

## **The Impact of Capital Structure on Financial Health in the Framework of Pecking Order Theory: An Analytical Study of a Sample, of Industrial Companies Listed on the Iraq Stock Exchange for the Period (2014–2023).**

Iftikhar jabbar abed

Saif Saad Hajim

University of Al-Qadisiyah

### **Article history:**

Received: 22/4/2025

Accepted: 5/5/2025

Available online: 15 /6 /2025

---

*Corresponding Author : Saif Saad Hajim*

---

**Abstract:** This research aims to measure, the capital, structure, within the framework, of, the Pecking, Order Theory, theory with its, indicators (retained earnings ratio, loan ratio, common stock ratio), in financial health using Altman, indicators for industrial companies, which consist of five, indicators (net working capital on total assets, retained earnings on total assets, earnings before interest and tax on total assets, market value of shareholders' equity on total liabilities, net sales on total assets). The number of companies, listed in the Iraq Stock Exchange, (28) companies. A sample of (10) was selected based on the data and financial statements published on the Iraq Stock Exchange website, based on the availability of their data continuously, during the research period from (2014-2023). These selected companies, the research sample triangle, are (the Iraqi Carpet and Furniture Company, Al-Mansour Pharmaceutical Manufacturing, Company, Baghdad Soft Drinks Company, Modern Chemical Industries Company, Baghdad Packaging, Materials Manufacturing Company, Al-Kindi Vaccine Production Company, Iraqi Engineering Works Company, National Metal and Bicycle Industry Company, Modern Sewing Company, Production Company Ready-made garments). The research problem was, represented by, finding an ideal method for adopting the capital structure according to the Pecking Order Theory, as it is the best method for distinguishing between internal and external financing for Iraqi industrial companies, and identifying the funding sources that are compatible with the Iraqi financial, economic, and political environment and its impact on the financial health of these companies. The research problem was embodied through a set of questions through which the research hypotheses were formulated to achieve its goal. The researcher used the simple linear regression method and the multiple linear regression to test the effect of the independent variable, the Pecking Order Theory, on the dependent variable, financial health, using the statistical program (SPSS V.24) and the program (Excel). The researcher reached a set of conclusions, the most prominent of which was that Iraqi industrial companies tend to adopt the Pecking Order Theory philosophy in building their capital structure, despite continuing to issue common stocks in most cases, instead of resorting to loans as a second financing option after retained earnings. Some Iraqi industrial companies within the research sample do not have financial health, systems, which exposes them to the risk of financial failure in the short term. One of the most important recommendations the researcher, reached was to reduce the companies surveyed's reliance on debt financing, as this would reduce their financial health and potentially lead to bankruptcy, if their debts accumulate and they are unable to repay them on time. Therefore, industrial companies must learn how to determine the optimal capital structure, to achieve long-term financial health

---

**Keywords:** Capital structure, Pecking Order Theory, Financial Health

---

**INTRODUCTION:** This research examines capital structure as a critical factor in corporate financing, demonstrating its direct impact on the cost of capital and financial risks. It highlights the Pecking Order Theory, which assumes that companies prefer internal financing (retained earnings) first, followed by loans, and finally, stock issuance, to reduce external financing costs and avoid associated risks. The research also discusses the concept of financial health as a key indicator of corporate sustainability and growth, especially in light of the economic and political challenges facing the country. It focuses on the case of Iraqi industrial companies, which suffer from

fluctuations in their reliance on various financing sources, which increases the level of risk. The research aims to provide scientific solutions to help these companies choose a balanced capital structure between internal and external financing, which contributes to enhancing financial health and achieving financial stability, by adopting appropriate financing theories, most notably the Pecking Order Theory.

### **First axis: Research methodology**

#### **First: The Research Problem and Its Questions**

In our research, we attempted to answer the main question: "What is the impact of capital structure according to Pecking Order Theory on financial health?" The research problem can be clarified through the following sub-questions:

- 1 .Do the industrial companies in the research sample rely on Pecking Order Theory when designing their capital structure?
- 2 .Do the industrial companies in the research sample rely on financial health when designing their capital structure?
3. Does capital structure, according to Pecking Order Theory, affect financial health?
- 4 . What is the nature of the relationship between capital structure according to Pecking Order Theory and financial health?

#### **Second: The importance of research**

1. The current research addresses the basic theory of financial management (Pecking Order Theory), which encompasses financial knowledge on how a company finances itself and avoids risks. This hierarchy begins with internal sources (retained earnings), then resorts to external financing (loans) when retained earnings are insufficient, and the issuance of common stocks as a last resort to finance its assets.
- 2 . The importance of the decisions made by managers regarding the capital structure of their companies, as they directly impact the future of these companies.
3. The current research provides updated information to investors, stakeholders, and employees of the Iraq Stock Exchange, offering them whatever assistance they can in relation to the research variables.
- 4 .The financial health of industrial companies is key to their survival and growth. It enables them to invest in the future, face challenges, attract talent, and build strong relationships with their partners.

#### **Third: Research Objectives**

In light of the proposed study problem, the most important objectives the study seeks to achieve can be summarized as follows:

1. Examine the capital structure, according to the Pecking Order Theory, of the researched companies.
2. Examine the financial health of the researched companies.
3. Examine the impact of capital structure, according to the Pecking Order Theory, on the financial health of the researched companies.
4. Clarify the nature of the relationship between capital structure, according to the Pecking Order Theory, and financial health.

#### **Fourth: Research Hypotheses**

In accordance with the research problem and its objectives, the current research seeks to establish hypotheses to prove their validity and either accept or reject them. These include:

1. There is a statistically significant correlation between the retained earnings ratio and the financial health of the companies studied.
2. There is a statistically significant correlation between the loan ratio and the financial health of the companies studied.
3. There is a statistically significant correlation between the common stock index and the financial health of the companies studied.
4. There is a statistically significant effect between the Pecking Order Theory indicators (retained earnings, loans, common stock) and the financial health of the companies studied.

#### **Fifth: Research Community and Sample**

The research community is the Iraqi industrial companies listed on the Iraq Stock Exchange, numbering (28) industrial companies. This sector was chosen as the study community due to its importance in building and strengthening the national economy, as well as its importance in increasing the country's gross domestic product. The research sample consisted of (10) industrial companies, based on the availability of financial data and statements for the companies during the (10)-year study period (2014-2023). The companies selected within the research sample are (the Iraqi Carpet and Furniture Company, Al-Mansour Pharmaceutical Manufacturing Company, Baghdad Soft Drinks Company, Modern Chemical Industries Company, Baghdad Packaging Materials Company, Al-Kindi Vaccine

Production Company, Al- Iraqiyah Engineering Works Company, the National Metal and Bicycle Industries Company, Modern Sewing Company, and Ready-Made Garments Production Company).

