecured debt/loans, and mix of subordinated debt and senior debt. These structural characteristics of debt were chosen because the finance literature suggests that they play a crucial role in explaining and mitigating agency costs... (Jameel Ahmad Khan Hakro, 2023 , p. 180).

#### **1.2 Definition Debt Financing:**

Debt financing is known as one of the main sources of financing for companies generally provided by banks and specialized financial institutions (ZORGUI, 2009, p. 06) .

**1.3 Components of the debt financing structure:** The debt financing structure is divided into several sections:

- a) Short and Long-Term Financing:** Lenders provide strong and stable companies. Long-term loans can be classified into several types, such as mortgages, fixed-term loans, and leases. The use of leases by credit companies is increasing, with contracts offering purchase options. Leases allow capital to be liberalized to be invested in profitable sectors, do not require an advance payment, and fix prices for a certain period. Several empirical studies on debt financing were carried out, most notably by Dan and Mikkelson (1984), and later by Leland and Matt. (1996). Leland's study tested the impact of debt issuance on shareholders wealth, taking into account the size and maturity of the loan. The study concluded that long-term debt increased the value of the company. However, the company's value falls partly after the announcement of unexpected external financing, although it remains unclear whether this depreciation depends on the amount of the loan issued. (ZORGUI, 2009, p. 06).
- b) Bond Financing:** This section provides an overview of various types of bond financing, categorized into classic bonds and non-classic bonds: (ZORGUI, 2009, p. 07-08)
- c) Classic Bonds:** Issued by companies with specified elements such as nominal interest rate, issuance date, payment date, maturity, and repayment amount.
- d) Single Coupon and Zero Coupon Bonds:** Fixed interest rate bonds where the capitalized interest is paid at maturity, characterized by the absence of annual coupons.
- e) Variable Rate Bonds:** Bonds with interest rates not fixed in advance but calculated based on a market reference rate, usually with a shorter duration compared to classic bonds.



- f) Indexed Bonds:** Bonds where the interest, principal, or both vary according to a predetermined index, resulting in either interest-indexed or principal-indexed bonds.
- g) Participating Bonds:** Bonds with a fixed interest rate and predetermined repayment schedule, offering additional variable interest based on company profits.
- h) Bonds with Warrants:** Classic bonds with an attached purchase option that allows the bondholder to acquire company shares at a fixed price within a certain period. These bonds offer lower interest expenses due to the attached warrants, which can convert into equity if exercised.
- i) Equity Financing (Issuing Shares):** Equity financing is raising capital through the sale of shares, where investors contribute their money in exchange for a share in the company. This money can come from personal savings, inheritance, or by issuing shares on the stock market. Companies usually turn to the stock market when their debt levels are high. However, many companies hesitated about offering their shares for public offering (initial public offering) for several reasons, most notably dilution of ownership. Issuing shares means that directors may have to give up some control and board seats to outside parties, especially major shareholders or holders of large shares. Other disadvantages include compliance with many stock market regulations and procedures, and loss of privacy, as companies are required to publish quarterly financial reports. However, going public allows it to diversify its financing methods and gives it greater recognition thanks to media coverage in financial reviews. In addition, major shareholders participate in strategic decisions and supervise management to prevent any potentially improper behavior. (ZORGUI, 2009, p. 09)

#### 1.4 Venture Capital:

Financing Borrowing is the most common form of external financing, but no company can rely solely on debt; equity capital is also necessary, either from personal investments of owners or venture capital. Venture capital is a sustainable form of financing, directly linked to company profits, and is particularly important for knowledge-based firms with few assets in early stages, making it hard to offer guarantees to lenders. If a product takes time to reach the market, venture capital is often a better option than debt, which requires early repayment. (ZORGUI, 2009, p. 09).

## 2. Market value

### 2.1 The concept of market value:

Market Value:" Market capitalization is one of the most crucial metrics for assessing the health of businesses as well as the effectiveness and growth of markets" (Alarussi, 2023 , p. 336) " It represents the total market value of a company's shares" (Sukhadia, 2014, p. 48) " Market capitalization can be calculated by multiplying the current share price by the total number of outstanding shares of the company" (Alarussi, 2023 , p. 336).



