An-Najah National University
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THE PECKING ORDER BEHAVIOR OF CAPITAL STRUCTURE: EVIDENCE FROM PALESTINIAN CORPORATIONS

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Dedication

I dedicate this work to my father, Nasser Jaradat.

Acknowledgments

I want to thank my university An-Najah National University, and my supervisor, Dr. Islam Abdeljawad, for his continuous advice and guidance

Declaration

I, the undersigned, declare that I submitted the thesis entitled:

THE PECKING ORDER BEHAVIOR OF CAPITAL STRUCTURE: EVIDENCE FROM PALESTINIAN CORPORATIONS

I declare that the work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

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THE PECKING ORDER BEHAVIOR OF CAPITAL STRUCTURE: EVIDENCE FROM PALESTINIAN CORPORATIONS

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Abstract

Research Background:

Financing policies have a significant impact on the profitability and performance of companies. Several theories, including the pecking order theory, have talked about capital structure. This study sought to find out the extent of the applicability of the pecking order theory on the financing policies in Palestinian companies.

Aim of the Study :

This study aimed to find out the extent to which the pecking order theory applies to financing policies in Palestinian companies, whether in terms governing them, and identifying the determinants of leverage . In addition, it is of interest to understand what the direction of the relationship is between these variables and this leverage.

Methodology:

The researcher used the quantitative research method. Heused a data panel for a Palestinian company from 2006-2019. The multiple linear regression method was used to analyze data, test the hypothesis, and identify the relationships between the variables.

Results of the Study:

After data analysis, it was found that the financial deficit was the actual ruler of the debt ratio in the Palestinian companies, and the direction of relationship was positive. There was aslo a positive relationship between deficit and net debt issued. However , there was a negative relationship between financing deficit and retained earnings. Furthermore, there was a negative relationship between net debt issued and cash dividends, cash flow after interest and tax, but a positive relationship between net investment and change in working capital. Another promising finding was that the conventional variables tangibility and market-to-book ratio and size had a positive relationship with leverage but a negative relationship with profitability and leverage.

Conclusions:

The pecking order theory is the ruler of the financing policies in the Palestinian companies, and the Palestinian companies depend on retained earnings and debt to finance their investments.

Keywords: Pecking order theory; financing deficit; leverage; capital structure.

Chapter One
Introduction and Theoretical Background

1.1 Preface

This thesis documents several key contributions in the field of capital structure. It is noted that companies differ among themselves in how they finance their investments by alternating between debt and equity financing. Firms may also rely on internal or external sources of capital. Internal financing includes exploiting the company's earnings, whereas external financing relies on external investors and lenders (Afzal, 2012). There is an ongoing and controversial debate on why firms choose a certain type of financing over others.

Many theories have been proposed to answer this question. In 1958, Modigliani and Miller suggested many horizons for understanding the capital structure issue. They claim, under certain conditions, that the investment rather than the financing policy solely determines the company's value. Therefore, the financing decisions unaffected the company's value (Cassar & Holmes, 2003). The weakness of Modigliani and Miller's theory was that it turned a blind eye to taxes and assumed that no tax was imposed on companies. Even after taking tax into account in 1963 (Modigliani & Miller), the theory still ignored other asymmetries in information and other market flaws, including transaction costs and expenses associated with bankruptcy and agencies. Tradeoff theory (Kraus & Litzenberger, 1973) tackled the bankruptcy costs effect, while agency theory (Jensen & Meckling, 1979) dealt with the agency costs effects.

A hypothesis that explains capital structure behavior in the presence of knowledge asymmetry was developed by Myers and Majluf (1984). The pecking order idea prioritized the preferences of the company's financial sources. Internal investments are originally financed using retained earnings. The company's backup plan is to employ external loan funding if internal resources are insufficient. As a last resort, equity is employed as a source of funding. (Mat Nawi, 2015). The debate over debt vs. equity should be fueled by asymmetric information. The issuance of stock implies a lack of confidence in the board, which could make the share price too high. Therefore, a decrease in share price would follow such an equity issuance. The debt issuance shows the board's

confidence in a potential investment, proving that the stock price is now cheap. (Adair and Aduskou, 2015).

As Chatzinas and Papadopoulos (2018) contested, this data investors are influenced by asymmetry to assume that a company is riskier than its manager understands and thinks. Underestimating the company's stock price and wanting a bigger return are two ways this presents itself. As a result, using debt rather than issuing common shares is less expensive for the manager, who acts in the best interests of the present shareholders when a firm needs money to finance a new project.

Many theories related to capital structure have developed, starting with Modigliani and Miller. It has opened up many horizons for realizing the theories of capital structure. This indicated that the investment policy is the factor affecting the value of companies and not the investment policy. It means that the company's value occupies the balance sheet's right side (Cassar & Holmes, 2003).

The pecking order theory can be studied in the light of agency cost. According to Wiagustini Ramantha, and Sedana (2017), agency costs refer to any costs spent due to the division of ownership and control between owners and management. A business with an excessively high agency cost will have a drop in value, which is opposed to the basic goal of capital structure theory. This circumstance requires special attention to reduce agency expenses and allow the firm to realize the maximum value anticipated by the stock holders.

The amendment came to the theory from the same scholars as the presence of taxes leads to an increase in the company's value by the amount of tax shield. However, the theory did not care about the cost of bankruptcy and the agency cost, whether on debt or equity and other market imperfection (Cheng, 2015).

Debt financing has advantages over equity financing due to the tax shield and tax savings resulting from debt financing, which would increase the value and profitability of the company. An early study by Cassar and Holmes (2003) states that an increase in another cost offsets the increase in debt, called the cost of financial distress, as the company bears more risks by increasing the debt

The pecking order hypothesis was developed by Myers and Majluf (1984) within the framework of capital structure theories. The theory is concerned with the sources of the company's funding. As the investments are funded internally through retained earnings, the company uses external debt financing if that is not enough. Then equity is used as a backup source of financing (Mat Nawi, 2015).

1.2 Problem of the study

The debt or equity financing decision is one of the important decisions managers make in determining financing policies because of its impact on the performance and profitability of companies. Likewise, financing decision is a goal that all companies seek to achieve. The markets in developing countries depend heavily on equity, especially retained earnings, in financing their investments. When retained earnings are not enough, firms use debt financing through banks. Issuing securities after the initial public offering is rare. It should mention the information asymmetry, its effect on financing choice, and why companies use debt financing, not equity. When making a financing choice, issuing equity can lead to an evaluation of companies' securities by investors. So firms resort to issuing debt to avoid evaluating their securities issuing debt and to avoid the negative signal associated with issuing shares. Previous studies such as Mouamer (2011) and Hadi and Suryant (2016) indicate that companies in Palestine depend on their internal sources and bank financing for financing purposes. It is necessary to understand the Palestinian firms financing behavior and determine if the pecking order theory of capital structure is compatible with this market.

The financing decision has a major impact on companies, as the decision to finance with debt creates an obligation to pay periodic payments to debt holders. At the same time, financing through equity means new owners and a new reduction in voting power. This has a major impact on determining the sources of financing (Chirinko & Singha, 2000).

Based on the aforementioned, the thesis objectives are to ascertain whether the pecking order theory of the capital structure is consistent with the financing practices in Palestinian companies, as well as to identify the factors unique to this theory and their effects on the capital structure and debt level in the listed Palestinian companies.

Based on the short preview above, the following questions can be asked:

1-Is the pecking order theory of capital structure consistent with the financing policies of the listed Palestinian companies?

2-What is the direction of the relationship between the variables in the pecking order theory and the level of debt in the listed Palestinian companies?

1.3 Aims of the study

The study aims to test the pecking order theory on Palestinian companies. Having this in mind, it also aims at studying whether it agrees with the financing policies of these companies. In addition, the study aims to determine the direction of the relationship between the variables in the pecking order models. The level of debt in these companies also aims to identify and study the determinants of leverage in Palestinian companies. Finally, it explores the direction of the relationship between these variables and the leverage.

1.4 Importance of the study

The importance of this study is summarized in determining the financing pattern in Palestinian companies that enables managers to determine the appropriate financing style. It is considered significant due to its priorities because of its great importance and significant impact on the performance and profitability of companies, as companies always strive to determine appropriate funding sources. Investment decisions in companies always use theories of capital structure as a reference for them and as a starting point for reaching the company's goals. The most important addition in this study is that the researcher used more than one measure of financial leverage: the net debt issued, the total debt, and the total liabilities, and all of this supports our results.

1.5 Theoretical background and previous studies

Many academics have studied issues that affect company capital structures and their effects on firm values as firms recognized firm value maximization as the main goal. In that context, the optimal capital structure is intended to minimize a company's capital costs while increasing its value. Furthermore, issues influencing company capital structure are investigated. Alternative theories and methods for capital structure are

produced as a consequence of academic and practical investigations; nonetheless, these ideas and new methods for the capital structure of conforming firms are still being studied.

Over the past forty years, much research has been conducted to ensure the compatibility of financing theories and capital structure theories with financing policies of the different corporates in different countries. In fact, they conducted various analytical studies on the financial statements of these companies and studied them in depth Abu Mouamer(2011). Among many capital structure theories, four are particularly well-known: (1) The Modigliani and Miller theory, (2) the pecking order theory, (3) the trade-off theory, and (4) the agency theory. Theories to improve effective and efficient finance decisions are being developed to attain optimal capital structure. Modigliani and Miller's (1958) fundamental point is that when capital markets are perfect and there are no tax impacts, capital structure decisions have no impact on the company gains.

On the other hand, their assumptions have contended that several underlying assumptions are unrealistic and have little similarity to real-world realities with market imperfections. According to the well-known trade-off principle, the benefits and drawbacks of debt and equity may be balanced to create the best capital structures. In contrast to the trade-off hypothesis, the pecking order theory contends that there is no ideal capital structure. Trade-off theory states that as debt increases, tax savings increase, but at the same time, there is another opposite factor, which is the cost of bankruptcy, and it interacts with tax savings until they reach a point where they are equal to each other, which is the optimal capital structure

Due to the knowledge gap between businesses and the financial markets, the pecking order is based on a hierarchy established by a company's preference for internal funding sources over external ones. Myers (1984) defined the pecking order hypothesis as the importance of selecting a suitable funding source to meet the underinvestment problem caused by information asymmetry. As a result, businesses favor internal funding over external financing. When debt is an option, rather than issuing additional shares when external financing is necessary, the pecking order theory can be discussed within the agency theory framework as it arises due to the separation between management and owners. According to Jensen and Meckling (1976), this adds cost since the right of

priority in the event of bankruptcy is for the debt holders and not the shareholders, leading to managers issuing decisions biased toward the shareholders.

A review of the literature reveals that pecking order and trade-off theories have historically significantly impacted decisions about corporate finance (Ho, Ho, and Vo (2019). The order in which a firm receives financing is a topic covered by the pecking order hypothesis. Internal money will be used to fund the investment initially. If it is insufficient, the corporation will use debt. As a last resort, equity is employed as a source of funding. Trade-Off deals with the trade-off between the tax shield advantages gained from debt interest expenditure and the cost of employing more debt. Based on this principle, the corporation will strive to choose a certain capital structure to match the costs and advantages of debt. Agency theory states that there is a separation between the ownership and management of companies. This entails agency cost since managers are biased in favor of shareholders in their decisions and take actions in favor of themselves in these companies, which creates such a cost.

1.5.1 The Modigliani and Miller theory of capital structure

This theory was founded in 1958, which generally means there is no optimal capital structure and debt ratio. This means that the financing policy or the source companies depend on to finance their investments does not affect the company's value. Tong and Green (2005) argue that it is determined by other factors, such as asset earning power or the risk of underlying assets. This theory is the so-called (preposition 1 without tax) MM, which states that the capital structure is irrelevant under perfect market assumptions where there is no tax or transaction cost, or bankruptcy cost, as the debt does not affect the value of the company or its earnings before interest and tax (EBIT).