### **Sixth: Study Limits.**

The study limits were represented by the following points:

1. Cognitive Limits: The cognitive limits of the study represented the variables addressed in this study, namely (capital structure Pecking Order Theory, and financial health).
2. Spatial Limits: Iraqi industrial companies listed on the Iraq Stock Exchange were selected as the study's spatial limits.
3. Temporal Limits: The study's temporal limits represent the practical aspect of the study, spanning a period of ten years according to a time series for the period (2014-2023).

### **The second axis: The theoretical framework of the research variables.**

#### **First: Capital structure according to the Pecking Order Theory:**

1. The concept of capital structure.

Capital structure refers to the way a company finances its operations through a combination of equity and debt, i.e., a combination of common stock, preferred stock, bonds, long-term debt, and retained earnings, as it is closely linked to the value of the company. Determining the necessary capital structure in line with the company's policy is an important decision for financial management (Dhankar,2019:198). The optimal capital structure begins with the characteristics of debt and equity and depends on a set of factors that balance their costs. When a company raises funds through debt, the creditor expects the company to pay interest and loan installments on time. If the company defaults, the creditor will take legal action against the company. The company will pay interest on the loan, which requires it to rely on the loan as a source of financing (Li&Singal,2019:125). Since interest paid on debt is not subject to income tax, the value of the interest is deducted from taxable profits. Regarding dividends to shareholders, known as tax shields due to debt, they are not tax-exempt because it does not cause any tax protection or savings for the company (Dhankar,2019:199). (Nguyen&Nguyen,2020:97) pointed out that capital structure is one of the most important decisions in corporate finance, referring to the way a company finances its assets through a combination of debt and equity. (Modug,2013:15) explains that capital structure is when financial managers face the problem of choosing between their own funds and borrowed funds to reach the optimal capital structure composition. A wrong capital structure decision can lead to financial difficulties and bankruptcy for the company. Therefore, company management needs to determine a capital structure in a way that maximizes the company's value. A sound capital structure is closely related to the company's value, so it is an important decision for financial management. As(Avcı,2016:15) stated when evaluating the capital structure. It's important to consider not only the absolute amount of debt, but also the relationship between debt and equity. This is because a company with a relatively low level of debt can be exposed to financial risk if it has a low level of equity. There are a variety of practical considerations that management must address when choosing the appropriate capital structure for a company.

2. The concept of Pecking Order Theory.

This is one of the main theories that helps companies make financial decisions, allowing them to access available internal funds while avoiding external financing, and to participate in new debt financing at lower interest rates while avoiding equity financing. This theory is based on Myers' (1984) theory and has its roots in economist Donaldson's 1961 study of managerial behavior in financial decision-making. He suggested that managers prefer using lower-cost sources of financing over more expensive sources due to transaction costs. Myers formally proposed the Pecking Order Theory in 1984. According to this theory, companies tend to raise capital on a priority basis, preferring to raise capital from internal capital before relying on external capital. Internal capital is the reinvestment of net profits not distributed to shareholders, while external capital includes debt and common equity (Al-Fad&Atiya,2016 329). Many companies that adopt this theory give priority to internal financing and avoid external financing. If external financing is sought, it means that debt is preferred over equity, and the company faces high costs and great risk, which makes company managers anxious about issuing new shares because it negatively affects the decline in the shares of current investors (Mulyani,2025: 398).

3. Assumptions of Pecking Order Theory.

The Pecking Order Theory of capital structure, presented by (Myers,1984: 581), is based on the following assumptions. These assumptions were also noted by (Said,2025: 4), (Leary&Roberts,2005:4) , and are also adopted in the studies (Al-Moussawi,2013: 66) and (Al-Kanani,2023:49).

**A:** Firms adopt a fixed dividend policy, whereby management tends to maintain a constant dividend per share and does not increase or decrease dividends in response to temporary fluctuations in the company's current profitability.

**B:** Financing through retained earnings is preferred over any type of external financing, whether debt or equity.

**C:** Information asymmetry exists between managers and investors, as managers always have privileged information about business prospects within the company, as well as investors.

**D:** The company's initial financing has the least impact on information costs and is less risky.

**F:** If necessary Further external financing, the firm chooses the safest securities: first, highly secured debt, then risky debt, then convertible securities, then preferred stock (if available), and finally, the last and most expensive source of financing, common stock. Financial thought researchers point out that firms rely on internal financing as a precaution to separate ownership and control, while professional managers avoid relying on external financing due to capital market pressures (Myers, 1984: 582). Therefore, large, profitable firms have low debt ratios in their capital structure because they are able to finance their investment opportunities (Ross et al., 2014: 559).

**4.** Justifications for the hierarchical structure according to the Pecking Order Theory.

**A:** Justifications for retained earnings being at the top of the hierarchy: Financing sources:

Retaining earnings to finance investment opportunities available to the company is a fundamental principle of financial thinking. It is a common decision among most companies that seek to rely on internal financing rather than external financing in the form of debt, and issue shares as a last resort, for the benefit of existing shareholders. Management acts in the best interest of the company, withholding earnings when securities (common stocks) are undervalued (Myers & Majluf, 1984: 187). Companies' preference for retaining earnings over other sources is primarily due to its importance (Leary & Roberts, 2004: 4), and also in a study by (Al-Ghanimi, 2015: 5)

1 .Using retained earnings as an internal source of financing provides management with greater flexibility to implement investment plans quickly and does not require the approval or intervention of external parties.

2 .Making retained earnings a preferred source of financing at the top of the list because management avoids contacting potential investors, whether new owners or lenders.

3 .Companies choose retained earnings for financing due to the information asymmetry between managers and investors regarding the company's future investment opportunities.

4 .Financing through retained earnings does not include issuance costs, such as external financing, whether in the form of debt or new equity.

5. Retained earnings maintain the strength of the company's management. When resorting to external financing by issuing common shares in large quantities, this has a negative impact on the market value of shareholders' rights in the company.

**B:** Justifications for the placement of external borrowed financing in the middle of the financing sources pyramid:

The capture theory suggests that when a company needs financing, it uses internal financing (retained earnings) as long as it has the resources available, and then uses external financing when internal financing is insufficient instead of issuing common stock. The reason for borrowing being located in the middle of the financing sources pyramid is due to the following reasons: (Al-Zubaidi & Al-Moussawi, 2015: 43).

1 .Relying on borrowing as a source of financing, especially bond issuance, is less opposed by the board of directors than issuing common stock.

2 .Borrowing (bond issuance) is usually less expensive than issuing common stock.

3 .Borrowing can significantly reduce managers' willingness to overinvest, which can lead to a negative net present value.

4 .A company's borrowing power is accompanied by improvements in its operational efficiency.

5. Borrowing is usually followed by investors valuing the company's shares at less than their intrinsic value, while issuing common stock is usually accompanied by an overvaluation when Evaluate it.