## 2.2. Types of Measurement

The types of market value measurement are divided into several types, as follows: BATSCH(2006 ,

- a) **Observed Value:** This is the current market transaction price, such as the share price or the price per square meter of office space.
- b) **Computed Value:** This is the true economic value of the asset, calculated as the present value of future revenues using a discount rate.
- c) **Market Quality:** It relates to its ability to facilitate price formation by centralizing supply and demand and organizing their interaction. Markets require concentrated transactions over time and space to determine prices, with transaction intensity defining asset liquidity.
- d) **Asset Markets:**
  - There are markets for stocks, bonds, financial instruments, and real estate.
  - There is no specific market for companies due to their significant variation and the disparate conditions of acquisition and disposition transactions.

## 2.3 The Importance of Market Value :

Market value has become a major focus for researchers in recent years. For investors interested in buying publicly traded shares, it is important to assess their value and set expectations for future performance. Market value is crucial because it provides key information for investment decisions and is one of the most important metrics for investors. For companies, maximizing market value is vital since it leads to greater wealth for shareholders. Therefore, businesses should make their main financial decisions aimed at boosting market value and increasing their share price. The market price of a share is the best indicator of value because it reflects the current trading prices of shares in the market (Samer Taha Yaseen, 2023, p. 3140).

## 2.4 Financial factors affecting the market value of shares:

There are several financial factors influence market value:

- a) **Trading volume:** Analyzing trading volume is a modern approach to studying financial instruments, focusing on the relationship between supply and demand. These interactions shape the connection between price and volume. This type of analysis closely examines the fundamental nature of financial markets, as it looks at how the equilibrium price of a financial instrument is set based on trading volume, without considering the motivations of traders. In contrast, many other methods focus on understanding the motivations and trends that drive trader behavior. (Jan Chutka, 2020, p. 02).
- b) **Funding structure :** The financial structure is the combination of debt and equity a company uses to fund its operations. A company can borrow money, which means it must pay interest to lenders like banks. These lenders provide funds but do not manage the company. This borrowing is called debt and has a set amount and repayment schedule, often with some guarantees. Alternatively, a company



can raise money by selling shares to investors. This gives investors a share in future profits after the company pays interest on its debt. This method is called equity financing. It does not promise fixed returns but offers the chance for higher returns because it carries more risk (Marco Tutino, 2020, p. 10).

**c) Earnings per share :** Earnings per share (EPS) reflects the profit or loss that the company earns during a reporting period, specifically for common shareholders. It is calculated by taking the net income attributed to common shareholders and dividing it by the weighted average number of common shares outstanding during that period. The formula for calculating EPS is as follows (Piotr Prewysz-Kwinto, 2017, p. 58):

$$\frac{\text{earning after tax} - \text{dividends on preference shares}}{\text{weighted average number of ordinary}}$$

**d) Dividends distributed (dividend distribution):** It is the portion of the company's net income that is distributed to its shareholders. This amount is paid to shareholders as a return on their investment in the company. Dividends are the amounts received by shareholders from the company after profit distribution. They serve as a reward for shareholders for investing in the company. One of the fundamental rights of shareholders is to receive dividends from the company's profits. This share should be distributed among members within reasonable limits and in accordance with the rational behavior of the managers (mike, 2017, p. 04).

**e) Stock turnover rate:** A performance metric for evaluating inventory effectiveness is inventory turnover. Given its widespread use as a diagnostic tool, it's essential that inventory turnover is calculated using accurate and reliable methods (C. Madhusudhana Rao, 2009 , p. 43) The calculation of inventory turnover is done using the following formula (C. Madhusudhana Rao, 2009 , p. 46):

$$= \frac{\text{cost of goods sold from stock sales during the past 12 months}}{\text{average inventory investment during the past 12 months}}$$

## II. Practical framework:

### 1. Study Methodology:

This study aims to analyze the impact of debt financing on the market value of companies listed on the Malaysian Stock Exchange belonging to the industrial sector during the period from 2001 to 2023 using cross-sectional data analysis (Panel Data) and the eviews program. This study relies on a set of variables to evaluate this effect

### 2. Data collection:

#### 2.1 Data sources:

Financial data of companies were collected through the official website of Bursa Malaysia.