Because there are no taxes and no risk of default, the firm's value is unaffected by its financing policy. It also indicates that issuing only equity or a combination of debt and equity does not affect the firm's value Prpposotion1 without tax. MM theory states that the average cost of capital is not affected by changing the capital structure, although the debt may be less expensive than the equity because debt does not contain a risk premium account, so increasing the leverage will not lead to a decrease in the cost of capital. (Prpposotion11 without tax) Given that a company's cost of equity closely correlates with its amount of leverage, the chance of default increases as the leverage level does.

Investors typically demand higher equity (yield) costs to compensate for the higher risk. (Prpposotion1 with tax) of MM theory took into account the existence of taxes. This theory clarified that with taxes, the increase in debt in the capital structure increases the return on equity linearly. It means that the company's value increases with the increase in debt, which means that with the increase in debt, the risk increases, so the risk premium will increase. The increase in tax savings will decrease the bulk of the weighted average cost of capital due to these savings.

(Prpposotion11 with tax) of MM states that in the real-world situation, the cost of equity in the presence of taxes is directly proportional to the debt ratio. A tax shield deduction affects this relationship and makes the cost of equity less sensitive to the increase in debt, meaning that a tax shield deduction offsets the increase in equity. While MM theorems and Miller's (Miller 1977) theorems forecast debt uses in optimizing value, Kopecky, Sugrue, and Tucker (2018) propose an alternate equilibrium process that achieves the same optimal level for company values which uses a different method to achieve the optimal capital structure by the acquisition of other companies through private equity firm and sovereign firms that did not exist on MM time, not through the issuance of debt and the equity retirement. He claims that there is not always an active liquid debt market, and capital structure irrelevance is reintroduced through this alternate approach because of the recapitalization expenses. The study suggests that the takeover market can change the traditional discounted cash flow model.

The MM theory states that firms should seek as much debt as possible to maximize their company's value. According to Modigliani and Miller (1958), as a practical matter, this is impossible due to the numerous costs associated with debt, including the cost of financial distress, the cost of using an agency, and the cost of uncertainty. Financing with all equity funds is also impractical because of the issue of adverse investor selection, which raises the company's cost of equity. This means that firms keep their capital structure in line with their operating environment. When it comes to a company's financial structure, the decision to have equity, debt, or reliance on internal funds or a mix of all three depends on various factors.

1.5.2 Trade-off theory

This theory is one of the theories that arose in the context of the capital structure theories, which talks about the tradeoff between increasing tax shield by increasing debt and increasing the bankruptcy cost. Miller (1988) reviewed the trade-off theory, stating that the more tax savings, the higher the bankruptcy cost. (Myers, 1984) indicated that a balance point would be achieved between tax savings and the cost of financial distress. That is trading between the cost of loans and the benefits resulting from increasing the debt because of the tax subsiding, as mentioned previously through MM theory. Managers have become more aware of the benefit of increasing debt (Adesola, 2009) because this will increase the cost of bankruptcy resulting from financial distress. In other words, there is a marginal benefit from increasing debt. As the debt increases, the benefit decreases. Thus the cost increases. After a certain point of increasing the debt, the cost of bankruptcy will overwhelm and overcome the increase in tax savings. At this point, the optimal capital structure will be achieved, as static trade-off theory holds that the corporation defines a debt target and attempts to achieve it over time. Although the company may stray from the target in the short term, the target is maintained in the long run, even if it may never be achieved in practice. The trade-off theory revolves around the existence of a target in financial leverage determined by trade between the costs and benefits of debt. According to Abdeljawad, Mat-Nor Ibrahim, and Abdul-Rahim (2013), this explains the cross-sectional difference in debt ratios between companies.

As a result, the trade-off theory is commonly used to describe a firm seeking the fulfillment of a firm's funding sources. The trade-off theory examines how long-term debt is combined with ideal equities to achieve an optimal capital structure (Miller, 1988) (Myers, 1984). Using debt to the fullest extent possible in order to reduce taxes on interest payments is one way of analyzing capital structure. The trade-off hypothesis is a popular name for this idea. The trade-off theory may be applied to a number of variables, including sales stability, asset structure, leverage operations, growth rate, tax, and management mindset

The managers switch between tax savings and the increase in bankruptcy costs. The trade-off theory includes a number of models, and both static and dynamic models balance the advantages and costs of debt (Abdeljawad and Nor, 2017). In the context of this theory, a static trade-off theory appears with different circumstances and assumptions, which

have been defined as the leverage during a single period and weighed between the increase in tax shield and the increase in the cost of bankruptcy, which stipulated that the increase in the cost of bankruptcy, the marginal tax rate for bond holders and the non-debt tax shield hurt the optimal capital structure (Baker & Gerald, 2011). It has taken into account that the taxes imposed on the level of individuals since the decrease in taxes on equity leads to a decrease in the optimal capital structure.

Razak and Rosli (2014) discovered that internal funding is frequently insufficient to cover investment expenditures and that trade-off theory offers a better explanation for capital structure decisions than the pecking order. Compared to the association between net debt issuance and funding gap, there is a stronger correlation between net equity issued and financing deficit. According to research by Razak and Rosli (2014), the trade-off theory outperformed the pecking order hypothesis in its ability to explain financing decisions by particular enterprises.

1.5.3 Agency cost and frees cash flow theory

One of the oldest ideas in management and economics literature is the agency model (Wasserman, 2006). The agency theory focuses on reducing the issues that develop in businesses due to the separation of owners and management. The use of various governance tools to regulate the conduct of agents in listed firms is aided by this notion. According to other research, American firms have scattered ownership, which causes ownership and control to be separated. There are competing interests of the shareholders and the business management, which creates agency costs that will influence financing. This conflict is created because debt holders have priority over stockholders when a company is bankrupt. When agency costs are kept to a minimum, the debt ratio is optimal.

According to Abdeljawad and Abed-Rabu (2019), the higher the percentage of loans used to finance investments, the greater the need to monitor management and its decisions, such as investing in risky assets, replacing risky assets with less risky assets, dividends, or decisions to increase management salaries, and all of this affects the degree of risk in the company and its ability to repay loans. It prompts investors to impose more restrictions on the company's management and control mechanisms over the implementation of these restrictions, and this results in a cost called agency cost.

According to Dommes, Schmitt, and Steurer (2019), these are neo-institutionalist funding theories. Agency cost is those incurred as a result of a principal-agent relationship. Additional disadvantages for the principal may occur due to conflicting goal sets, using free cash flows. The example of a company's owners and management illustrates this. Managers value independence and control and hence try to keep as much of the inflows inside the business.

On the other hand, owners want a dividend to diversify their portfolios. Additionally, managers may work on long-term unsuccessful initiatives that appear profitable in the near term as they have the effort to advance their status and accrue potential rewards.

Myers and Majluf (1984) developed the well-known pecking order theory model based on agency cost and signaling theory findings. They demonstrate that rational investors understand management financing decisions as signs of a company's overvaluation or undervaluation. For instance, if management believes that the company is overpriced due to inside knowledge, it would want to issue stock so that new investors may share in potential losses.

The pecking order theory comes in a context that is consistent with agency theory, which asserts that companies prefer debt financing over issuing new shares. These give three reasons that can lead to the effective use of debt in financing management. First, debt limits free cash flow, which reduces a manager's capacity to deploy business resources to establish an empire (Jensen, 1986). Second, managers increase their efficiency in fulfilling payment objectives to avoid bankruptcy, whereas process managers operate in the best interests of shareholders (Jensen, 1986). Third, an increase in debt can strengthen oversight by creditors (Jensen, 1986). Lenders spend monitoring to keep their money safe. This forces the company to operate more efficiently through the use and regulation of consumption required to improve the reported results to lenders.

Leverage decisions are among the crucial corporate policy decisions made by managers prone to agency conflicts since the number of leverage influences the firm's riskiness and might result in the management being removed in the event of a takeover. Jensen (1986) argued that management's self-interest is a major factor contributing to agency costs. This became especially clear when there was a conflict of interest between shareholders and management, and as a result, shareholder interests were always dominated by

management interests. Brush Bromiley, and Hendrickx (2000) claimed it is alleged that poor corporate governance has led to inefficiencies in the allocation of free cash flows as the company's board of directors aligns with policies in favor of management at the expense of shareholders' wealth. According to Panda and Leepsa (2017), the separation of ownership and control, different risk preferences, information asymmetry, and moral hazards all contribute to the conflict of interest and agency cost. When a company with a free cash flow generates an excessive amount, and no viable investment opportunities are available, management abuses the free cash flow at the agency's expense, resulting in increased agency costs, inefficient resource allocation, and poor investment. According to brush et al. (2000), Revenue growth is more beneficial for companies with a lack of cash flow but not necessarily for companies with sufficient free cash flow and therefore supporting free cash flow Chung Firth, and Kim. (2005) Found that excessive free cash flow could adversely affect corporate profitability and share valuation, thus proposing the theory of institutional investor control.

1.5.4 Pecking order theory

Myers (1984) proposed the pecking order theory. Based on asymmetric information issues, Myers (1984) asserted that businesses prefer retained earnings to external sources of funds but prefer issuing debt to issuing stocks when external funds are needed. In order to avoid having to disclose more financial information about the company's outlook, managers choose to use internal funds because external funds generally have significant flotation costs and disclosure requirements.

The idea of unequal knowledge between insiders and outsiders in a firm is the basis for the pecking order hypothesis. Investors will closely watch the company's financing moves to learn more about the firm's prospects because management is better aware of the firm's true value than outside investors. Debt issuance indicates management's belief that an investment will be profitable and that the present stock price is undervalued. In contrast, issuing equity indicates a lack of faith in the enterprise and, maybe, an overvalued stock. As a result, the equity issue would result in a decline in the share price, and it is the funding source with the highest cost of information.

Pecking order theory talks about the various financial sources the company uses to finance its investments and the different sources and to arrange them in terms of priority for the

company’s interest to raise the required capital (Chirinko & Singha, 2000). It assumes that there is a specific order for these sources where it begins with retained earnings and then moves to external sources of financing in transfer to debt and then Equity. This theory was created by Myers (1984). Unlike Modigliani and Miller and the trade-off theory, companies follow a specific arrangement to determine the sources of their financing.

By reference to the text of the pecking order theory, companies resort to their own money in financing their investments because it has the lower information cost and then moves to safer external financing such as hybrid securities, then they resort to issuing shares (Frank & Goyal, 2003).

As Yildirım and Celik (2020) argued, companies need external and internal sources of financing. Based on the pecking order theory, firms prefer low-risk debt over capital financing. Hence, the pecking order theory can be studied either as a determinant of the debt ratio because it prefers debt over equity in financing or as a regression for the financial deficit as it is the determinant of the debt ratio, according to Frank and Goyal (2003). Based on this theory, there is no specific debt ratio, but there are two equity kinds, one at the top of the arrangement and the other at the bottom of the arrangement, but the debt ratio changes according to the company's need for external financing. Based on this theory, there are several justifications for the debt ratio, such as the manager's reluctance to bear external debt and the company's management style if it is more or less to avoid the risks and these things that prevent managers from resorting to external sources of debt or equity.

The pecking order theory provided a hierarchical arrangement of the sources of financing. All of this was presented in the theory of information symmetry between investors and corporate management. Managers know more about the company’s future and financial position. Moreover, that requires monitoring costs, which pushes companies to rely on internal financing sources. According to Martinez, Scherger, and Guercio (2018), due to the tax advantages of deductible interest payments, firms used to issue debt .unlike equity, debt allows organizations or enterprises to keep ownership.