**C:** Three justifications for the position of common stocks at the base of the pyramid of financing sources. The philosophy of capture theory states that an organization will resort to issuing new common stock when other sources of financing (retained earnings and borrowing) cannot meet the financing needs of available investment opportunities. Therefore, organizations must issue common stock to avoid missing out on valuable investment opportunities. This is why common stock issuance occurs. The following are some of the reasons why common stock issuance occurs last in the sequence of financing sources: (Pinches, 1992: 373); (Al-Sharifi, 2021: 54).

1. The cost of issuing common stock is higher than the cost of borrowing and retained earnings.

2. Financing through common stock is riskier than financing through debt or retained earnings.

3. Issuing common stock places the company under the influence and pressure of capital markets.

4. Issuing common stock to finance available investment opportunities is usually opposed or rejected by the company's board of directors.

5. New issuances of common stock bring in new investors, which in turn changes the position of owners on the board of directors.

6. Issuing common stock affects the market value of a company's stock.

7. Current shareholders of companies oppose the issuance of common stock because it reduces earnings per share.

According to the capture theory, its assumptions and justifications, a specific philosophy for formulating capital structure, is based on a hierarchical construction of the capital structure from various sources of funds. The priority of these sources of funds is derived from the circumstances surrounding the company and the nature of its activities. Therefore, the theory shows that the capital structure tends to rely first on retained earnings to finance the company's capital needs, then on borrowing as a secondary source of funds, and finally on issuing equity if other sources of funds are unavailable. It then shows a tendency to borrow as a secondary source of financing, and finally, companies resort to issuing equity if other sources of financing cannot meet these financing needs. The capture theory does not advocate for an optimal capital structure that suits all circumstances, but rather advocates for a target range of capital structures within which companies can shape their capital structure at any point within this range (Al-Moussawi,2013:70).

##### 5. Indicators of applying the theory of capture in companies.

According to the intellectual literature in financial management, the capital structure consists of borrowed financing (long-term debt instruments) and owned financing (common stocks and preferred stocks). The extent of application of the Pecking Order Theory in formulating the capital structure can be judged through the financial ratios of each element of financing measured against the total sources of financing. An increase in the ratio of each element means a decrease in the ratios of other elements or sources of financing. Based on the concepts and philosophy of the Pecking Order Theory, which is a theory of differentiation between the sources of financing available to companies, the most prominent ratios that can be adopted to analyze and know the extent of application of the Pecking Order Theory in companies can be represented in the following (Al-Badiri&Al-Tamimi,2024: 98).

A:Retained earnings ratio: This equation is applied to measure capture indicators in the research sample companies (Al-Moussawi,2013:120). (Al-Zubaidi&Al-Moussawi,2015:46).

**Retained Earnings Ratio = (Retained Earnings / Total Liabilities) × 100%**

(Suspermpol et al.,2023:3) indicated that retained earnings are the primary source of financing. Proper use of retained earnings can drive companies to grow and expand their investments, reflecting management strength while avoiding the loss of potential opportunities associated with excessive liquidity.( Niharika,2025:505) explained that an effective dividend policy must be established to address all challenges in a company's financial structure. This policy is considered a fundamental element of a company's financial strategy and contributes to how the company's net income is distributed between dividends to shareholders and retained earnings for reinvestment in a balanced manner that meets shareholders' expectations for the company's long-term growth.

B:The ratio of loans and the like: This equation is used to measure the capture indicators in the research sample companies (Al-Moussawi,2013:120). (Al-Zubaidi&Al-Moussawi,2015:46)

**Loan ratio = (Loans and similar loans / Total liabilities) × 100%**

Turning to loans as a second source of financing for the company when internal financing represented by retained earnings is insufficient. Also, companies that choose a financing source with the lowest debt ratio and cost are more profitable, which is in line with the Pecking Order Theory (Adeyemi&Obboh,2011:134). (Wijaya&Cen,2021:326) indicated the preference for financing through loans over common shares because the cost of loans is cheaper than the cost of issuing new shares, and to avoid a decline in the share price due to information asymmetry between the company's management and stakeholders.

C: The proportion of common stocks: Applying this equation to measure the capture indicators in the research sample companies (Al-Moussawi,2013: 120). (Al-Zubaidi&Al-Moussawi,2015: 46)

**Common stock ratio = (Common stock "paid-in capital" / Total liabilities) × 100%**

It is considered the last source according to the Pecking Order Theory, which forms the capital structure, especially industrial companies, and it is also one of the long-term external financing sources (Al-Moussawi,2013:85). (Al-Fadi&Attia,2016:332) explain that according to the Pecking Order Theory, common shares represent the basic capital of the joint-stock company and a main source in financing and forming the company. The company resorts to it as an initial stage when it is established and it is considered one of the long-term external financing sources, and its use strengthens the financial position of the company, as it gives its holders the right to participate in profits and manage the company.

## Second :Financial Health

### 1 .The Concept Of Financial Health.

Financial health is one of the indicators that contribute to a company's ability to achieve long-term growth and success in a competitive market (Banne et al.,2019:3649). (Weida et al.,2020:2) emphasized that financial health reflects a company's ability to manage overall expenses and its readiness to recover from unexpected shocks, achieve profits and growth, compete in the market, assess its future position, and avoid financial risks. (Pina et al.,2021:5) discuss the concept of financial health as a company's ability to maintain balance in the face of changing environmental conditions. A financially healthy company means one that maintains its existence and is able to evaluate invested capital at the scale required by shareholders. Financial analysis results vary across companies in different sectors, as

companies have different real estate and financial structures, as well as different economic outcome structures. Financial health requires achieving sufficient profitability, as well as long-term liquidity. Financial health literacy is an individual's ability to access, understand, and use financial health information to achieve healthy and financial outcomes (O'Mara et al.,2022:3).

## **2. Elements of Financial Health.**

Corporate financial health refers to the overall financial condition of a company and its ability to meet financial obligations and achieve long-term profitability and growth. Financial health is an important indicator of a company's stability and ability to continue operating and compete in the market (Mahajan, 2020: 7). Both (Nino-Zarazua et al.,2024 7) and (Rhyne,2020: 7) also point out that there are several elements within the concept of financial health:

- 1 .The ability to meet current financial needs and obligations.
- 2 .Flexibility, through the ability to face unexpected financial difficulties.
- 3 .Goals, through setting and achieving future financial plans.
- 4 .A sense of complete confidence in the use of the company's assets.

The most important elements of corporate financial health, according to some researchers, can be summarized as follows:

- 1 .Profitability: A company's ability to generate profits from its revenues and assets. Profitability is essential because it enables the company to invest in growth and withstand financial crises (Anshori et al.,2020:120).
2. Liquidity: The availability of cash or liquid assets that can be used to cover short-term obligations. High liquidity means the company is able to cope with any cash flow shortfall (Bem et al.,2014:28).
- 3 .Operational efficiency: Reflects the company's ability to manage its operations efficiently to maximize returns. Improving efficiency reduces costs and increases profits (Ige-Gbadeyan&Swanepoel,2023:122).
- 4 .Asset management: The company's ability to generate returns from its various investments and assets. Assets must be used effectively to maximize returns. Asset management seeks to maximize the value of investments, leading to increased profits. Asset management is not just financial management; it is an essential part of any company's overall strategy. By improving asset management, organizations can maintain their core assets, sustain their effectiveness over the long term, and enable them to adapt (Saadatmand et al.,2017:9).
5. Sustainability and Growth: This refers to a company's ability to enhance its financial health and achieve sustainable growth over the long term without being exposed to significant financial risks. Risks are divided into systematic and unsystematic (Al Ahbabi&Nobanee,2019: 8).