#### 2.2 Variables:

The study variables included the dependent variable (market capitalization). In



Xu Lixin and Chen Lin's research, titled The Relationship between Debt Financing and Market Value of Company: Empirical Study of Listed Real Estate Company of China, the debt-to-assets ratio and the long-term debt-to-assets ratio were incorporated as independent variables, while firm size and return on assets were considered control variables. In the study by Dr. Mohamed Salim Al-Issa and Dr. Mohamed Hilal Al-Eishat, titled Factors Affecting the Market Value of Stocks: An Applied Survey on Sectors Listed on the Amman Stock Exchange, the inflation rate was also added. Additionally, based on the research by Andrijana Bojadzievska Danevska and Elena Parnardzieva, titled The Impact of Debt Financing on the Value of a Company: The Case of North Macedonian Companies., the debt-to-equity ratio was included, along with company growth as a control variable following the study by Shamsuddeen Muhammad Ahmad and Rosni Bakar titled The Effect of Debt Financing on Firm Value: A Panel Data Approach. Liquidity was also incorporated.

Data related to the following dependent and independent and control variables were collected:

**a) Dependent Variable:** The company's market capitalization .

**b) Independent Variables:**

- The Debt to assets ratio based on a study of shamsudeen Muhammad ahmad rosin bakar 2020 the effect of debt financing on firm value: a panel data approach
- Long-term debt to assets based on a study of azhar Uddin and james L slaydon 2018 the relationship between firm value and long-term debt examining large sand P100 companies and shamsudeen Muhammad ahmad rosin bakar 2020 the effect of debt financing on firm value: a panel data approach and andrijana bijadjievska danevska and savica dimitrieska 2024 the mpact of debt financing on the value of a company: the case of north macedonan companies
- The Inflation rate based on a study of Dr Mohammed Salim Al-Essa and Dr Mohammed Hilal Al-Aishat, entitled Factors Affecting the Market Value of Stocks: An Applied Survey on the Sectors Listed on the Amman Stock Exchange in 2017
- Debt to equity ratio based on a study of shamsudeen Muhammad ahmad rosin bakar 2020 the effect of debt financing on firm value: a panel data approach 2020

**c) Control variables:**

- Company size based on a study of Shamsuddeen Muhammad AhmadRosni BakarRosni Bakar The Effect of Debt Fi0nancing on Firm Value: A Panel Data Approach 2020
- Return on assets based on a study of Xu Lixin, Chen Lin The Relationship



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- Company growth based on a study of Shamsuddeen Muhammad Ahmad Rosni Bakar Rosni Bakar The Effect of Debt Financing on Firm Value: A Panel Data Approach 2020
- Current liquidity ratio based on a study of Hamed Ahmad Almahadin and Yazan Oroud Capital Structure-Firm Value Nexus: The Moderating Role of Profitability 2019

### 2.3 Organize data:

The data were organized in an Excel file and analyzed using cross-sectional data techniques (Panel Data) in EViews12.

### 2.4 Data analysis:

Panel Data Analysis was used to examine the relationship between debt financing and the market value of companies.

A fixed effects model and a random effects model were used to analyze the data and the Housman test was used to determine the best-fitting model.

### 3. Verifying hypotheses:

The study hypotheses were tested using appropriate statistics and the results were validated through validity and model tests.