Furthermore, debt is readily available and simple to get during periods of low-interest rates. Nevertheless, during these periods, the cost of equity is higher than the cost of debt.

Equity does not, however, have to be returned if earnings fall short of projections, unlike debt. Bhama, Jain, and Yadav. (2016) argued that the pecking order hypothesis is a good description of deficit businesses but a bad one for surplus enterprises. Deficit businesses often issue debt to cover shortfalls, but they do it within a strict debt-to-equity ratio. Despite low debt-to-equity ratios, surplus corporations seldom repurchase debt. They frequently put money aside for future expansion and other operating needs.

One thing that must be considered is information asymmetry, which talks about individuals' lack of information about the value of corporate securities. Therefore this can lead to an evaluation of companies' securities, which pushes companies to deliver signals to investors about the company's value, so it issues bonds instead of issuing shares (Mihalca & Antal, 2009).

Shyam-Sunder and Myers (1999) test the pecking order hypothesis. According to them, businesses should borrow money or pay it off in order to cover their funds' flow deficit, which is the absence of enough internal cash flows for genuine investments and dividend payments. The pecking order model is a useful first-order description of the firms' financing behavior.

In order to test the hypothesis, Frank and Goyal (2003) use a sizable sample of publicly traded US companies from 1971 to 1998 using a modified version of Shyam-Sunder and Myers's (1999) pecking order model. They discovered that the pecking order theory applies more to large and mature companies than to small and high-growth ones.

1.5.5 Timing theory

Managers issue shares when they are overvalued. This reflects its impact on the capital structure. The capital structure results from companies trying to time the market; this is called the market timing theory Baker and Wagler (2002). According to Celik and akarim (2013), borrowing from companies is preferable if the stocks in initial public offers are undervalued. Otherwise, corporations should issue stocks, and firms with tradable stocks are expected to borrow when the stock's market value falls and to issue additional shares when the market value of the stock increases. In this sense, if market value exceeds book value, issuing new stock rather than borrowing from other firms is preferable; nonetheless, stock performance will decline in the long run.

Baker and Wagler (2002) discussed a new capital structure theory called the theory of market timing. Companies are involved in market timing when they issue more stocks when they are perceived to be overvalued and when companies are perceived as undervalued, they repurchase their shares. As for the timing theory, it leads to the relationship between stock pricing and the leverage ratio, and such mispricing affects the decision of the capital structure and will affect the decisions of investors in the next issue of shares (Abdeljawad and Nor, 2011)

According to Kim et al. (2015), the company time the market when it has debt problems, such as when the company's debt position is approaching its limits and it is difficult to obtain loans from outside sources. Timing theory that results in similar capital structure dynamics assumes that economic actors are rational. Companies are believed to post a positive information release, reducing the asymmetry between firms and stock holders.

Baker and Wagler (2002) have found evidence for the US that market timing greatly impacts capital structure. This result of persistence laid the foundation for research that tested the impact of changes in stock market valuations on capital structure. However, unlike Baker and Wagler(2002), some researchers, such as Setyawan (2015) and Mahajan and Tartaroglu (2008), do not support the long-term stability of market timing effects. Other studies, such as Miglo (2011), examine whether firms' issuance decisions are consistent with market timing or traditional theories, such as trade-offs and pecking order theory. It concludes that they correspond to market timing and pecking Order theory.

For empire-building purposes, managers improve efficiency in meeting payment targets to avoid bankruptcy, while process managers work in the best interests of shareholders. Lenders spend monitoring to keep their money safe. These forces companies to operate more efficiently through the use and regulation of consumption required to improve the reported results to lenders Jensen (1986).

1.6 Pecking order theory: a closer look

1.6.1 Theoretical discussion of the pecking order theory

Shyam Sunder and Myers (1999) claim that if the internal cash flow is insufficient to cover dividends and real investment, debt will be released, and the company will never issue equity. Shyam Sunder and Myers (1999) then generate a variable in the flow of

funds called financing deficit. In addition, Shyam-Sunder and Myers (1999) established a basic financial deficit definition model. Afterward, the net debt must be regressed to test the pecking order principle. However, according to the pecking order theory, there may not be an ideal capital structure. The pecking order hypothesis claims that companies are funded according to the cost of each capital source, with cheaper sources preferred over others.

According to Agliardi, Agliardi, and Spanjers (2016), the sources of finance are arranged in a rigid sequence or hierarchy. This is due to adverse selection concerns that develop when a company has more information about its value than outsider investors. As a result, lenders demand a higher risk premium for equity financing than debt financing. Consequently, corporations will prefer internal sources of cash first, then debt, and last, after all, other sources have been exhausted, equity financing.

It is possible to analyze the pecking order idea in the context of when a business decides against using external finance and thus loses positive NPV investment. Asymmetric knowledge is created. Managers (insiders of the firm) have better access to information than outside investors. This motivates opportunistic behavior on the part of managers. Managers issue securities when the market price of a firm's securities is higher than the company's true value. According to Myers and Majulf (1984), investors may wrongly consider equity with inadequate knowledge of the value of the business's assets, which results in a discrepancy between the market price of a company's securities and the true worth of a firm. Intelligent investors know that corporations are incentivized to issue more shares when the market is overpriced. As a result, investors alter the price to be paid in a logical manner, which causes the market to undervalue new assets. The lower the price, the more probable it is that new investors will take more of the net present value of the new plan, resulting in a loss to existing shareholders when corporations need to fund new projects through stock. If this is the case, the project will be turned down even if its NPV is positive since the managers will work for and on behalf of the current shareholders. This underinvestment can be prevented by funding a new enterprise with a dubious security that is devalued (Myers, 1984).

According to Roerink (2014), asymmetric information is the starting point for the pecking-order theory; this indicates that firm managers are better knowledgeable about

their companies' prospects, dangers, and values than outside investors. Outside investors can only make educated guesses about these issues in many circumstances, the manager of an overpriced company will be eager to sell shares, but the manager of an undervalued company will not.

As a result, unfavorable selection occurs. According to the idea, asymmetric information influences the decision between internal and external funding, as well as the issuance of new debt and equity. According to Shen (2014), issuing debt at the expense of issuing capital will increase the asymmetry of information until it reaches a certain limit, after which no more debt can be issued, and they claim that the asymmetry in information will push either debt investors or capital investors to request an information premium instead of this risk associated with such transactions.

Myers (1984) and Myers and Majluf (1984) created the pecking order theory as an alternative to past developments. This theory uses the asymmetry of knowledge between lenders and firms as its core axis to show a hierarchical order in funding choices. Martinez et al. (2018) claimed that since firms know better about their future than lenders, the demand for monitoring boosts borrowing rates and, in turn, promotes businesses to be financed with internal funds in the first place. Businesses seek to reinvest profits to avoid concerns with adverse selection.

According to Ramdani and Vigneron (2012), for pecking order theory, a capital structure that minimizes asymmetric information issues is not always optimum but rather a hierarchy between diverse sources of money. Firms prefer debt over equity and internal finance versus external funding. According to Dong et al. (2012), firms prefer debt financing over equity financing due to the higher costs of equity issuance, and firms will issue equity only when they are financially constrained. They first consume all their cash, and only then do they resort to borrowing. As soon as a company's debt capacity is achieved, it issues shares of stock. Myers and Majluf (1984) developed this model class first. External investors will charge good businesses because of an adverse selection problem that makes good firms prefer internal finance to fund their positive net present value investments.

According to the pecking order, firms do not seek debt to equity target ratio when it comes to financing. Companies follow a certain order according to the pecking order theory

without having a clearly defined target ratio. If securities are issued, they prefer internal to external funding and debt to equity (Wang, 2013). The fundamental premise of the pecking order hypothesis that information asymmetry influences capital structure decisions have been subject to evaluation in several recent studies, as Leary and Roberts (2010) and Shen (2014). Transaction costs on new issues and information asymmetry costs, which are related to management's superior understanding of market actors, are two examples of finance costs, according to Wang (2013), that contribute to pecking order behavior.

The pecking order could be viewed in light of information asymmetry. According to yuan (2018), managers acting on behalf of existing shareholders are well-versed in the firm's current conditions and future, but outsiders may not have the same access. In addition to the transaction costs associated with issuing additional shares, firms must also pay the information costs associated with asymmetric information. When faced with a funding gap, corporations feel that internal funds are better than external funds in the case of adverse selection. Financing from retained earnings involves less risk to the company since it is less impacted by information costs and has a lower adverse selection problem.

Dommes, Schmitt, and Steurer (2019) argued that rational investors consider management financing choices to be signs of the company's over- or undervaluation. For instance, management may issue shares to share possible losses with new investors if they have information that the company is overvalued. As a result, novice investors profit from the circumstance by claiming a substantial discount when buying shares. In contrast, present owners will be reluctant to share potential residual benefits with new investors if a company's prospects look excellent.

In relation to capital structure and dividends strategy, Fama and French (2002) discussed many of the forecasts of the pecking order and the trade-off theory. They claim that the two hypotheses agree with the bulk of the prediction and usually report conclusions consistent with these combined forecasts. Fama and French (2002) found, in line with Shyam-Sanders and Myers (1999), that debt is used to meet short-term investment (for their broad samples). They also find that small, high-growth firms are predominantly equity issuers, and mature firms rarely issue debt, as in Frank and Goyal (2003).

Frank and Goyal(2003) also analyze the conclusions made by Shyam-Sander and Myers (1999) on a number of fronts. The most intriguing issues are how much Shyam-Sunder and Myers(1999) research focuses on samples from larger organizations, how long their results span (into the 1990s), and how much high-asymmetry information is included in sub-samples of enterprises.

Shyam-Sunder and Myers (1999) compare the pecking order theory to the static tradeoff theory. The authors created a model that implies that each extra unit of the financing deficit causes an equal change in the amount of firm debt. As a result, the slope coefficient would be one in the existence of the pecking order hypothesis. Shyam-Sunder and Myers (1999) tested a 157 US corporation sample between 1971 and 1989. The result was that the firm financing deficit is predominantly covered with debt, which supports the hypothesis.

Frank and Goyal(2003) demonstrate for their wider sample of companies that $\beta po = 1$ does not hold and that, even for companies of the kinds (large and mature) tested by Shyam-Sunder and Myers(1999), this is considerably weaker in the 1990s. Frank and Goyal (2003) attempted to undertake a study comparable to that of Shyam-Sunder and Myers (1999). Despite having a substantially larger sample of organizations, the empirical test results contradict those of other studies, such as Rajan and Zingales (1995) and Titman and Wessels (1988). Frank and Goyal (2003) found no clear preference for debt, and they propose that the pecking order hypothesis is best attributed to the largest enterprises. Furthermore, the analysis suggests that the predictive validity of the pecking order theory declines over time for data from the 1990s onward.

According to Frank and Goyal's (2003) findings, the model's explanatory power is improved by including factors like a deficiency. The funding deficit was shown to be an important variable when the conventional variable was investigated as a separate model for the pecking order hypothesis. This result demonstrated that the regression had no appreciable impact on the magnitudes and significance of the coefficients on the conventional variables. According to Frank and Goyal (2003), the financial shortfall is empirically substantial.

1.7 Review of pecking order literature

1.7.1 Studies that test the existence of the pecking order behavior

Myers (1984) argued that changes in capital structures indicate signals to the firm's investors. Many theories, such as signaling and market timing, explain the optimal capital structure. The problem that companies experience is that no such theories can explain the important facts about a company's capital structure. The pecking order hypothesis, which presupposes a hierarchical relationship between the company's financial sources, analyzes how companies finance themselves. Such behavior was outlined by Myers (1984) and Myers and Majluf (1984) in the context of a pecking order model based on the presumption that information is disseminated asymmetrically. They stated that although dividends are steady and payouts are progressively changed as the investment possibilities available vary, corporations prefer internal funding over external funding and alter their target dividend payout ratios based on their investment opportunities. They suggested that the retained earnings might not be enough due to rigorous payout restrictions, erratic fluctuations in profitability, and limited investment alternatives. The corporation will rely on its cash and marketable securities in this situation. Businesses offer the most secure security first when requesting external investment. Debt is given priority, followed by hybrids and equity at the end.