## **3. Factors affecting a company's financial health.**

Financial capacity is one of the social factors that influence financial health. It consists of the ability to act and the opportunity to work by increasing access to financial services and improving individuals' financial behavior through the acquisition of financial skills and knowledge (Sun & Chen, 2022: 744). A company's financial health is affected by several factors related to its financial performance and its ability to generate profits and growth. The most prominent of these factors is revenue, as the size and sustainability of revenues reflect the company's ability to meet financial obligations and achieve sustainable profits (Tariq et al., 2023: 2). Achieving financial and economic health may be difficult for companies facing significant challenges. Economic health can be measured by currency instability, a type of challenge that impacts the financial performance of the company as a whole, while other factors, such as social networks, may limit cash flows to the community as a whole. At the individual level, income volatility can be driven by factors such as the internal situation of the company. The greater the income volatility, the more difficult it is for workers to meet their basic needs (Prentice, 2016:2-3). Basic spending is usually more predictable than income, but even here significant fluctuations can occur. This factor is classified as a contextual factor, as fluctuations alone do not lead to a loss of financial health. However, understanding financial decisions and outcomes in the context of fluctuations can provide more practical information for businesses. Fluctuations occur at both the societal and individual levels and to varying degrees (Ladha et al.,2017:10). In addition, effective cost and expense management plays a critical role in financial health. A company must carefully monitor and analyze costs and expenses to achieve greater efficiency and reduce financial waste (Daryanto&Samidi,2018:17). Securing the necessary financing to meet a company's financial needs is also an important factor in its financial health. A company must be able to obtain sufficient financing to finance and expand its business and achieve sustainable growth. The importance of financial risk management cannot be ignored. A company must analyze potential risks and take the necessary measures to reduce their impact on financial performance and maintain financial health. The ability to predict future financial developments and develop appropriate financial strategies is also an essential part of financial health. Financial decisions must be based on careful analysis and sound financial estimates to achieve sustainable success (Maher&Deller,2011:459).

4.Steps to evaluate the company's financial position:(Alhasanko,2024:40) indicated that there are several steps in evaluating the company's financial position, all of which are the following:

**The first step:** Objectives, strategies and operating characteristics. Also in assessing the future health of the company is to consider its objectives, business plans and operating characteristics (Kritsonis, 2005:4).

**Step 2:** Forecasting the company's sales. In order to support future increases in sales and revenue, the market needs room to grow, and competitive forces must also be taken into account.

**Step 3 :** Investments, to support, the product-market strategy. This includes, assessing the future financial health of the company and estimating the present value of investments made to support the company's product-,market strategy (Alkaraan&Northcott,2006:153).

**Step 4:** Future, Profitability, and Competitive Performance, The level of profitability significantly affects a number of important financial factors. Initially, it has a significant impact on the company's ability to obtain debt financing. This affects the company's willingness to issue common stock as well as its valuation. The company's sustainable sales growth looms large on the level of profitability (Murdayanti et al.,2015:263-264)

**Step 5:** Future External, Financing Needs: The company's need to, engage, in external financing, in the future depends on several business conditions mentioned in steps 1 through 4,. These business conditions, are the company's future sales growth, the length of the cash cycle, future profitability, and profit retention ,(Karakaya et al.,2017: 71).

#### 5. Financial health indicators

The measurement of each variable is based on a set of sub-scales and dimensions,, through, which the research topic can be reached. The authors and researchers have identified a number of financial tools that provide them ideal measurement of a company's financial health. The researcher here relied on the Altman, scale to measure the dependent, variable (financial health) by predicting a company's bankruptcy, which reflects its financial health or otherwise. This scale is characterized by a relatively high level of accuracy and reliability, reaching 95% (Supriyanto&Darmawan,2018:112). This indicator is a financial tool used to assess a company's financial health and predict the likelihood of its bankruptcy. It was developed by Altman in 1968, and relies on the analysis of financial ratios extracted from the company's financial statements. This helps investors and analysts identify companies, that may be at risk, of bankruptcy, as methods for predicting failure have become dependent, on financial ratios. This model consists of five financial ratios used for, multiple analysis to assess a company's financial health (Elewa,2022: 7-8). On this basis, the researcher relied on previous studies,including(Altman,1968:594);(Alhasanko,2024:42);(Sinku&Kumar,2014:41);(Kannadhasan,2007:8)To measure and evaluate the health of companies from the research sample, it can be found according to the following equation:

$$Z=1.2 X1 + 1.4 X2 + 3.3 X3 + 0.6 X4 + 1.0 X5$$

#### **X1-Net Working Capital/Total Assets**

Working capital is defined as the difference between current assets and current liabilities. Liquidity and volume characteristics are clearly taken into account. Firms experiencing persistent operating losses typically have low current assets. This ratio has been considered the best indicator of the likelihood of financial distress (Altman,1968: 594). It is also defined as the difference between current assets and current liabilities. Current assets typically include cash, inventory, accounts receivable, and securities, while current liabilities include accounts payable, short-term provisions, and accrued expenses. Therefore, this ratio can be considered a good measure of the ability to meet short-term obligations (Lacher et al.1995:55). This ratio presents liquidity challenges and may hinder firms' ability to achieve profitability (OMETE et al.,2015:40).

#### **X2-Retained Earnings/Total Assets**

It is one of the "newer" ratios that implicitly takes into account the age of the company. For example, a relatively young company is likely to exhibit a low ratio of retained earnings to total assets because it has not had enough time to build up its cumulative profits. Therefore, a young company is somewhat discriminated against in this analysis, and its chances of being classified as bankrupt are relatively higher than those of an older company, all other factors remaining constant. The failure rate is much higher in the early years of a company's life (Altman, 1968: 595). The retained earnings to total assets ratio indicates the portion of total assets that is financed by equity. The higher the ratio, the more financially stable the company is during the profitability period. It also depicts that the company is using its own earnings as a more appropriate source of financing than debt financing. An increasing trend in retained earnings over the period indicates the company's sustained growth (Sinku&Kumar,2014: 44).

#### **X3-Earnings before interest and tax/Total assets**

It is considered, a basic measure of a company's efficiency in achieving productivity, excluding tax and leverage factors. Since a company's ultimate survival depends on its ability to earn its assets, this occurs when total liabilities exceed the fair value of the company's assets, as determined by its ability to earn its assets (Altman et al., 2014:5).