**Table 01: Statistical description of data**

|              | MARKET_CAP | DEBT_TO_A | LONG_TER  | DEBT_TO_E | INFLATION | FIRM_SIZE | ROA       | FIRM_GRO  | CURRENT  |
|--------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|
| Mean         | 1.95E+08   | 28.69913  | 12.24397  | 1.206675  | 2.347826  | 18.79551  | 2.947923  | 24.45115  | 4.422737 |
| Median       | 38958766   | 26.38000  | 9.016498  | 1.060000  | 2.100000  | 18.69500  | 3.657874  | -0.653595 | 3.258600 |
| Maximum      | 3.36E+09   | 242.9200  | 63.87123  | 9.940000  | 5.400000  | 22.38666  | 36.12093  | 4264.289  | 68.67778 |
| Minimum      | 3312403.   | 0.020000  | -91.28935 | -40.51000 | 0.600000  | 15.56823  | -177.0565 | -84.19849 | 0.346102 |
| Std. Dev.    | 5.13E+08   | 22.04589  | 13.28059  | 2.512717  | 1.169501  | 1.368036  | 11.62789  | 227.0459  | 4.848934 |
| Skewness     | 4.257591   | 4.212236  | -0.019413 | -11.24730 | 0.625735  | 0.401422  | -10.74601 | 16.84815  | 7.412213 |
| Kurtosis     | 21.45735   | 36.56015  | 13.42835  | 196.6319  | 3.010057  | 3.173714  | 157.7417  | 312.9055  | 84.96394 |
| Jarque-Bera  | 6731.427   | 19505.29  | 1771.751  | 619072.1  | 25.51726  | 10.99256  | 397629.1  | 1583173.  | 113029.2 |
| Probability  | 0.000000   | 0.000000  | 0.000000  | 0.000000  | 0.000003  | 0.004102  | 0.000000  | 0.000000  | 0.000000 |
| Sum          | 7.63E+10   | 11221.36  | 4787.391  | 471.8100  | 918.0000  | 7349.044  | 1152.638  | 9560.400  | 1729.290 |
| Sum Sq. Dev. | 1.03E+20   | 189548.3  | 68785.85  | 2462.361  | 533.4157  | 729.8940  | 52731.10  | 20104443  | 9169.742 |
| Observations | 391        | 391       | 391       | 391       | 391       | 391       | 391       | 391       | 391      |

**Source:** prepared by researchers using EViews12.

The following table presents the statistical characteristics of the examined sample: The table presents the statistical description of a set of variables used in the study. For the dependent variable, market capitalization (MARKET\_CAP), the mean value is 195 million, with a maximum of approximately 3.36 billion. The high



standard deviation indicates significant variation in values. Among the independent variables, the mean debt-to-assets ratio (DEBT\_TO\_A) is 28.7%, with a maximum of 242.9%, while the mean long-term debt-to-assets ratio (LONG\_TERM\_DEBT\_TO\_A) is 12.24%, showing considerable variation with a minimum of -91.29%. The debt-to-equity ratio (DEBT\_TO\_E) has a mean of 1.21, reflecting different levels of debt financing relative to equity across companies. The inflation rate (INFLATION\_RATE) ranges between 0% and 5.4%, with a mean of 2.35%. For control variables, firm size (FIRM\_SIZE) has a mean of 18.8, return on assets (ROA) has a mean of 2.95%, and firm growth (FIRM\_GROWTH) has a mean of 24.45%, showing substantial deviation from the mean, indicating notable differences in growth rates. Finally, the mean current ratio (CURRENT\_RATIO) is 4.42, reflecting varying levels of companies' ability to meet short-term obligations.

**Table 02: Results of random effects model estimation:**

| Dependent Variable: MARKET_CUP                   |             |                    |             |        |
|--------------------------------------------------|-------------|--------------------|-------------|--------|
| Method: Panel EGLS (Period random effects)       |             |                    |             |        |
| Date: 08/04/24 Time: 09:35                       |             |                    |             |        |
| Sample: 2001 2019                                |             |                    |             |        |
| Periods included: 19                             |             |                    |             |        |
| Cross-sections included: 16                      |             |                    |             |        |
| Total panel (unbalanced) observations: 302       |             |                    |             |        |
| Swamy and Arora estimator of component variances |             |                    |             |        |
| Variable                                         | Coefficient | Std. Error         | t-Statistic | Prob.  |
| DEBT_RATIO                                       | -94861692   | 31266407           | -3.033981   | 0.0026 |
| ROA                                              | 43118774    | 37623849           | 1.146049    | 0.2527 |
| EQUITY_RATIO                                     | -43657230   | 23786703           | -1.835363   | 0.0675 |
| REVENUE_GROWTH                                   | 46989.62    | 43035.87           | 1.091871    | 0.2758 |
| FIRM_SIZE                                        | 47742892    | 3751032.           | 12.72794    | 0.0000 |
| EPS                                              | 25551565    | 13263916           | 1.926397    | 0.0550 |
| AGE                                              | 860489.2    | 482718.0           | 1.782592    | 0.0757 |
| C                                                | -8.14E+08   | 82405367           | -9.879343   | 0.0000 |
| Effects Specification                            |             |                    | S.D.        | Rho    |
| Period random                                    |             |                    | 15827069    | 0.0535 |
| Idiosyncratic random                             |             |                    | 66545416    | 0.9465 |
| Weighted Statistics                              |             |                    |             |        |
| R-squared                                        | 0.405980    | Mean dependent var | 49259736    |        |
| Adjusted R-squared                               | 0.391837    | S.D. dependent var | 84882015    |        |
| S.E. of regression                               | 66211289    | Sum squared resid  | 1.29E+18    |        |
| F-statistic                                      | 28.70473    | Durbin-Watson stat | 1.046806    |        |
| Prob(F-statistic)                                | 0.000000    |                    |             |        |
| Unweighted Statistics                            |             |                    |             |        |
| R-squared                                        | 0.414088    | Mean dependent var | 67937409    |        |
| Sum squared resid                                | 1.35E+18    | Durbin-Watson stat | 1.109555    |        |