Shyam-Sunder and Myers (1999) assert that three variables, internal cash flow, net dividends, and investment opportunities are responsible for the change in the debt ratio. When a company's investment prospects exceed its internal revenue, it borrows more and more, changing the debt ratio to prevent it from being at the ideal level. Frank and Goyal (2003) used American Public Trading-RMS Dataset between 1971 and 1998 to test the validity of the packing order theory. They argued that the financial deficit is important to determine the debt ratio and that the financial deficit should match dollar by dollar according to changes in firm debt, but there is a lack of evidence. They discovered that when smaller models of firms were considered, the economic performance of the greatest quartile companies in prior years matched the pecking order, providing more support for it. This does corroborate the pecking order notion, however. Frank and Goyal (2003) argue in their article that past literature failed to have strong empirical facts to criticize such theories with weakness or strength. Cash dividends, changes in working capital, investment opportunities, and cash flow signal a financing deficiency, in that sequence

determines the debt ratio. Frank and Goyal (2003) found that the pecking order theory can explain the financing behavior in the large mature firm more than in small this was attributed to a problem of asymmetric information that is apparent in small companies more than in large companies. Therefore, the small, high-growth firms do not follow the pecking order as he claimed.

Razak and Rosli (2014) tested the pecking order hypothesis on Malaysian public companies from 2007 to 2012. It was discovered that internal fund shortages did not impact the issuance of further shares. Therefore, the pecking order theory, which projected that businesses would make loans to finance internal fund deficiencies, was statistically refuted.

Lemmon and Zender (2010) demonstrated that the pecking order hypothesis is a good predictor of corporate funding behavior. Bhama Jain, and Yadav. (2015) concentrated on firms with normal as well as big deficits and surpluses. According to the study of Rossi (2014), the pecking order theory is reinforced by the negative coefficient on profitability, which demonstrates that more successful SMEs fund their operations with less debt. Small and medium-sized businesses prefer internal resources over external sources of funding. The tangibility variable determines the proportion of fixed assets, frequently long-term investments, to total assets. The fact that there is a negative correlation between tangibility and short-term debt ratio shows that current liabilities, or short-term debt, are used to finance current assets, also known as non-fixed assets. According to Vanacker and Manigart (2010), the pecking order theory was tested in high-growth businesses, and the findings showed that the more profitable businesses tend to finance with retained earnings even when there is an excess of debt financing capacity and that external financing is more crucial for the least profitable businesses with the least cash flow, which invests more in intangible assets. This everything pertains to the principle of the pecking order.

Bhama et al. (2016) tested the pecking order theory on Chinese and Indian firms during deficit and surplus situations. The results show that when a deficit occurs, both Indian and Chinese enterprises issue debt, suggesting adherence to the pecking order. In the case of China, the debt issues are particularly severe. Chinese companies prefer more short-term debt, but Indian companies prefer more long-term debt in their capital structure.

Despite substantial debt difficulties, Indian and Chinese enterprises have acceptable debt ratios. According to Mateev Poutziouris, and Ivanov. (2013), from 2001 to 2005, 3175 small and medium-sized businesses in Central and Eastern Europe were examined to evaluate the pecking order theory, where they considered the leverage ratio as the determinant of the financial structure in those companies. Their results used cash flow as an independent variable. Their results were that the higher the retained earnings, the less dependence on external sources in the financing, and that financial leverage has a negative correlation with profitability, which supports the pecking order argument. They also concluded that companies' financial leverage varies according to size and age.

1.7.2 Studies that compare the pecking order behavior with other theories.

All commercial activities still depend heavily on capital. As a result, each firm must examine how to raise money for operational tasks successfully. The effects of capital structure decisions on the firm's value have been investigated using a variety of theories and empirical testing. Four well-known and highly appreciated theories on the composition of capital are the pecking order theory, the trade-off theory, the market timing theory, and the agency theory. Pecking order and trade-off theories have long been important factors in corporate finance choices. However, more research was done to see if the hypothesis explained capital-structured decisions made by corporations. According to the pecking order idea, businesses seek external funding sources if retained earnings are inadequate or prioritize internal funding first to minimize debt issuance.

Bradley Jarrell, and Kmi. (1984) create a model which synthesizes the modern theory of balance of the optimal capital structure of capital. The cross-sectional comparability for 851 companies in the USA is analyzed in this report, with average company leverage of 20 years. This study reveals that maximum business leverage is inversely linked to the anticipated cost of financial distress and the extent of the non-debt tax shield. If financial distress costs are high, optimum business leverage is inversely related to the volatility in firm earnings. The strong adverse association between debt ratio and past profitability is seen in many types of research. The relationship between leverage and sector classifications is provided with more data from Bowen et al. (1982). Moreover, the DeAngelo and Masulis (1980) proposals on the role of a non-cash tax shield in deciding the optimal structure of the capital were empirically tested. 1.800 companies in the United States and nine business segments were used for this research from 1951-1969.

In contrast, the principle of pecking orders suggests that businesses choose external funds rather than internal financing and debt to equity if they sell shares. The business has no specified debt-to-equity ratio. There is no optimal debt ratio in Myers' (1984). He set the principle of the pecking order as an alternative to the trade-off theory.

Pecking order theory illustrates that a highly profitable corporation is borrowing less than should be a company that chooses internal finances rather than external. In addition, the pecking order theory notes that businesses would more likely borrow if they lack the internal funds necessary to finance their investments since debt funding is less advantageous than retained income. Pecking order theory also discusses how profitable businesses seek to hold low debt when there are restricted spending prospects in management behavior. In comparison, if their internal capital supply is inadequate, a company would raise its debt, providing a good investment opportunity **(**Tong and Green 2005). This illustrates why the debt ratio of a business increases with a financial deficit and declines if there is retained earning surplus. However, the pecking order theory cannot clarify the disparity in debt ratios between different industries. In the high-growth the, high-tech sector, leverage levels are always low, while demand for foreign capital is strong.

In contrast, the trade-off theory may clarify variations in the capital structure. However, the trade-off theory will clarify the impact that corporate taxation, bankruptcy costs, and organization expense have on the composition of the capital structure. However, the trade-off theory cannot clarify whether such businesses have poor leverage profitability or whether a business will be more likely to offer new equities rather than debt if its market-to-book valuation rises.

According to Enjolras, Sanfilippo, and Soliwoda (2021), owners and management aim to optimize the company's debt to increase the worth of the trade-off theory. One may maximize company value by assessing the pros and disadvantages of borrowing (Myers, 1984). The interest tax shield balances the moral hazard and direct and indirect debt expenditures (monitoring and contracting, legal and administrative bankruptcy). The appropriate debt-to-equity ratio depends on several accounting and economic factors that affect the risk of bankruptcy in a static framework. According to the trade-off argument, businesses frequently raise their debt in order to profit from tax advantage.

Tradeoff theory contends that in order to achieve the best capital structure, the advantages of debt financing must be balanced against their disadvantages. According to tradeoff theory, the factors that determine the ideal debt ratio are tax deductions, the cost of financial distress, and agency costs. Each company must determine its target capital structure and strike this balance in order to achieve it.

Market timing theory can be justified in the framework of pecking order theory and how it affects leverage and the relationship between them. Market timing theory of capital explains that when their share price is overvalued, businesses sell new shares and purchase back shares when the share price is underestimated (Baker and Wurgler, 2002). This fluctuation in share prices influences the decisions on corporate finance and, consequently, the business's capital structure. The error in pricing the shares determines the debt ratio in the company in relation to the market timing theory, which means that there is no specific target for the leverage. (Abdeljawad and Nor, 2017)

Baker and Wurgler (2002) discussed further that since equity trades are timed for stock market environments, the pecking order of the market system does not move into target leverage. This assumes the shifts in the financial system convinced by the timing of the economy are irreversible (Bessler, Drobetz and Grüninger2011).

According to Abdeljawad et al. (2013), the timing theory does not concentrate on factors such as stock mispricing and adverse selection connected to the target leverage. Empirical studies demonstrated that managers typically issue new shares at the ideal moment to trade them, providing more support for the market timing theory. According to Baker and Wurgler (2002), the market timing theory suggests that businesses issue timeshares at times of high market performance. The fundamental explanations for this timing activity may be linked to adverse selection costs, as in the pecking order. The market timing assumption for the influence of market success on corporate finance is consistent with the assumptions of the pecking order hypothesis. The principle of the pecking order is generally consistent with the theory of market time. Indeed, with high market results, the likelihood of the debt versus equity problem and the observed debt ratio would decrease.

Jensen and Meckling (1976) discussed the agency problem. In this principle, the company chooses to take steps that support holders at the expense of bondholders in the absence of constraints. These costs emerge as a company's management is tempted without any

constraints to take steps that favor the stockholders at the cost of bondholders (Jensen and Meckling, 1976). The obligor introduces constraints and conventions that interrupt the company's lawful practices and prohibit it from operating smoothly. The bondholders aim to accomplish their expectations, leading to higher costs of monitoring and cost of efficiency. Such charges are huge agency costs carried on as debt to the stockholders. This ensures that the company reduces its equity value and thus reduces the debt advantages.

Kester (1986) claimed that a financial leverage rise would minimize agency costs sufficiently when management is subjected to legal bonding of debt repayment and interest that could potentially lower abuses of free cash flows that come in line with the pecking order. According to Gul and Judy (1998), a corporate takeover could deter management incentives to consume and shirk behavior. In addition, the corporation may continue to distribute idle cash reserves to stockholders by repurchasing securities or by paying dividends to prevent cash flows.

Albanez and Lima (2014) tested the market timing theory over Brazilian firms and argued that market timing activity impacts the capital structure. If this conduct influences the long and short run, the goal was to determine when the market-to-book ratio influences the capital structure through the issuance of shares and if the effects are enduring enough to explain long-term changes in leverage.

1.7.3 Pecking order theory in developing and underdeveloped countries

Although various studies focused on studying the different financing patterns of many companies in different counties and their applicability on the ground as studying the different financing theories in the capital structure, according to Abu Mouamer(2011), they also conducted comparative studies between the markets in different countries and the stock exchanges of different companies and compared them with each other.

Despite the obvious logical distinctions between pecking order and trade-off philosophies, it is not easy to differentiate between them. In an analysis of US corporate firms, Fama and French (2002) do not recognize which of the two better implemented theories, suggesting that both theories share similar predictions about the variables of

leverage and dividends. They argued that Trade-off is best for large equity low-leverage companies and pecking order in the other case.

Based on previous literature, developing countries do not apply to them a single financing theory, whether the pecking order or trade-off theory. According to Yildirım and Celik (2020), two views of the financing theory apply to developing countries, as the studies here are insufficient. The financial policies of companies in these countries differ according to the different levels of investment, as the level of investment, in addition to the debt ratio, has an impact on the financing policies in these companies, as well as these studies considering the risks, volume, sector differences, and different periods, which vary according to the level of investment.

Prasad , Green, and Murinde (2001) thoroughly examine the analytical literature on the company's capital structure. There is still no evidence of a trade-off against the hierarchical organization. They also point out that the great bulk of academic studies on the capital structure that are now accessible are focused on the big industrialized nations, with the little study being done on rising nations.