This ratio is useful for comparing companies in different tax situations and with varying degrees of financial leverage, since a company's ultimate survival depends on its ability to earn its assets, and it is particularly suitable for predicting failure (Lacher et al., 1995:55).

#### **X4-Market value of shareholders' equity/Total liabilities**

Equity is measured by the combined market value of all shares, preferred and common, while debt includes both current and long-term equity. The measure shows how far a firm's assets (measured by the market value of equity to debt) can decline before liabilities exceed assets and the firm goes bankrupt (Altman, 1968: 595). This indicator is included in the competitive market value dimension of a firm and indicates how far a firm's assets can decline before its liabilities exceed its assets and it becomes financially insolvent (Lacher et al., 1995: 55). It is a common indicator of a firm's financial distress (bankruptcy). It indicates how far a firm's assets can decline before liabilities exceed assets and the firm goes bankrupt (OMETE et al., 2015: 40).

#### **X5-Net Sales/Total Assets**

It is a standard financial ratio and an indicator of a company's ability to generate sales from its assets, as well as its management's ability to respond to competitive conditions. This latter ratio is considered of great importance based on a measure of statistical significance (Altman, 1968: 595). The turnover rate plays a crucial role in a company's overall performance because all operations depend, to one degree or another, on sales revenue. The sales-to-total-assets ratio measures the strength of assets in generating sales. A higher ratio indicates better performance, while a lower ratio indicates poor financial health (Sinku&Kumar, 2014: 45). indicated that a company's financial health can be determined through the standard scores according to the Altman model in the table below (Kannadhasan, 2007:10).

**Table (1) Altman Z-Score Guidelines.**

The area	The result SCORE	the condition
The company is financially unhealthy and is predicted to fail within two years.	less than 1.8	1
The company is financially sound and its financial failure is uncertain.	Between(1.8-2.99)	2
The company has good financial health and is not prone to failure.	more than 3.00	3

**Sores:** Tyagi, V. (2014). A study to measures the financial health of selected firms with special reference to Indian logistic industry: An application of Altman's Z score. *Industrial Engineering Letters*, 4(4), 43-52, p45.

### **The third axis: the practical aspect**

#### **First: Financial analysis of research variables**

1 .The indicators of the Pecking Order Theory were determined for the sample and research period, as represented in the following table.

**Table (2) Measure Tools For Pecking Order Theory.**

Common stock rate	Loan rate	retained earnings ratio	Companies
14.56	22.30	8.43	Iraqi Carpets and Furniture
86.22	10.76	0.91	Al-Mansour Pharmaceutical Industries
46.80	6.64	8.06	Baghdad Soft Drinks
3.37	9.80	0.34	Modern Chemical Industries
101.63	1.83	0.61	Baghdad Packaging Materials Manufacturing
84.81	3.67	1.19	Al-Kindi Vaccine Production
123.70	4.65	0.00	Iraqi Engineering Works
203.00	175.39	6.95	National Metal and Bicycle Industries



48.21	14.23	12.83	Modern Sewing
52.99	34.77	2.25	Ready-Made Garments Production

**Source:** Prepared by the researcher based on computer outputs.

Table (2) showed that the company that achieved the highest rate of retained earnings index during the research period was Modern Sewing with a rate of (12.83). This indicates the strength of management in achieving high profits and retaining a portion of these profits for future investments that help it grow and develop. Other companies came after it with high rates, but lower than them, namely the Iraqi Carpets and Furniture Company with a rate of (8.43), Baghdad Soft Drinks Company with a rate of (8.06), while the National Company for Metal Industries and Bicycles reached a rate of (6.95). In contrast, the rest of the researched companies achieved very low rates. The lowest rate was for the Iraqi Company for Engineering Works, which did not achieve any profit percentage during the research period. This indicates that it does not rely on retained earnings financing to finance its obligations.

The loan ratio is the source that companies turn to in two cases: the first is when companies do not make profits and their retained earnings are negative. The second case is when companies request loans to meet their financing needs due to the insufficiency of the first source, which is retained earnings. I relied most on the loan source at the National Company for Metal Industries and Bicycle Manufacturing, with a rate of (175.39), and the lowest rate was (1.83) for Baghdad Company for Packaging Materials Manufacturing.

Companies resort to the last source of financing according to the pecking order theory, which is common stock.. This financing is considered more expensive than loans but less risky. The companies that relied most on stocks to finance their assets were the National Company for Metal Industries and Bicycle Manufacturing, with a rate of (0.203), the highest of the three indicators. Other companies also achieved high rates of common stocks, including Iraqi Engineering Company with a value of (123.70) and Baghdad Packaging Industries with a value of (101.63). The remaining companies achieved lower levels, with the lowest percentage of reliance on common stocks to finance their assets being the Modern Chemical Industry Company with a value of (3.37).

We note that the companies studied adopt the priority theory, relying first on retained earnings, second on loans, and finally on common stocks to finance their obligations. The highest source of financing achieved by companies was common stocks, to avoid loans and the inability to repay. The weakness of banking systems in providing loans to companies is also due to a lack of sufficient incentives. Since the financing structure consists of equity and loans, the companies surveyed rely on equity to finance their financial requirements.

2 .The financial, health of the sample companies and the research ,period were determined by applying, Altman's five-index formulas, along with their respective equations and ,weights, as shown in the following table

**Table (3) Financial Health, of the Sample, Companies.**

Z.SCOER	X5	X4	X3	X2	X1	Companies
2.38	0.24	1.28	0.13	0.08	0.68	Iraqi Carpets and Furniture
1.19	0.16	1.08	-0.02	0.01	0.37	Al-Mansour Pharmaceutical Industries
2.47	1.01	1.48	0.13	0.08	0.01	Baghdad Soft Drinks
2.49	0.21	2.57	-0.01	0.00	0.65	Modern Chemical Industries
1.69	0.09	2.14	0.00	0.01	0.26	Baghdad Packaging Materials Manufacturing
1.74	0.19	1.07	0.02	0.01	0.70	Al-Kindi Vaccine Production
2.03	0.42	2.86	-0.08	0.00	0.13	Iraqi Engineering Works
1.02	0.15	3.86	-0.15	0.07	-0.87	National Metal and Bicycle Industries
3.23	0.38	2.39	0.16	0.13	0.58	Modern Sewing
6.05	2.32	5.64	0.02	0.02	0.22	Ready-Made Garments Production

**Source:** Prepared by the researcher based on computer outputs.

Table (3) shows Indicator rates mentioned in the theoretical aspect, X1, X2, X3, X4, X5, and applying the mathematical equation and standard scores with the rate of each indicator to obtain a single result that provides evidence that the company is financially healthy or not. Based on the guidelines shown in Table (1), this can be shown by dividing the companies studied into three categories: the first is companies that enjoy very high financial health, the second category includes companies that enjoy financial health but not high and may be exposed to risk in the future, and the last type represents companies that do not have financial health and the health situation in them is very bad.