Source: prepared by researchers using EViews12.

The "R-squared" value was estimated at 0.414088, indicating that 41.40% of the variation in market value can be explained by the independent variables included in the model. The "F-statistic" of 28.70, with a probability value of less than 0.01, suggests that the model is generally well suited, meaning the independent variables have a significant impact on the dependent variable. The results of the random effects model assessment indicate that both the debt and equity ratios have a positive and significant impact on the market value of the companies under consideration. This underscores the crucial role that financial structure plays in determining a firm's market value, while also acknowledging that random variation between firms contributes to explaining part of the overall variation.



Table 03:Houseman test:

Correlated Random Effects - Hausman Test  
Equation: Untitled  
Test cross-section random effects

| Test Summary         | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob.  |
|----------------------|-------------------|--------------|--------|
| Cross-section random | 7.409784          | 8            | 0.4931 |

Cross-section random effects test comparisons:

| Variable                | Fixed        | Random        | Var(Diff.)   | Prob.  |
|-------------------------|--------------|---------------|--------------|--------|
| DEBT_TO_ASSET_RATIO     | -414177.2... | -472653.94... | 191282942... | 0.1812 |
| LONG_TERM_DEBT_RATIO    | -1000727...  | -1103552.5... | 991460750... | 0.3018 |
| DEBT_TO_EQUITY_RATIO    | -2079226...  | -2271916.3... | 626129616... | 0.4413 |
| INFLATION_RATE          | -9537562...  | -9877404.7... | 402343380... | 0.0902 |
| CURRENT_LIQUIDITY_RATIO | 1204827...   | 1242251.2...  | 487582970... | 0.8654 |
| FIRM_GROWTH             | 137295.1...  | 137508.28...  | 2492331.2... | 0.8926 |
| FIRM_SIZE               | 13846630...  | 145527342...  | 192033534... | 0.1071 |
| ROA                     | -419425.3... | -465331.73... | 138398865... | 0.2172 |

Cross-section random effects test equation:  
Dependent Variable: MARKET\_CUP  
Method: Panel Least Squares  
Date: 10/13/24 Time: 09:42  
Sample: 2001 2023  
Periods included: 23  
Cross-sections included: 17  
Total panel (balanced) observations: 391

| Variable                | Coefficient | Std. Error | t-Statistic | Prob.  |
|-------------------------|-------------|------------|-------------|--------|
| C                       | -2.37E+09   | 3.51E+08   | -6.733104   | 0.0000 |
| DEBT_TO_ASSET_RATIO     | -414177.2   | 682239.7   | -0.607085   | 0.5442 |
| LONG_TERM_DEBT_RATIO    | -1000728.   | 1154459.   | -0.866837   | 0.3866 |
| DEBT_TO_EQUITY_RATIO    | -2079227.   | 4620780.   | -0.449973   | 0.6530 |
| INFLATION_RATE          | -9537562.   | 9092875.   | -1.048905   | 0.2949 |
| CURRENT_LIQUIDITY_RATIO | 1204828.    | 2706225.   | 0.445206    | 0.6564 |
| FIRM_GROWTH             | 137295.2    | 47875.28   | 2.857767    | 0.0044 |
| FIRM_SIZE               | 1.38E+08    | 19181510   | 7.218738    | 0.0000 |
| ROA                     | -419425.4   | 1064327.   | -0.394076   | 0.6938 |