There are many reasons why many findings assumed priorities in developed economies. First, many private companies were state-owned entities with distinct strategic priorities and tactics from their initial legal status. Prasad et al. (2001) stress that irrespective of the organizational priorities, corporate policy is an essential determinant of the capital structure. Prasad et al. (2001) emphasize that business policy, regardless of corporate priorities, is an essential determinant of capital structure. Secondly, capital markets are less mature within developing economies, and a limited variety of available financial instruments and a greater range of funding limits are usually available than in advanced countries (Singh and Hamid, 1992). Finally, underdeveloped countries appear to have comparatively poor accounting and audit requirements, which means asymmetric information is more common than in the main industrial countries, as the accounting audit and accounting requirements increase investors' knowledge of the financial situation of companies and provide them with sufficient knowledge and information.

The pecking order hypothesis is widely accepted, according to several studies. Non-financial UK companies' capital structure is examined by Wang (2013) to see whether the theory is more accurate between 2006 and 2011. The data was gathered over six years.

The findings demonstrate that the trade-off model better describes firms' capital structure than the pecking order theory. According to Atiyet's related research (2012), which looked at data from 88 French companies between 1999 and 2005, the enterprises follow the pecking order.

Dedes (2010) investigated whether the trade-off or pecking order approach can explain the capital structure behavior of 121 Swedish non-financial listed businesses from 2000 to 2009. The data shows that the capital structure of large businesses is governed by the pecking order approach, whereas the trade-off hypothesis may better explain the capital structure of small enterprises.

Serrasqueiro and Caetano (2015) examined whether Portuguese SMEs' capital structures followed the trade-off method or the pecking order approach between 1998-2005. According to their findings, both models may explain how these companies' capital structures behave. Thus, the two theories do not appear to be mutually exclusive.

Singh and Hamid (1992) studied developing capital markets. They concluded that businesses in emerging economies rely heavily on equity rather than debt to fund their investments compared to their peers in developed countries, which contradicts the pecking order principles. Cobham’s and Subramaniam's (1998) findings are somewhat different in India, at least where they infer that major Indian and British corporations showed largely the same trends of debt levels in the 1980s. Studies stress, however, that developed countries' debt levels vary greatly. Many of these researches employ explanatory variables that conform to trade-offs and picking order hypotheses and disclose various outcomes. None of them, however, highlights a comparison between the pecking order and trade-off principles that aim to set them apart from one another.

To determine the most accurate theoretical explanation of the capital structure of Brazilian enterprises, De Medeiros and Daher (2004) tested the two models. The pecking order theory and the static tradeoff principle were reflected in the design of the test models. Companies listed on the So Paulo (Brazil) stock market between 1995 and 2002 made up the study's sample. Using panel data econometric techniques, which of the two theories had the best capacity to explain Brazilian businesses was the question that is considered to be answered. The analysis of the results led to the conclusion that the pecking order best explains the capital structure of these enterprises.

Yildrim and Celik (2020) studied Turkish companies from 2000 to 2018. They did not find evidence of the pecking order theory in those companies, whether with high or low leverage, as they preferred financial financing, and the result of their study on industrial companies was that the pecking order theory does not apply to the financing policies of these companies.

Major state-owned enterprises mostly control China's real estate market. Companies in China's real estate sector favor equity financing over debt financing and internal finance (Lim, Chai& Zhao, 2012). Thomas (2013), on the other hand, notes that the Indian firm relies heavily on internally produced money for funding. To counteract this trend, the Indian cement industry favors low debt ratios in its capital structure owing to increased growth and profitability.

According to Hadi and Suryanto (2016), the option of financing with debt or equity differs from market to market due to different laws, taxes imposed, and interest rate, which varies from country to country. That is, it can be said that the markets differ in terms of economic and market conditions, leading to this difference in financing policies between the pecking order theory and the trade-off theory. According to Hadi and Suryanto (2016), their study on Palestinian companies from 2008 to 2012 found evidence of the pecking order theory in Palestinian companies as they found a negative relationship between leverage and profitability, size, and growth.

Relative to developed countries, one of the principles of pecking order suggests that they often favor debt financing to issue new equity in profitable businesses. However, in some amounts, debt is considered less risky than equity. Fama and Fench (2000), who observed that profitable corporations were less powerful than non-profit companies, accepted this claim. Murray Frank and Goyal (2003) argued that big corporations prefer to increase debt to cover dividend distributions and to support investments.

De Jong , Verbeek, and Verwijmeren (2011) investigated six thousand of U.S. businesses and found data supporting the pecking order hypothesis. Also, Bessler et al. (2008) found that non-U.S. businesses endorse the philosophy of the pecking order.

According to Jarallah, Saleh, and Salim (2019), based on their study of Japanese non-financial companies from the period 1991 to 2015, the pecking order theory is the

governing financial policies in these companies, as the financial deficit was the determinant of the financial leverage of the studied companies during this period.

Rajan and Zingales (1995) address behavior and the reasons that influenced the leverage of G-7 countries' companies for 1987-1991 (the United States, Japan, Germany, Canada, France, and Italy). They removed financial firms in their samples to reduce the bias of these companies' minimum capital requirements. Rajan and Zingales (1995) argue that the leverage ratio occurs in all the G7 nations like almost all and is correlated to a large extent. The states are well-developed financially and can borrow money from the economy and the bank. They also note a positive relationship between leverage and tangibility of assets and firm size. For Germany, the scenario is the opposite. The corporate size in its sampling periods is linked to debt negatively. The profit is also linked negatively to leverage, which aligns with the results of Titman and Wessels (1988) and (2002). This finding supports the pecking order, which is inconsistent with the trade-off model, indicating a positive relationship between profitability and leverage (Myers, 1984; Myers and Majluf, 1984).

Abdullazade (2020) tested the pecking order theory on American companies for three years. The result was a weak representation of the pecking order theory in American companies, where he found that the debt ratio is inversely related to the financial deficit.

Shyam-Sander and Myers (1999) proposed a test for the capital structure pecking order theory. Their test's primary objective is to predict the money that will be utilized to close the deficit in the budget. Using the cash flow identity, the financing deficit is computed by summing the net cash dividends, net investment, change in working capital, and cash flow. The pecking order predicts that deficits will be entirely covered by the issue of additional debt, according to Shyam-Sander and Myers. Using the capital structure and leverage pecking order theory, Frank and Goyal (2003) analyze the leverage behavior of publicly traded businesses in the United States. They mainly examine three key theories on the corporate funding pattern. The results of Shyam-Sunder and Myers' (1999) study on the pecking order and its efficacy in organizations that face serious adverse selection problems. Their samples span the years 1971 through 1998. After analyzing a wide sample of data sets, they discover that external finance is significantly employed over their sample period, which contradicts Myers' conclusions (2001). They also found that

the pecking order theory is supported in large mature firms rather than smaller firms. Even for the types of organizations described by Shyam-Sunder and Myers (1999) as big and mature, Frank and Goyal demonstrate that the prediction bpo =1 does not hold for their larger sample of businesses and substantially declines in the 1990s.

1.8 Main predictions of the pecking order theory

The researcher in this section discusses some predictions of the pecking order, like its relation with profitability, tangibility, size, growth opportunity, dividends policy, and free cash flow.

1.8.1 Profitability

According to the pecking order hypothesis, a corporation would give precedence to internal funds as asymmetric information is presented but provide debt loans if internal funds are depleted. The final option is to reissue existing shares. According to Myers (1984), profitability and debt have an inverse correlation. Profitable companies have the potential to earn additional money. Successful businesses do not need to rely as heavily on outside finance. The pecking order idea appears to be supported by actual data from earlier studies. Most research suggests a detrimental connection between profitability and debt ratio (Myers and Majulf, 1984).

The cost of information for internal financing is cheaper than for external financing. Therefore, they explain this as the knowledge asymmetry between insiders and outsiders. Jarallah, Saleh, and Salim (2019) discovered a negative relationship between the debt ratio and the organization's profitability.

The literature has conflicting opinions about how firm profitability affects debt financing. Profitability and leverage are adversely correlated under the pecking order theory, but under the trade-off Theory, they are positively correlated since a high degree of profitability combined with a high debt load encourages tax deductions.

1.8.2 Growth opportunity

As companies grow, their funding needs tend to grow. The ability to fund growing demand depends on internal funding. Growth can be limited if the business relies entirely on internal funding. Managers may forgo some useful projects. If a company chooses to

raise external funding, the likelihood of risk rises. According to Myers (1977), organizations with growth potential frequently have a smaller capital structure. The growth potential might inspire management to take on more risk for the organization, which can have a detrimental effect on moral hazard. This problem should be resolved using equity rather than debt to finance growth opportunities. The link between debt and development prospects is unfavorable, according to Smith and Watts (1992).

On the other hand, high-growth businesses frequently seek outside capital to maintain their expansion (Michaelas, Chittenden, and Poutziouris 1999). Growth may put a strain on organizations' borrowing capacity and retained earnings. Companies will consider their long-term financial needs rather than just their immediate ones. Research demonstrates that growth and capital structure are positively correlated.

According to Jarallah et al. (2019), The Corporation uses debt to finance its investments and repurchases shares to prevent investors from making extra gains; therefore, there is a positive correlation between the debt ratio and the company's growth potential.

1.8.3 Size

According to Peking order theory, larger businesses can build retained earnings and require less debt. The Peking order idea predicts a poor association between size and debt (López-Gracia, Sogorb-Mira 2008). The Pecking Order hypothesis, which certain studies have supported, there is a negative correlation between firm size and debt. Therefore, smaller businesses should utilize less debt because of the higher external funding costs brought on by information asymmetry. However, according to Myers (1984), larger organizations are better equipped to borrow money on more favorable terms since knowledge asymmetry issues between managers and creditors are less severe.

Large firms adhere to the pecking order more rigorously than small ones, according to research by Lemmon and Zender (2010), Jong et al. (2010), Frank and Goyal (2003), and others. A pecking order approach might lead one to expect a positive correlation between size and debt, supported by several studies. However, Komera and Lukose (2014) find that the pecking order does not explain businesses with high information asymmetry costs, so it may be better for debt-free organizations. As a result, the Peking Order technique may produce a positive or negative relationship between size and debt.

According to Chadha and Sharma (2015), there is a negative correlation between size and leverage; larger organizations can profit from issuing stock rather than debt since they have fewer information asymmetries.

1.8.4 Asset tangibility

Businesses acquire more physical assets as they expand. For outsiders, physical assets like real estate, machinery, and equipment are simpler to assess than intangible assets like the goodwill value of an acquisition, which lowers the cost of the anticipated hardship (Frank and Goyal, 2009). Rajan and Zingales (1995) also state that if a company has many physical assets, the assets should be used as collateral to reduce the possibility that the lenders may charge debt. It is also anticipated that more asset liquidation will preserve value.

Therefore, lenders should be more prepared to offer loans and accept greater indemnification if more physical assets are on the balance sheet. Furthermore, stockholders find it challenging to switch high-risk assets for low-risk ones. The decreased projected distress costs and the decreased agency problem predicts a favorable association between tangibility and debt. These material possessions can also be used as collateral when borrowing money from other financial organizations. Businesses with a high fixed asset ratio ought to have higher borrowing capability, claim Nhungm, Lien and Hang (2017). As a result, lenders should be keener to offer loans, and leverage should be higher the more physical assets there are.

1.8.5 Dividend policy

The higher the coefficient of dividends given, the fewer chances for corporations to finance their investments with internal resources. This will increase reliance on external financing. According to Al-Najjar (2011), dividends are negligible in capital structure, although the relationship between leverage and dividends is significant. However, when Mazur (2007) separated firms that pay dividends from those that do not, he discovered that corporations that pay dividends regularly align with the pecking order theory. However, paying a dividend reduces a firm's internal finance; therefore, the pecking order theory will influence a firm's decision to pay dividends. Companies with the promising investment will carefully review dividend distributions.