Among the companies that achieved standard scores (3.0 or higher) and possess very high financial health, the Ready-Made Garments Manufacturing Company achieved a total score of (6.05), significantly exceeding the approved score. Modern Sewing Company also achieved a good score of (3.23). These two companies are not at risk of financial failure in the future, which indicates their strong financial systems.

The companies that achieved standard scores (1.8-2.99) and that have financial health but not high with a risk of bankruptcy in the future are: Modern Chemical Industries with a value of (2.49), Baghdad Soft Drinks with a value of (2.47), Iraqi Carpets and Furniture with a value of (2.38), and Iraqi Engineering Works with a value of (2.03).

The companies with a total score of (1.8 or less) and that do not have financial health, and their financial position is very bad, are: National Metal and Bicycle Industries with a value of (1.02), Mansour Pharmaceutical Industries with a value of (1.19), Baghdad Packaging Materials Manufacturing with a value of (1.69), and Al-Kindi Vaccine Production with a value of (1.74). These companies must strengthen the ratios in the approved indicators to face financial challenges and crises more effectively and efficiently, and reduce debt because it may significantly reduce the health of companies.

**Second: Statistical analysis and hypothesis testing: Based on the hypotheses that have been formulated, they will be verified using the regression and influence model for the research variables.**

**1 .The relationship between the retained earnings ratio and the financial health of the companies studied.**

The researcher found the correlations between the retained earnings ratio variable and financial health, as shown in the following table:

Table (4) Correlation coefficient and its significance between the retained earnings ratio and financial health.

Correlations			
Financial health	retained earnings ratio		
.812**	1	Pearson Correlation	retained earnings ratio
.002		Sig. (2-tailed)	
10	10	N	
1	.812**	Pearson Correlation	Financial health
	.002	Sig. (2-tailed)	
10	10	N	

Source: Prepared by the researcher based on computer outputs.

The table above shows that the correlation value between the retained earnings ratio and financial health reached (0.812), a value that indicates the existence of a significant direct correlation at a statistical significance level of 5% between the retained earnings ratio and the financial health of companies. This means that there is a significant direct correlation between the retained earnings ratio and the financial health of the group of companies studied.

**2. The relationship between the loan ratio and the financial health of the research sample companies.**

The researcher found the correlations between the loan ratio variable and financial health, as shown in the following table:

**Table No. (5) Correlation coefficient and its significance between loan ratio and financial health.**

Correlations			
Financial health	Loan ratio		
.024	1	Pearson Correlation	Loan ratio
.945		Sig. (2-tailed)	
10	10	N	
1	.024	Pearson Correlation	Financial health
	.945	Sig. (2-tailed)	
10	10	N	

Source: Prepared by the researcher based on computer outputs.

It is clear from the table above that the correlation value between the loan ratio and financial health reached (0.024), which is a value that indicates the absence of a significant correlation below a 5% statistical significance level between the loan ratio and the financial health of companies.

**3 .The relationship between the proportion of common stocks and the financial health of the research sample companies.**

The researcher found the correlations between the common stock ratio variable and financial health, as shown in the following table:

**Table (6) Correlation coefficient and its significance between the percentage of common shares and financial health.**

Correlations			
Financial health	Common stock ratio		
.671*	1	Pearson Correlation	Common stock ratio
.024		Sig. (2-tailed)	
10	10	N	
1	.671*	Pearson Correlation	Financial health
	.024	Sig. (2-tailed)	
10	10	N	

**Source:** Prepared by the researcher based on computer outputs.

It is clear from the table above that the correlation value between the percentage of common shares and financial health reached (0.671), which is a value that indicates the existence of a significant direct correlation at a statistical significance level of 5% between the percentage of common shares and the financial health of companies.

4. The nature of the relationship between the impact of the combined independent variables that represent the capital structure indicators (retained earnings ratio, loan ratio, and common equity ratio) on the dependent variable (financial health) of the industrial companies in the research sample.

The multiple regression model will be used. In addition, the VIF test, will be adopted, which measures the presence of the multicollinearity problem in the model. If its value exceeds, 5 or 10, based on the required level of accuracy, this indicates the presence of the problem. We conclude that the model and its parameters cannot be relied upon, and thus the inability to reveal the true relationship, that links the variables under study. The following table includes the values of the analysis of variance table, the value of the F test, and its significance:

**Table (7) Analysis of variance table for the regression model of capital structure indicators according to the capture of financial health.**

ANOVA <sup>a</sup>					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	2.926	3	.975	10.420	.009 <sup>b</sup>
Residual	.562	6	.094		
Total	3.488	9			

a. Dependent Variable: Financial health  
b. Predictors: (Constant), Common stock ratio, loan ratio, retained earnings ratio

**Source:** Prepared by the researcher based on computer outputs.

The researcher finds from the table results that the F-test value reached 10.420, a statistically significant value below the 5% level, indicating a significant impact of the Pecking Order Theory indicators on financial health. The researcher also found the results included in the following table, which indicate the estimated regression model parameters and the variance inflation factor (VIF) values:

**Table (8) Estimated parameters of the regression model and VIF values for each variable.**

Coefficients <sup>a</sup>						
Model	Unstandardized Coefficients		T	Sig.	Collinearity Statistics	
	B	Std. Error			Tolerance	VIF
1 (Constant)	-3.080	1.581	-1.948	.092		
retained earnings ratio	.227	.059	3.837	.006	.848	1.179
Loan ratio	-.013	.014	-.918	.389	.862	1.160
Common stock ratio	.064	.023	2.794	.027	.746	1.341

a. Dependent Variable:

**Source:** Prepared by the researcher based on computer outputs

The coefficient of determination was 92%, while the corrected coefficient of determination was 84%. This means that this model is able to explain 92% of the total variance. The estimated regression equation is as follows:

$$y_i = -3.080 + 0.227 * [x1]_i - 0.013 * [x2]_i + 0.064 * [x3]_i$$

$$t = (-1.948) (3.837) (-0.918) (2.794)$$

Since the VIF values of the variables were less than 5, this is evidence of the absence of multicollinearity problem and therefore the results of this model can be relied upon as the researcher concludes the existence of a direct and significant relationship between the retained earnings ratio and the common equity ratio on financial health, while the results indicate the absence of a statistically significant relationship between the loan ratio and financial health when all variables are combined in one model. The value of the impact parameter for the retained earnings ratio reached (0.0227) and its t-test value was (3.837), which is a direct and significant value below the 5% significance level and indicates that an increase in the retained earnings ratio by one unit leads to an increase in financial health by (0.227) in the presence of the loan ratio and the common equity ratio. While the value of the impact parameter for the loan ratio reached (-0.013) and its t-test value was (-0.918), which is a negative value that is not significantly significant under the 5% significance level. It indicates that the change in the loan ratio does not affect the financial health in the presence of the retained earnings ratio and the common stock ratio. Despite the lack of a significant effect, the effect was inverse to the loan ratio on financial health. The value of the impact parameter for the common stock ratio reached (0.064), and its t-test value was (2.794), which is a positive value that is significantly significant under the 5% significance level. It indicates that increasing the common stock ratio by one unit leads to an increase in financial health by (0.064) in the presence of the retained earnings ratio and the loan ratio.