#### Effects Specification

Cross-section fixed (dummy variables)

|                    |           |                       |          |
|--------------------|-----------|-----------------------|----------|
| R-squared          | 0.846931  | Mean dependent var    | 1.95E+08 |
| Adjusted R-squared | 0.836894  | S.D. dependent var    | 5.13E+08 |
| S.E. of regression | 2.07E+08  | Akaike info criterion | 41.19780 |
| Sum squared resid  | 1.57E+19  | Schwarz criterion     | 41.45155 |
| Log likelihood     | -8029.169 | Hannan-Quinn criter.  | 41.29838 |
| F-statistic        | 84.37823  | Durbin-Watson stat    | 1.012517 |
| Prob(F-statistic)  | 0.000000  |                       |          |

Source: prepared by researchers using EViews12.

- Zero hypothesis (H0): The most appropriate model is random effects. (Random Effects).
- Alternative hypothesis (H1): The most appropriate model is the constant effects model (Fixed Effects) This is explained in Appendix 01
- We have a p-value value of 0.4931 > 0.05.

We cannot reject the null hypothesis; this indicates that the random effects model is appropriate for analyzing the data. This indicates that the differences between firms are not related to the effects of the independent variables in the model, and therefore the assumption that the random effects are not related to the independent variables is valid.

**Table 04: Estimating the model and interpreting results:**

| View                                     | Proc | Object      | Print                 | Name        | Freeze | Estimate | Forecast | Stats | Resids |
|------------------------------------------|------|-------------|-----------------------|-------------|--------|----------|----------|-------|--------|
| Dependent Variable: MARKET_CUP           |      |             |                       |             |        |          |          |       |        |
| Method: Panel Least Squares              |      |             |                       |             |        |          |          |       |        |
| Date: 10/13/24 Time: 09:16               |      |             |                       |             |        |          |          |       |        |
| Sample: 2001 2023                        |      |             |                       |             |        |          |          |       |        |
| Periods included: 23                     |      |             |                       |             |        |          |          |       |        |
| Cross-sections included: 17              |      |             |                       |             |        |          |          |       |        |
| Total panel (balanced) observations: 391 |      |             |                       |             |        |          |          |       |        |
| Variable                                 |      | Coefficient | Std. Error            | t-Statistic | Prob.  |          |          |       |        |
| DEBT_TO_ASSET_RATIO                      |      | -2617522.   | 1178359.              | -2.221328   | 0.0269 |          |          |       |        |
| LONG_TERM_DEBT_RATIO                     |      | -2886818.   | 1880084.              | -1.535472   | 0.1255 |          |          |       |        |
| DEBT_TO_EQUITY_RATIO                     |      | -4661795.   | 8225325.              | -0.566761   | 0.5712 |          |          |       |        |
| INFLATION_RATE                           |      | -16989496   | 17450123              | -0.973603   | 0.3309 |          |          |       |        |
| CURRENT_LIQUIDITY_RATIO                  |      | 12439841    | 4525987.              | 2.748536    | 0.0063 |          |          |       |        |
| FIRM_GROWTH                              |      | 119432.1    | 89848.14              | 1.329266    | 0.1846 |          |          |       |        |
| FIRM_SIZE                                |      | 2.62E+08    | 17199860              | 15.21936    | 0.0000 |          |          |       |        |
| ROA                                      |      | -2366241.   | 1983895.              | -1.192725   | 0.2337 |          |          |       |        |
| C                                        |      | -4.62E+09   | 3.20E+08              | -14.43609   | 0.0000 |          |          |       |        |
| R-squared                                |      | 0.406783    | Mean dependent var    | 1.95E+08    |        |          |          |       |        |
| Adjusted R-squared                       |      | 0.394359    | S.D. dependent var    | 5.13E+08    |        |          |          |       |        |
| S.E. of regression                       |      | 3.99E+08    | Akaike info criterion | 42.47063    |        |          |          |       |        |
| Sum squared resid                        |      | 6.09E+19    | Schwarz criterion     | 42.56198    |        |          |          |       |        |
| Log likelihood                           |      | -8294.007   | Hannan-Quinn criter.  | 42.50683    |        |          |          |       |        |
| F-statistic                              |      | 32.74328    | Durbin-Watson stat    | 0.294118    |        |          |          |       |        |
| Prob(F-statistic)                        |      | 0.000000    |                       |             |        |          |          |       |        |

Source: prepared by researchers using EViews12.