1.8.6 Free cash flow

Free cash flow may fund new investments, increasing the firm's worth by generating more of its capital. Free cash flow is the first readily available external funding source, and the higher its value, the less debt the company will need to issue. Lopez-Garcia and Sogorb-Mira (2008) claim that they tested the pecking order theory using enterprises in Spain and the free cash flow ratio. In their study, these authors outlined the detrimental effects of free cash flow and showed that Spanish businesses prefer to finance their projects internally, which lowers their debt ratio.

1.9 Hypotheses of the study

1. Palestinian companies satisfy their financial deficit using only retained earnings and debt. These companies rarely issue equity.

2. Companies with a greater financing deficit issue more debt. There is a positive relationship between the net debt issued and the financial deficit.

3. Net debt issues are related to the components of the financing deficit as follows: positively related to dividends, investments, and changes in working capital, and negatively related to operating cash flow.

4. The determinants of net debt issues in Palestinian companies are as follows: positively related to changes in firm size and asset tangibility and negatively associated with changes in growth options and profitability. When the financial deficit is considered a determinant of net debt issues, it becomes the most important determinant.

5. The determinants of the leverage ratio in Palestinian companies are as follows: positively related to firm size and assets' tangibility and negatively associated with growth options and profitability.

Chapter Two
Methodology

This chapter sheds light on the most important tests applied to the data. This thesis adopts a quantitative research method. A recent study published by Abuhamda (2021) stated, "Quantitative and qualitative methods are the engine behind evidence-based outcomes." Thereupon, the quantitative research method meets the perspectives of the thesis's goals. The researcher used panel data for Palestinian companies and analyzed it using the EViews program. The researcher used Frank and Goyal (2003) and Shyam Sunder and Myers (1999) models to define the variables. Two test models were applied. The first model considered the financial deficit to be a factor in determining the debt ratio and included the components of the financial deficit of cash dividends, net investment, change in working capital, and cash flow after interest and tax.

Additionally, the second model relied on the factors that affect the debt ratio, such as changes in size, profitability, and deficit, to test the pecking order theory. The researcher tested each model and each theory separately using the multiple regression test and adopted the p-value as a determinant of the significance level. Also, this chapter included the study sample and data collection methods through the Palestine Stock Exchange on the listed companies from 2006 to 2019. Then, the researcher discussed the results for both models to test the hypotheses and compared them with the previous studies that studied the pecking order theory**.**

2.1 Sample of the study

The data was collected from annual reports and financial statements of firms listed on the Palestine Stock Exchange, depending on the availability of information and financial data of those companies. The data for the thesis were collected through the published quarterly financial statements of the listed companies that spanned from the beginning of the financial period to the end of it. The financial statements of listed companies are periodically published and hosted by the stock exchange website. Nearly All listed companies, except financial companies, have been included because of their high leverage. The total number was 29 companies. The financial data was collected for 15 years, from 2005-2019. The researcher used a long period due to the small number of listed companies on the Palestine stock exchange.

2.2 Variables of the study

The following variables will be used in modeling the pecking order behavior that the researcher depended on Frank and Goyal's (2003) model:

1. The dependent variables

$\Delta \mathbf{D_t}$: net debt issued in year t; (i.e., ΔD_t= change in total debt standardized by total assets).

Leverage: Total debt to total assets (TD) or Total liabilities to total assets (TL)

2. The independent variables

$\mathbf{DIV_t}$: cash dividends in year t.

$\mathbf{I_t}$: net investment in year t (i.e., I_t =Δ total assets +depreciation) standardized by total assets.

$\Delta \mathbf{W_t}$: change in working capital in year t (i.e., ΔW_t =change in current assets- change in current liabilities) standardized by total assets.

$\mathbf{C_t}$: cash flow after interest and taxes (i.e., C_t = income before extraordinary items +depreciation and amortization) divided by total assets.

DEF: Deficit: is a variable that satisfy the following equation $DEF_t = DIV_t + I_t + \Delta W_t - C_t$

RE: Retained earnings**:** Net income- cash dividends

T: tangibility of assets (the ratio of fixed assets to total assets). Δ**T** is the change in this ratio

LS: natural log of sales. Δ**LS** is the change in this ratio (which refer to the size of the company)

"MTB: market-to-book ratio(the ratio of the market value of assets (book value of assets plus the difference between the market value of equity and book value of equity) to the book value of assets. ΔMTB is the change in this variable"(refer to growth opportunities)

P: profitability (the ratio of operating income to book value of assets). ΔP is the change in this ratio

Table (2.1)

Variables of the study

The dependent variable	$\Delta \mathbf{D_t}$: "net debt issued in year t; (i.e., ΔD_t= change in total debt standardized by total assets)". **Leverage:** Total debt to total assets(TD) or Total liabilities to total assets(TL)
The independent variable	$\mathbf{DIV_t}$: cash dividends in year t. $\mathbf{I_t}$: net investment in year t (i.e., $I_t = \Delta$ total assets +depreciation) standardized by total assets. $\Delta \mathbf{W_t}$: change in working capital in year t (i.e., ΔW_t = change in current assets- change in current liabilities) standardized by total assets. $\mathbf{C_t}$: "cash flow after interest and taxes (i.e., C_t = income before extraordinary items +depreciation and amortization) divided by total assets". ***DEF*:** Deficit: is a variable that satisfy the following equation $DEF_t = DIV_t + I_t + \Delta W_t - C_t$ **(RE)**:Retained earnings**:** Net income- cash dividends **T:** tangibility of assets (the ratio of fixed assets to total assets). Δ**T** is the change in this ratio **LS**: natural log of sales. Δ**LS** is the change in this ratio **MTB** :market-to-book ratio(the ratio of the market value of assets (book value of assets plus the difference between market value of equity and book value of equity) to the book value of assets. ΔMTB is the change in this variable" **P:** profitability (the ratio of operating income to book value of assets). ΔP is the change in this ratio

This table contains the variables extracted from Frank and Goyal's (2003) study. The independent and dependent variables.

2.3 Models of the study

Many studies tested the pecking order theory of the capital structure as Frank and Goyal (2003), Shyam Sunder and Myers (1999), Razak and Rosli (2014), Lemmon and Zender (2010). These studies took time and effort to develop the best models for this theory. Funding priorities are important in the financing decision of companies because of their great impact on financial performance and profitability. Determining the best financial structure is one of the important matters of interest to researchers and managers. Modigliani and miller have studied the structure of capital, Myers (1984), Myers and Majluf (1984), and many theories have been formulated around it.

Consequently, various financing theories arose, including the pecking order theory. This theory states that when companies need financing, they will initially take advantage of the internal sources, which is the retained earnings, due to their low cost compared to external sources and because it is less risky than external sources. It will resort to issuing shares as a last resort. Addressing the problem of informational asymmetry that arises between investors and managers leads to a difference in the cost and risk between sources of financing.

Shyam et al. (1999) tested the pecking order theory and created a variable called the financial deficit as a determinant of the debt ratio. Companies will typically resort to debt if they face a financing deficit and will not issue shares after the initial public offering, as discussed in the following section. Frank and Goyal (2009) put the pecking order idea to the test by elaborating on Shyam Sunder and Myers's (1999) model. This is also what will be explained in the next section. Here, the researcher will highlight the two models tested in the methodology. Shyam –sunder and Myers (1999) and Frank and Goyal (2003).

2.3.1 Shyam Sunder and Myers (1999) approach

Shyam Sunder and Myers (1999) argue that a firm will use internal cash flow to fund its dividends and real investments. If internal funds are insufficient, the firm will issue debt but never issue equity. Shyam-Sunder and Myers(1999) then create a deficit variable to be funded then they regress the net debt issued on this variable to test for the pecking order theory.

According to Shyam-Sunder and Myers (1999), each capital outflow results in a financing shortfall for the same amount of funds. The corporation is expanding its debt to cover this loss. Due to the negative cost of financial hardship, equity is only invested as a last option. The researcher may test the pecking order idea by generating a finance deficit variable using information about the company's cash flows. Dividends paid, net investments, working capital change, and internal cash flows contribute to the deficit variable.

According to Shyam-Sunder and Myers (1999), the Pecking order theory is a suitable way to describe a company's funding practices. Additionally, the results show that the pecking order theory outperforms the target adjustment model when the pecking order model and the target adjustment model are merged for analysis.

The use of the asymmetric information theory proposed by the pecking order theory (Myers and Majluf, 1984). Asymmetric information theory postulates that firm leaders (insiders) may possess secret knowledge on the status, performance, and future of investments. Consequently, the company's choice of capital structure encrypts information from insiders to investors (to outsiders). According to Myers' (1984) pecking order hypothesis, businesses should finance their projects internally before turning to debt and equity afterward. When there is an imbalance between internal cash flow, dividends, and investment possibilities, the level of debt changes (Shyam-Sundar & Myers, 1999). In the same context, pecking order theory assumes that fund managers who make decisions do not consider the optimal capital structure. Instead, they move on to the "least resistance" path for seeking low-cost financial instruments and loans. In other words, the change in the debt ratio is due to the need for external funding, not an attempt to optimize the capital structure (Sharm-Sundar and Myers, 1999).

Based on Shyam-Sunder and Myers (1999) model, first, the researcher finds the aggregated form of the accounting cash flow identity deficit as follows:

$$DEF_{it} = DIV_{it} + I_{it} + \Delta W_{it} - C_{it} = \Delta D_{it} + \Delta Eit \quad eq(1)$$

Then the researcher estimates Shyam-Sunder and Myers (1999) model

$$\Delta D_{it} = a + b_{po} DEF_{it} + e_i \quad eq(2)$$

According to Shyam-Sunder and Myers (1999) model, as for the pecking order theory, it is rare for companies to issue equity after the initial offering, so they resort to issuing debt based on the lack of internal financing.

Relating to eq (2) the pecking order hypothesis requires that $a = 0$ and $b_{PO} = 1$. Shyam-Sunder and Myers (1999) found that the model has provided a first-order approximation, but not conclusive evidence, of their data.

2.3.2 Frank and Goyal's (2003) approach

According to Frank and Goyal's (2003) interpretation of the Peking Order, a company's funding shortfall is significant. According to Frank and Goyal (2003), it is conceivable that the deficit may provide data that aids in explaining the debt, but not in a manner that

is foreseeable by the pecking order hypothesis; they assume that a rise in the deficit must have an equal influence on changes in the debt.

Frank and Goyal (2003) describe another model of the set of conventional variables; distill these variables into a simple cross-sectional model. The variables have passed many tests. A regression model that combines the impact of the financial deficit with other variables such as changes in the tangibility of assets, market-to-book ratio, log sales, and profitability.

Frank and Goyal (2003) used US data between 1971 and 1998 to test the validity of the packing order theory. Two direct methods have been applied to the paper. The first method uses the financing deficit share to explain the net debt issued. Another way is to use leverage determinants. Frank and Goyal (2003) concluded that internal investment is inadequate to offset the investment cost. This conclusion is contrary to what is generally suggested. External financing is used significantly .Frank and Goyal (2003) found that small and high-growth firms issue equity more than mature firms. Arguing that firms exposed to asymmetric information problems have a greater incentive to follow the pecking order, According to Frank and Goyal(2003), it is not consistent with the pecking order theory's expectations that large, mature organizations follow the pecking order more than tiny, high-growth enterprises.

Frank and Goyal also find that cash and cash equivalent that could be correlated with the amount of debt issued and included in the change in a working capital variable *(*$\Delta \mathbf{W_t}$) explains the change in financial deficit, which also encourages the pecking order.