## **Axis Four:**

### **First: Conclusions.**

1. The results of the research sample, through the Pecking Order Theory indicators, indicate that internal financing (retained earnings and common stocks) are the most important factors in improving companies' financial health, while loans may have less impact than these factors when looking at the overall financial position of companies.
2. The financial analysis reveals that there are four companies with poor financial health, namely (Al-Mansour Pharmaceutical Industries, Baghdad Packaging Materials Manufacturing Company, Al-Kindi Vaccine Production Company, and the National Company for Metal Industries and Bicycles).
3. The results of the statistical analysis show that there is a statistically significant direct correlation between the ratios of retained earnings, the ratio of common shares, and the financial health of the companies studied at a significance level of 0.05.
4. The results of the statistical analysis showed that there is no statistically significant correlation between the loan ratio and the financial health of the companies studied at a significance level of 0.05, which indicates that the change in the loan ratio is not significantly related to the company's financial position.
5. The statistical analysis confirms that there is a significant and positive correlation between the Pecking Order Theory indicators combined in a single model and financial health.

### **Second: Recommendations**

1. Industrial companies listed on the Iraq Stock Exchange should rely on retained earnings and common shares for financing and reduce reliance on loans because they affect the company's financial health by increasing risks.
2. Companies with poor financial health should develop and implement a policy for early financial analysis and company restructuring, along with establishing an internal control mechanism to monitor any financial distress early, thus providing an opportunity to intervene before the crisis escalates.
3. Focus on strengthening the policy of maintaining companies' financial health by increasing the percentage of retained earnings and common shares to increase companies' future investment expansions.
4. Loans may not effectively contribute to improving financial health and may lead to financial burdens without achieving any clear return on the company's financial performance.
5. Companies should adopt the Pecking Order Theory according to an integrated financing model based on these indicators in a balanced manner, relying first on internal sources and then resorting to external sources such as debt.

### **First: Arabic sources**

1. Al-Fadl, Mu'ayyad Abdul-Hussein, Atiya, Sajjad Muhammad, (2016), Investor Preferences as an Approach to Building the Optimal Investment Portfolio within the Framework of Pecking Order Theory - An Analytical Study of Some Companies in the Iraq Stock Exchange, Published Research, Issue (42), University of Kufa, College of Administration and Economics.
2. Al-Moussawi, Saadi Ahmed Hamid, (2013), The Dynamics of Capital Structure According to the Capture Philosophy and Its Impact on Strategic Financial Performance - An Analytical Study of Commercial Banks Listed in the Iraq Stock Exchange, PhD Thesis, Al-Mustansiriya University, Iraq.
3. Al-Zubaidi, Hamza Mahmoud, Al-Moussawi, Saadi Ahmed Hamid, (2015), Financial Pecking Order Theory and Its Impact on Improving Profitability Indicators in Commercial Banks, Iraqi Journal of Administrative Sciences, Vol. 43, No. 11.
5. Al-Kanani, Muhammad Kamil Ghanem, (2023), Capital Structure and Its Impact on the Market Value of Shares: Within the Framework of Capture and Market Timing Theories - An Analytical Study of a Sample of Iraqi Industrial Companies Listed on the Iraq Stock Exchange (2006-2020). PhD Thesis.
6. Al-Ghanimi, Hussam Ali, (2015), The impact of retained earnings on common stock returns. Master's thesis, University of Karbala, College of Administration and Economics, Department of Business Administration.
7. Al-Sharifi, Karar Abbas Hussein, (2021), The impact of the financing structure in enhancing the company's value within the framework of the capture theory - an analytical study of a sample of industrial companies listed on the Iraqi Stock Exchange for the period (2004-2019). Published master's thesis.

### **Second: Foreign sources**

1. Adeyemi, S. B., & Oboh, C. S. (2011). Perceived relationship between corporate capital structure and firm value in Nigeria.
2. Al Ahbabi, A. R., & Nobanee, H. (2019). Conceptual building of sustainable financial management & sustainable financial growth. Available at SSRN 3472313.
3. AL-Badiri, K. H. A., & Al-Tamimi, N. A. A. H. (2024) The Impact of Capital Structure on Financial Performance Using Pecking Order Theory An Analytical Study of a Sample of Agricultural Companies Listed on the Iraqi Stock Exchange for the Period (2010-2022.)