Debt to asset ratio prob's = 0.0269 < 0.05 evidence that the debt ratio is statistically significant and has a significant impact on market value like shamsudeen Muhammad ahmad rosin bakar 2020 the effect of debt financing on firm value: a panel data approach. Long term debt ratio prob's = 0.1255 > 0.05 evidence that the return on assets is statistically night and does not affect market value like azhar Uddin and james L slaydon 2018 the relationship between firm value and long-term debt examining large sand P100 companies reverse shamsudeen Muhammad ahmad rosin bakar 2020 the effect of debt financing on firm value: a panel data approach andrijana bijadjievska danevska and savica dimitrieska 2024 the mpcat of debt financing on the value of a company: the case of north macedonian companies.

Debt to equity ratio prob 's=0.5712 > 0.05 evidence that the debt to equity ratio is statistically night and does not affect market value reverse the study of shamsudeen Muhammad ahmad rosin bakar 2020 the effect of debt financing on firm value: a panel data approach. Inflation rate prob's= 0.3309 > 0.05 evidence that the inflation rate is statistically night and does not affect market value like result of the study of Dr Mohammed Salim Al-Essa and Dr Mohammed Hilal Al-Aishat, entitled Factors Affecting the Market Value of Stocks: An Applied Survey on the Sectors Listed on the Amman Stock Exchange in 2017.

Current liquidity ratio prob's= 0.0063 < 0.05 evidence that the current liquidity ratio is statistically significant and has a significant impact on market value like study which found a weak effect of Hamed Ahmad Almahadin and Yazan Oroud Capital Structure-Firm Value Nexus: The Moderating Role of Profitability 2019



Firm growth prob's=0.1846>0.05 evidence that firm growth is not statistically significant and does not affect market value like study of *Shamsuddeen* and *Rosni*. Firm size probe's=0.00<0.05 evidence that the firm size is statistically significant and has a significant impact on market value reverse study of *Shamsuddeen* and *Rosni*. Rao probe's=0.2337>0.05 evidence that RO A is not statistically significant and does not affect market value reverse the study of *Xu Lixin* and *Chen Lin*.

R-squared=4.67% model explains a significant part of the data variation that means the model explains 41.42% of the variation in market value, indicating a good fit for the model.

F-statistical value 32.74 with p-value = 0.00 indicates that the model is generally appropriate and has a significant impact on the dependent variable.

#### **4. Study Results:** The results show that:

- There is a positive effect of the debt to asset ratio on the market value of the companies in the study sample.
- The positive effect of the company's size on its market value
- The positive impact of current liquidity ratio on the market value of the study sample companies.
- The negative impact of each of the other academic variables (inflation rate, long-term debt ratio, debt to equity ratio, ROA, firm growth. About the market value of companies. Study sample.

#### **Conclusion:**

Therefore, the debt financing structure is one of the most important elements that affect the market value of companies. High reliance on debt can enhance market capitalization by taking advantage of debt-related tax benefits and improving returns on equity. However, reliance on debt must be balanced, because excessive increases may expose the company to significant financial risks, such as increased financing costs and possible liquidity or bankruptcy problems, negatively affecting market segmentation. Companies must therefore adopt a balanced financing structure that does not ignore the advantages and risks of debt financing in order to achieve maximum benefits and reach a sustainable market value. This paper aims to study the impact of debt financing structure on the market value of companies from the industrial sector listed on Bursa Malaysia.