In summary, Frank and Goyal (2003) tested the theory using the same approach used by Shyam-Sunder and Myers (1999), and the model of the theory was

$$\Delta D_{it} = b_{DIV} DIV_{it} + b_I I_{it} + b_W \Delta W_{it} - b_C Ct_{it} + e \quad eq.(3)$$

The pecking order hypothesis thus implies that $b_{DIV} = b_I = b_W = b_C = 1$. If that hypothesis is correct, then the aggregation in eq. (1) is justified.

Then, based on the changes in the following variables, Frank and Goyal (2003) developed an improved framework for the pecking order hypothesis: “tangibility of assets (T), market-to-book ratio (denoted MTB), log sales (LS), and profitability (P)”.

The financing deficit variable that captures the deficit is added. Upon this, the basic regression equation is

$$\Delta D_{it} = \alpha + \beta_t \Delta T_{it} + \beta_{mtb} \Delta MTB_{it} + \beta_{ls} \Delta LS_{it} + \beta_p \Delta P_{it} + e \quad eq(4)$$

The results are explained as follows: According to Harris and Raviv's (1991) argument, organizations with little physical assets will have more asymmetric information issues. As a result, businesses with little physical assets will often be more indebted and leveraged. According to Goyal et al. (2002), companies with greater market-to-book ratios have stronger chances for expansion; conversely, as these opportunities deteriorate, businesses become more reliant on debt as a funding source. Likewise, the company's size is another factor affecting the debt ratio, as large companies have a better reputation and can take this advantage to issue debt. Also, the company's profitability is one factor affecting the debt ratio, and its effect should be negative in the pecking order.

Finally, the financial deficit previously discussed is the main factor affecting the debt ratio and explains the pecking order behavior. Therefore, the leverage regression is estimated again with financing deficit as an additional explanatory variable.

$$\Delta D_{it} = \alpha + \beta_t \Delta T_{it} + \beta_{mtb} \Delta MTB_{it} + \beta_{ls} \Delta LS_{it} + \beta_p \Delta P_{it} + \beta_{def} \Delta DEF_{it} + ee\text{q}(5)$$

The influence of the traditional factors should have been eliminated if the pecking order was the main factor. The deficit variable is included to see if it affects the coefficients of other variables. According to Frank and Goyal(2003) findings, the regression had no discernible impact on the magnitudes or significance of the coefficients on the conventional variables. According to Frank and Goyal (2003), the financial shortfall is empirically substantial.

Two approaches will be used to test for pecking order behavior in this thesis following two of the most famous papers that empirically tested this behavior:

2.3.3 First approach

Based on Shyam-Sunder and Myers (1999) model, the researcher estimates the pecking order theory model as the following:

$$\Delta D_{it} = a + b_{po} DEF_{it} + e_i \, eq(2)$$

According to Shyam-Sunder and Myers (1999) model, as for the pecking order theory, it is rare for companies to issue equity after the initial offering, so they resort to issuing debt based on the lack of internal financing. Expanding the DEF variable to its components results in the following model:

$$\Delta D_{it} = b_{DIV}DIV_{it} + b_I I_{it} + b_W \Delta W_{it} - b_C Ct_{it} + e \quad eq(3)$$

2.3.4 Second approach

An improved framework for pecking order theory developed by Frank and Goyal(2003) is based on the tangibility of assets (T), market-to-book ratio (denoted MTB), log sales (denoted LS), and profitability (P). An extra variable represents the financial shortfall. The fundamental regression equation based on this is:

$$\Delta D_{it} = \alpha + b_t \Delta T_{it} + b_{mtb} \Delta MTB_{it} + b_{ls} \Delta LS_{it} + b_p \Delta P_{it} + b_{def} \Delta DEF_{it} + e \quad eq(4\&\ 5)$$

The influence of the traditional factors should have been eliminated if the pecking order was the main factor. The deficit variable is included to examine if it affects the coefficients of other variables. In any case, the regression did not significantly affect the magnitudes and significance of the coefficients on the traditional variables, according to Frank and Goyal's (2003) findings. Frank and Goyal (2003) assert that the financing deficit is empirically significant.

2.3.5 Third approach

The conventional determinants of capital structure are estimated using the following model to check if the results are consistent with the pecking order theory. The researcher used the variables in the second approach itself hear, not the change. Then, regress it with total debt as the dependent variable and the total liabilities as the dependent variable another time:

$$D_{it} = \alpha + \beta_t T_{it} + \beta_{mtb} MTB_{it} + \beta_{ls} LS_{it} + \beta_p P_{it} + e \quad eq(6)$$

2.4 Estimation methods

When it is to panel data, a group of variables repeats a group of observations over several periods to simultaneously combine the characteristics of all cross-sectional data and time series. At a specific time, the important panel data contains necessary information dealing

with time dynamics on multiple variables. In certain special cases, panel statistics, data obtained from (often small) time variables on a (typically large) number of cross-sectional units, such as individuals, families, corporations, and governments, are sometimes referred to as longitudinal or cross-sectional time-series data. In economics and statistics, panel data is a term for multi-dimensional data that often calls for some measures across time. Panel evidence includes researchers' findings of several phenomena gathered for the same category of units or individuals over many time periods. Panel data regression methods allow economists to use numerous panel data sets. The analysis of the panel data might then get very intricate. Panel data sets, as opposed to more conventional cross-sectional or sequence data, provide the benefit of this flexibility for economic study. The abundance of distinct data points that panel data offers researchers increase their ability to investigate explanatory factors and correlations. In this study, the researcher uses panel data for the variables collected from financial statements included in the Palestinian stock exchange. Then, the researcher uses the EViews program to analyze these data statistically to study the effect of dependent variables on the independent variables and determine the relationships between them to develop the most appropriate models for the pecking order theory.

The following statistical analysis was used to investigate the pecking order behavior of Palestinian corporations.

1. Descriptive statistical analysis: The researcher conducted a descriptive analysis of all the study variables. Descriptive statistical measures such as the mean, median, and standard deviation were reported.
2. Correlation analysis: Correlation coefficients between variables were presented. The researcher conducted this test to see the univariate relationship between variables and as a diagnostic for linear correlation problems between independent variables.
3. The least squares regression analysis: regression analysis was used in order to test the hypotheses of the study and to verify whether there is an effect of the independent variables on the dependent variable. Panel data analysis was used to estimate the models and compare them according to statistical tests to find the most appropriate model. The researcher followed Shyam et al. (1999) approach to define financing deficit and regress net debt, and gross debt with the financing deficit components suggested to test for evidence of the pecking order theory. Frank and Goyal (2003)

founded the test model that was followed in this thesis. The researcher regresses the net and gross debt to the conventional variables with and without the financing deficit. The researcher used another approach: the conventional variable, not the change. The researcher regresses it with total debt once and with total liabilities another time.

Chapter Three

Results and Discussion

3.1 Overview

The findings of the analysis of the information gathered from the audited and released financial statements of the firms listed on the Palestine Stock Exchange are presented in this chapter. Descriptive statistics were initially used to assess the variables using the mean, median, standard deviation, and greatest and lowest values. Then, in order to make sure that there is no significant association between the study's independent variables, the researcher calculated the correlation matrix. The estimation outcomes for each model were then provided. In order to evaluate the impact of the independent variables on the dependent variable, the researcher tested the models using multiple linear regressions. The researcher also tested the research hypotheses using the data from constructing the best suitable statistical models.

Table (3.1)

Descriptive statistics

	Mean	**Median**	**Maximum**	**Minimum**	**Std. Dev.**	**Observations**
ΔD	0.003	0	0.297	-0.884	0.077	290
TL	0.292	0.285	0.952	0	0.193	290
TD	0.09	0.042	0.423	0	0.108	290
I	0.034	0.023	0.383	-0.715	0.11	290
ΔW	0.003	0.003	0.21	-0.451	0.082	290
C	0.044	0.04	0.327	-0.477	0.082	290
DIV	0	0	0.032	0	0.003	290
ΔMTB	0.043	0	12.916	-5.152	0.902	290
ΔT	0.002	0.002	0.368	-0.317	0.0684	290
ΔP	0.003	3.36E-05	0.443	-0.439	0.071	290
ΔLS	-0.001	0	0.964	-1.303	0.146	290
DEF	-0.007	-0.006	0.343	-0.961	0.0992	290

This table helps study the variables and understand the different conclusions, as it contains the mean, median, standard deviation, maximum value, and minimum value among the variables.

The researcher noted from the table that companies differ in their dependence on debt, where the maximum ratio of net debt issued was **0.297,** and the minimum ratio was **-0.884.** The researcher noted from the table that the mean cash flow after interest and tax ratio is **0.044**, the maximum value was **0.443,** and the minimum value was **-0.439**. This means that there is a large disparity in profitability ratio among Palestinian companies, which raises questions about the profitability of Palestinian companies. Also, the average change in profitability was **0.003**, and this means that Palestinian companies achieve annual fixed profits, meaning that there is no difference in profit, but rather there is stability in the profits of these companies, as the maximum value was **0.443,** and the minimum was**-0.439**with standard deviation of **0.071**. The researcher also noted that the mean change in the sales log has a low value**-0.001**, which confirms our conclusions about the stability of sales of Palestinian companies. Consequently, their profits as the value of change were low. The researcher also noted from the table that the mean of tangibility is **0.002**, meaning that Palestinian companies do not invest much in fixed assets, and the maximum value was **0.443**.

3.2 Correlation matrix

Table (3.2)

Correlation matrix

	DIV	**I**	**∆W**	**C**	**MTB**	**∆T**	**∆P**	**∆LS**	**DEF**
DIV	1								
I	-0.0406	1							
∆W	0.0462	-0.259	1						
C	0.035	0.388	0.305	1					
MTB	-0.014	-0.279	-0.013	-0.025	1				
∆T	-0.082	0.546	-0.667	-0.087	-0.024	1			
∆P	0.125	0.204	0.227	0.333	-0.240	-0.003	1		
∆LS	-0.029	0.4593	0.251	-0.012	-0.316	0.057	0.021	1	
DEF	-0.009	0.575	0.297	-0.144	-0.298	0.122	0.140	0.723	1

This table contains the correlation matrix, which helps to know if there is a linear relationship between the variables

Table 3.2 shows the correlation matrix between the study's variables, where the correlation matrix is useful in determining the relationships between the variables and is used in identifying the extent of the linear relationship problem between the variables.

This is to infer the problem of linear correlation between the variables when estimating the multiple regression model, which indicates the existence of the problem of linear correlation. The highest correlation coefficient is between the change in log sales and the deficit variable by 0.723. This indicates that there is no linear relationship between the variables, and the multiple regression models can be estimated using all variables. The researcher noted that there is another high value of correlation by **-0.667,** which is between the change in working capital and the tangibility. The researcher noted through the table that the rest of the correlation values are less than 0.8, which is a low correlation level. This means there is no linear correlation problem between the variables, so we can perform the regression equation using all the variables.

3.3 Estimation Results

We used the multiple regression method to confirm or reject hypotheses. To determine the study model's explanatory power and its suitability to depict the relationship between the independent and dependent variables, we relied on the p value. This allowed the researcher to demonstrate a statistically significant relationship between the dependent and independent variables and assess the model's accuracy.

3.3.1 How Palestinian corporations finance the deficit

To get the first insight into how Palestinian corporations finance their deficit, we regress the deficit variable on both net debts issued and retained earnings. The results are presented in Table 3.3.