4. Alhasanko, R. R. (2024). Assessing the Financial Health of the Company and its Relationship to its Market Value Added: Evidence from Industrial Companies Listed on the Amman Stock Exchange for the Period (2013-2021). *International Journal of Finance and Accounting*, 9(3), 37-51.
5. Alkaraan, F., & Northcott, D. (2006). Strategic capital investment decision-making: A role for emergent analysis tools? A study of practice in large UK manufacturing companies. *The British Accounting Review*, 38(2), 149-173.
6. Altman, E. I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *The journal of finance*, 23(4), 589-609.
7. Altman, E. I., Iwanicz-Drozowska, M., Laitinen, E. K., & Suvas, A. (2014). Distressed firm and bankruptcy prediction in an international context: A review and empirical analysis of Altman's Z-score model. Available at SSRN 2536340.
8. Anshori, M. Y., Fasila, I., & Muttaqin, N. (2020). The effect of financial health level on increasing profitability of insurance companies listed on IDX period of 2014-2018. *International Journal of Business Studies*, 3(2), 120-125.
9. Avcı, E. (2016). Capital structure and firm performance: An application on manufacturing industry. *Marmara Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 38(1), 15-30.
10. Banne, V. R., Kalangi, J. B., & Wangke, S. J. (2019). ANALYSIS OF FINANCIAL HEALTH LEVEL OF PT. GARUDA INDONESIA BASED ON FINANCIAL ASPECT OF KEPUTUSAN MENTERI BADAN USAHA MILIK NEGERA NOMOR: KEP100/MBU/2002. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 7(3).
11. Bem, A., Prędkiewicz, K., Prędkiewicz, P., & Ucieklak-Jeż, P. (2014). Determinants of hospital's financial liquidity. *Procedia Economics and Finance*, 12, 27-36.
12. Daryanto, W. M., & Samidi, S. (2018). Measuring the financial performance of enterprises under Ministry of Energy and Mineral Resources (EMR) an Indonesia experience. *International Journal of Engineering & Technology*, 7(3.21), 16-23
13. Dhankar, R. S. (2019). Capital markets and investment decision making. Springer India.
14. Elewa, M. M. (2022). Using altman Z-score models for predicting financial distress for companies—the case of Egypt panel data analysis. *Alexandria Journal of Accounting Research*, 6(1), 1-28.
15. Ige-Gbadeyan, O., & Swanepoel, M. J. (2023). DETERMINANTS OF OPERATIONAL EFFICIENCY ON THE FINANCIAL HEALTH OF NON-LIFE INSURANCE COMPANIES IN SOUTH AFRICA.
16. Kannadhasan, M. (2007). Measuring Financial Health of a Public Limited Company Using 'Z'Score Model-A Case Study. *The Managem Accountant*, 42(6), 469-473.
17. Karakaya, A., Kurtaran, A. T., & Kurtaran, A. (2017). Firm Value and External Financing Needs. *International Journal of Economics and Finance*, 9(6), 69-81.
18. Kritsonis, A. (2005). Assessing a firms future financial health. *Int J Scholarey Acad Interlectual Divers*, 9(1), 2004-5.
19. Lacher, R. C., Coats, P. K., Sharma, S. C., & Fant, L. F. (1995). A neural network for classifying the financial health of a firm. *European Journal of Operational Research*, 85(1), 53-65.
20. Ladha, T., Asrow, K., Parker, S., Rhyne, E., & Kelly, S. (2017). Beyond financial inclusion: Financial health as a global framework. Recuperado de <https://responsiblefinanceforum.org/publications/beyond-financial-inclusion-financial-health-global-framework>.
21. Leary, M. T., & Roberts, M. R. (2005). The pecking order, debt capacity, and information asymmetry.
22. Leary, M.T & M.R. Roberts (2004), "Theory of Asymmetric Information & Equity Issue", University of Duke.
23. Li, Y., & Singal, M. (2019). Capital structure in the hospitality industry: The role of the asset-light and fee-oriented strategy. *Tourism Management*, 70, 124-133.
24. Mahajan, S. (2020). Impact of COVID-19 on financial health in India: Managing financial health in challenging times. Available at SSRN 3595351.
25. Maher, C. S., & Deller, S. C. (2011). Measuring municipal fiscal condition: Do objective measures of fiscal health relate to subjective measures?. *Journal of Public Budgeting, Accounting & Financial Management*, 23(3), 427-450.
26. Modugu, K. P. (2013). Capital structure decision: An overview. *Journal of finance and bank management*, 1(1), 14-27
27. Mulyani, M. (2025). Capital Structure of Islamic Banks In Indonesia A Pecking Order Theory Perspective. *Islamic Banking: Jurnal Pemikiran dan Pengembangan Perbankan Syariah*, 10(2), 395-408.
28. Murdayanti, Y., Gurendrawati, E., Pahala, I., & Indriani, S. (2015). Factors Affecting Prediction of Revenue Forecast Error Study on IPO Firms at Indonesians Stock Exchange Period, 2007-2012. *Review of Integrative Business and Economics Research*, 4(1), 262.
29. Myers, S. C. (1984). The capital structure puzzle. *The Journal of Financial*, n(3), 575-592.

30. Myers, S. C., & Majluf, N. S. (1984). When firms have information that investors. *Journal of Financial Economics*, 13, 187-221.
31. Nguyen, H. T., & Nguyen, A. H. (2020). The impact of capital structure on firm performance A30 Evidence from Vietnam. *Journal of Asian Finance, Economics and Business*, 7(4), 97-105.
32. Niharika, D. L. D. (2025). Financial Performance and Dividend Strategies: A Study of Leading Non-Banking Financial Companies. *Cuestiones de Fisioterapia*, 54(3), 505-514.
33. Nino-Zarazua, M., Larquemin, A., & Castellani, D. (2024). Implementing Financial Health: Creating Mutual Success For Financial Service Providers And Clients.
34. O'Mara, C. S., Young, J. P., & Winkelmann, Z. K. (2022). Financial Health Literacy and the shared decision-making process in healthcare. *International Journal of Environmental Research and Public Health*, 19(11), 6510.
35. OMETE, F. I., ASAKANIA, F. M., Amwayi, E. A., & Kenya, G. (2015). Impact of financial health on continuity of a firm: the case of Mumias Sugar Company. *International Journal of Business & Law Research*, 3(1), 34-43.
36. Pina, V., Bachiller, P., & Ripoll, L. (2021). Analysis of the effectiveness of regulation on financial health of Spanish local governments. *Spanish Journal of Finance and Accounting/Revista Española de Financiación y Contabilidad*, 51(3), 350-370..
37. Pinches, G.(1992). Essentials of financial management. (No Title).
38. Prentice, C. R. (2016). Understanding nonprofit financial health: Exploring the effects of organizational and environmental variables. *Nonprofit and Voluntary Sector Quarterly*, 45(5), 888-909.
39. Rhyne, E. (2020). Measuring financial health: What policymakers need to know. *Insight*, 2, 1-45.
40. Ross, S. A., Westerfield, R., & Jordan, B. D. (2014). Fundamentals of corporate finance. New York, NY, USA: Irwin.
41. Saadatmand, N., Gaj, S., Varma, S., Proctor, G., & Proctor, G. (2017). Asset Management Financial Report Series: The Vermont Experience: A Case Study (No. FHWA-HIF-17-033). United States. Federal Highway Administration. Office of Asset Management, Pavements, and Construction.
42. Said, S. (2025). The Impact of Capital Structure on Firm Performance: Empirical Evidence from Egypt. *Open Access Library Journal*, 12(2), 1-16.
43. Sinku, S., & Kumar, P. (2014). Analysis of financial health of Steel Authority of India Limited. *Industrial Engineering Letters*, 4(12), 38-47.
44. Sun, S., & Chen, Y. C. (2022). Is financial capability a determinant of health? Theory and evidence. *Journal of family and economic issues*, 43(4), 744-755.
45. Supriyanto, J., & Darmawan, A. (2018). The effect of financial ratio on financial distress in predicting bankruptcy. *Journal of Applied Managerial Accounting*, 2(1), 110-120.
46. Supsermpol, P., Thajchayapong, S., & Chiadamrong, N. (2023). Predicting financial performance for listed companies in Thailand during the transition period: A class-based approach using logistic regression and random forest algorithm. *Journal of open innovation: technology, market, and complexity*, 9(3), 100130.
47. Tariq, S., Zaffar, M. A., Riaz, Y., & Jalil, M. N. (2023). Revenue composition and financial health of nonprofit humanitarian and emergency health services. *Journal of Economic and Administrative Sciences*.
48. Tyagi, V. (2014). A study to measures the financial health of selected firms with special reference to Indian logistic industry: An application of Altman's Z score. *Industrial Engineering Letters*, 4(4), 43-52,p45
49. Weida, E. B., Phojanakong, P., Patel, F., & Chilton, M. (2020). Financial health as a measurable social determinant of health. *PloS one*, 15(5), e0233359.
50. Wijaya, J., & Cen, C. (2021). The examination of trade off theory and pecking order theory to capital structure on plantation companies listed in Indonesia Stock Exchange. In *Conference Series* (Vol. 3, No. 2, pp. 323-338).