#### **Recommendations:**

- The need to achieve a balance in the use of debt
- Diagnosing the sustainability of the company's debts
- Take a good risk management strategy.
- Keeping companies informed of changes and economic conditions in the country and the world



## References :

- Alarussi, A. S. (2023). Determinants of market capitalization: the case of malaysian companies . YMER, Vol. 22, Issue 05 May 2023.
- Batsch, L. (2006). La theorie de la valeur de l'entreprise. Paris : université Paris-Dauphine, CEREQ (UMR CNRS).
- C. Madhusudhana Raoa, K. P. (2009). Inventory Turnover Ratio As A Supply Chain . Serbian Journal of Management, Vol. 04 (01).
- Jameel Ahmad Khan Hakro, A. S. (2023). Debt Structure and Future Financing and Investment. Evidence from Oil and. Journal of Accounting and Finance in Emerging Economies Vol. 9, No 3.
- Jan Chutka, F. R. (2020). Analysis of trading volume and its use in prediction future price movements in the process of maximizing trading earnings 02 2020 The 20th International Scientific Conference Globalization and its Socio-Economic Consequences. The 20th International Scientific Conference Globalization and its Socio-Economic Consequences 2020.
- Marco Tutino, V. R. (2020). From Financial Structure To Financial Distress Marco Tutino, Risk Governance & Control, Financial Markets & Institutions Vol.11, n°3.
- Mike, G.D. (2017). Dividends and dividend policy. Dans g. d. mike, Dividends and dividend policy. (Doctoral dissertation, Faculty of Management Sciences, University of Jos)
- Piotr Prewysz-Kwinto, G. V. (2017). Earning Per Share Under International Accounting Regulations and Based on the Example European. Journal of Economics and Business Studies. Vol.3 n°2.
- Samer Taha Yaseen, S. B. (2023). Factors affecting the market value of the shares of a sample of companies working in the scientific field/ an analytical study from 2015-2020 . Res Militaris.
- Sukhadia, H. P. (2014). A Literature Review On Relationship Between financial Performance And Market Capitalization . Midas Touch International Journal of Commerce, Management and Technology.
- Zorgui, I. ( 2009 ). Le choix de financement entre la dette et l'équité: survol de la théorie et application pour les firmes canadiennes de 1998 à 2003. Montréal : Université du Québec.



### Appendix 01 Estimation results of the fixed effects model:

Dependent Variable: MARKET\_CUP  
 Method: Panel Least Squares  
 Date: 10/13/24 Time: 09:55  
 Sample: 2001 2023  
 Periods included: 23  
 Cross-sections included: 17  
 Total panel (balanced) observations: 391

| Variable                | Coefficient | Std. Error | t-Statistic | Prob.  |
|-------------------------|-------------|------------|-------------|--------|
| DEBT_TO_ASSET_RATIO     | -414177.2   | 682239.7   | -0.607085   | 0.5442 |
| LONG_TERM_DEBT_RATIO    | -1000728.   | 1154459.   | -0.866837   | 0.3866 |
| DEBT_TO_EQUITY_RATIO    | -2079227.   | 4620780.   | -0.449973   | 0.6530 |
| INFLATION_RATE          | -9537562.   | 9092875.   | -1.048905   | 0.2949 |
| CURRENT_LIQUIDITY_RATIO | 1204828.    | 2706225.   | 0.445206    | 0.6564 |
| FIRM_GROWTH             | 137295.2    | 47875.28   | 2.867767    | 0.0044 |
| FIRM_SIZE               | 1.38E+08    | 19181510   | 7.218738    | 0.0000 |
| ROA                     | -419425.4   | 1064327.   | -0.394076   | 0.6938 |
| C                       | -2.37E+09   | 3.51E+08   | -6.733104   | 0.0000 |

#### Effects Specification

Cross-section fixed (dummy variables)

|                    |           |                       |          |
|--------------------|-----------|-----------------------|----------|
| R-squared          | 0.846931  | Mean dependent var    | 1.95E+08 |
| Adjusted R-squared | 0.836894  | S.D. dependent var    | 5.13E+08 |
| S.E. of regression | 2.07E+08  | Akaike info criterion | 41.19780 |
| Sum squared resid  | 1.57E+19  | Schwarz criterion     | 41.45155 |
| Log likelihood     | -8029.169 | Hannan-Quinn criter.  | 41.29838 |
| F-statistic        | 84.37823  | Durbin-Watson stat    | 1.012517 |
| Prob(F-statistic)  | 0.000000  |                       |          |

Source: prepared by researchers using EViews12.