Table (3.3)

Regression analysis for the relationship between financial deficit, debt change, and retained earnings

Dependent Variable: DEF				
	Coefficient	**Std. Error**	**t-Statistic**	**Prob.**
ΔD	0.749	0.064	11.674	0.000
RE	-0.238	0.057	-4.189	0.000
R-squared	0.3117			
Adjusted R-squared	0.3078			
F-statistic	80.1584			
Prob(F-statistic)	0			
Durbin-Watson stat	2.25885			

Regression analysis of the model that achieves this equation $DEF_{it}=a+ b\Delta D_{it} + bRE_{it}+ e$

Here the sign of the independent variables indicates the internal or external availability of funds. The lower the retained earnings, the greater the financial deficit. As both variables are significant here, the researcher is more interested in the size of the coefficient as it indicates the percentage of the deficit that is closed by each type of financing. According to the pecking order theory, firms use retained earnings first, then debt, and avoid issuing equity after the initial public issue. The results are consistent with the pecking order theory as, according to the pecking order theory, the firms first rely on retained earnings, then issue debt, and rarely issue shares after the initial public offering.

3.3.2 The relationship between net debt issued and financing deficit

Table (3.4)

Regression analysis for the relationship between net debt issued and financing deficit

Dependent Variable: ΔD				
	Coefficient	**Std. Error**	**t-Statistic**	**Prob.**
DEF	0.363	0.031	11.680	0.000
R-squared	0.2776			
Adjusted R-squared	0.2756			
F-statistic	136.4159			
Prob(F-statistic)	0			
Durbin-Watson stat	2.1646			

Regression analysis of the model that achieves this equation $\Delta D_{it} = a + b_{po}DEF_{it} + e_i$

As it appears in Table 3.4, there is a positive relationship that is statistically significance between the financial deficit and the net issued debt. According to the pecking order theory, the change in the firm debt ratio is driven by the funding deficit because companies rarely issue shares after the initial public offering. In this case, the coefficient of the deficit is 0.3636%, meaning that the deficit variable drives 36% of the change in debt. The value of R Squared was about 0.28, meaning that the independent variable explains the variation in the dependent variable by 28%.

Based on the studies of Frank and Goyal (2003), Shyam-Sunder and Myers (1999), and Chirinko and Singha (2000), there is a positive relationship between the deficit and the change in debt. This can be justified by the fact that Palestinian companies may depend on debt to finance their investments and that banks are the main supplier of credit facilities to companies in Palestine.

According to Shyam-Sunder and Myers (1999), each dollar in the financing deficit should be accounted for with a dollar change in corporate debt. When there is financing deficit, the simplest form of the pecking order model presented by Shyam Sunder and Myers (1999), indicates that when there is a financing deficit, the business's internal cash flow should be employed, and if this is found to be insufficient, the firm should issue debt. They also claimed that equity would not be issued until the corporation faced severe financial distress costs and that no debt could be issued. All of that comes in line with the results of our study that there is a strong positive relationship between debt and financing deficit.

3.3.3 The relationship between net debt issued and the components of the financing deficit

The researcher used a simple model to decompose financial deficits and then regress the net debt issued on the component of the deficit (Shyam-Sunder & Myers, 1999). The financial deficit is determined by several variables, which are the cash dividend *(DIV_t)*, the net investment (I_t), the change in the working capital (ΔW_t), and the cash flow after interest and tax *(C_t)*. The researcher tested each of these variables to study its effect on the debt ratio and to see if there is a relationship between them and net debt issued. Table 3.5 presents the results.

Table (3.5)

Regression analysis for the relationship between net debt issued and components of the financing deficit

Dependent Variable: $\Delta \mathbf{D_t}$				
	Coefficient	**Std. Error**	**t-Statistic**	**Prob.**
DIV	-0.884	0.524	-1.689	0.092
I	0.449	0.034	13.368	0.000
ΔW:	0.257	0.041	6.240	0.000
C	-0.314	0.044	-7.174	0.000
R-squared	0.3384			
Adjusted R-squared	0.3309			
F-statistic	45.0133			
Prob (F-statistic)	0			
Durbin-Watson stat	2.1944			

Regression analysis of the model that achieves this equation $\Delta D_{it} = b_{DIV} DIV_{it} + bI_{it} + b_W \Delta W_{it} - b_C C_{it} + e$

The researcher concludes that all model variables exhibit a statistically significant association at the 5% significance level. R Squared was 0.34, which indicates that the independent variables account for 34% of the variation in the dependent variable model.

The cash dividend and the net debt issued has a negative, statistically significant association at a significance level of 10% with a p-value of 0.092, as indicated in the table. Numerous researchers, such as Frank and Goyal (2003), suggested that debt and dividend payout ratios will be negatively correlated. According to Frank and Goyal(2003), companies with higher debt reduce dividend payments to minimize the expenses associated with borrowing outside financing. They discovered a statistically significant inverse link between leverage and dividend payout ratio.

On the other hand, Umer (2014) predicted a positive relationship between the dividend payout ratio and debt, which is consistent with Baskin (1989), Shyam-Sunder and Myers (1999), and Jarallah et al. (2019). This could be attributed to the fact that a company with a steady stream of dividends will face less information asymmetry. The more dividends are given, the less money is available for reinvestment, and the more the firm will have to rely on other sources of long-term funds. In addition, the literature suggests that dividend payments have a detrimental impact on corporate savings. The pecking order theory explains the relationship between corporate capital structure and dividend and investment policies which put the issuing of equity at the bottom of the rank. The firm will favor debt over issuing equity because of the transaction costs, agency costs, and information asymmetry associated with equity".

As shown in Table 3.5, for the net investment variable, the p-value is 0.00, which means that there is a statistically positive significant relationship between net investment and the net debt issued with a coefficient (β) of 0.449. It indicates that for a unit increase in the net investment, the deficit will increase by 0.449 units.

Firms with positive net investments are more likely to have high leverage (Myers, 1977). As Yilidirm and Celic (2020) and Jarallah et al. (2018) argued, the level of debt increases as investment levels increase. On the other hand, high-growth firms can be affected by asymmetric information about growth opportunities, which tends to discourage new equity issuance. It depends on debt. Guner (2016),kayo and Kimura (2011), Mateev et al. (2013), and Baskin (1989) have made the case that there is an inverse correlation between

the issuance of debt and growth possibilities. Kouki and Said(2012) remarked that businesses with significant growth potential need more resources to purchase assets. Firms prefer debt over external equity to finance their expansion when internal equity is depleted.

According to Smith and Watts (1992), the negative link between debt and net investment may result from rising investment, which might have moral hazard consequences and encourage management to take more risks with the company. Managers boost capital and issue shares instead of depending on debt to address this issue since growth possibilities should be funded by equity rather than debt.

The change in working capital and net debt are positively correlated, which is statistically significant. Since the P-value is equal to 0.00, as shown in the table. The researcher observes that the coefficient is 0.26, indicating a positive association and indicating that there is a 0.26 unit deficit for every unit of net investment.

Such a result can be explained as an increase in current assets, including cash and cash equivalents, which will increase the company's ability to pay the debt and increases the creditors' confidence in the company, as it is possible to use these assets to repay loans and as collateral for the debt. Also, the increase in the current debt leads to increased pressure on the internal sources of financing, which leads, according to the pecking order theory, to issuing debt to overcome the shortage of internal sources in order to avoid the issuance of equity.

On the other hand, a negative correlation was discovered between net debt outstanding and cash flow after tax and interest. According to most earlier research, businesses with poor cash flow choose to fund their cash flow deficits by issuing loans. The regression coefficient for our model is -0.314, which is a poor and statistically significant correlation. According to Addae, Baasi, and Hughes (2013), and Frank and Goyal (2003), in the pecking order theory, the company initially will depend on the retained earnings to meet the funding deficit. However, negative cash flow leads to a scarcity of internal funding sources, so the company will issue debt, which is consistent with information asymmetry theory, which suggests that managers know more about their company than investors. Hence, issuing of equity indicates bad news about the company, and the company will rely on debt to face this negative cash flow.

3.3.4 What determines the net debt issued: conventional determinants or deficit?

Capital structure literature point to several determinants as the main factors that affect the level of debt. The main determinants of the level of debt ratio are tangibility of assets, growth options (market-to-book ratio), firm size (ln sales), and profitability. Any change in the level of debt must result from the changes in these factors. These results are consistent with the tradeoff theory and the pecking order theory. If the pecking order hypothesis is the best explanation for the capital structure behavior, adding a variable representing the firm's deficit to the determinants should make it the major determinant and influence other determinants in a relevant way. These findings concurred with those of Frank and Goyal (2003), who found that the shortfall decreased the magnitudes and importance of the coefficients of the traditional factors. The primary factor affecting the net debt issued is the deficit. The results are explained in full below.

3.3.5 The relationship between net debt issued and the conventional determinants without including the deficit variable

Table (3.6)

Regression analysis for the relationship between net debt issued and the changes in conventional determinants

Dependent Variable: **ΔD**				
	Coefficient	**Std. Error**	**t-Statistic**	**Prob.**
ΔT	0.168	0.057	2.922	0.004
ΔMTB	0.012	0.005	2.493	0.013
ΔLS	0.257	0.028	9.086	0.000
ΔP	-0.077	0.057	-1.367	0.173
R-squared	0.2556			
Adjusted R-squared	0.2452			
F-statistic	24.4646			
Prob(F-statistic)	0			
Durbin-Watson stat	1.8960			

Regression analysis of the model that achieves this equation

$$\Delta D_{it} = \alpha + \beta_t \Delta T_{it} + \beta_{mtb} \Delta MTB_{it} + \beta_{ls} \Delta LS_{it} + \beta_p \Delta P_{it} + e$$

There is a statistically significant positive relationship between the change in tangibility and net debt issued. As we note from Table 3.6, the p-value is equal to 0.004. A coefficient (β) of 0.168 refers to the positive relationship between the two variables and indicates that for a unit increase in the tangibility, the deficit will increase by 0.168 unit.

Rajan and Zingales (1995), Kayo and Kimura (2011), and Nhung (2017) all predicted a positive relationship between the net debt issued and change intangibility, the problem of informational asymmetry, which reduces the likelihood of issuing equity. They also predicted that fixed assets would be used as collateral for debt, increasing the confidence of the creditors in the company and decreasing the likelihood of default. Lima (2009) states that firms with smaller levels of tangible assets have information asymmetry issues that lower the price of equity, causing them to seek debt financing. However, Mateev (2013), Rossi (2014), Sofat and Singh (2017), and Awan and Bashir (2016) found a negative relationship between tangibility and leverage.

With regard to the changes in the market-to-book ratio, which indicates the company's market value relative to its book value, there is a statistically significant effect on net debt issues. Results agreed with previous studies that predicted a positive impact on the debt ratio because companies with higher market-to-book ratios have higher growth opportunities, which increases reliance on debt in financing their new investments. Some studies predict a negative relationship between market-to-book ratio and leverage, as Lemmon and Zender (2010).

As we note from the table, there is a statistically significant relationship between market-to-book ratio changes and net debt issued. A coefficient (β) of 0.012 refers to the positive relationship and indicates that for a unit increase in the change in market-to-book ratio, the deficit will increase by 0.012 units.

Large companies have a better reputation than small firms and lower information asymmetry, so they can benefit from that in borrowing more than small companies. The results showed a positive statistically significant relationship between the company's size changes and the net debt issued. As we noted from the table, the p-value is equal to 0.00. A coefficient (β) of 0.257 refers to the positive relationship and indicates that for a unit increase in the ln sales, the deficit will increase by 0.257 units. According to previous studies, a to Rossi (2014), Acarvic (2016)s, there is a significant positive relationship between net debt issued and the size of the company justified by the better reputation of large firms that enable them to borrow more money than small companies, reducing information asymmetry, and that increase lender confidence. This is consistent with the principles of the pecking order theory, meaning that companies do not resort to issuing

equity first but rather issue debt. According to Rossi (2014), Acarvic (2016), and Jarrallah et al. (2018), this positive relationship is a result of larger companies having easier access to financial markets. They are more eager than small businesses to disclose better information to potential investors. Another significant feature, according to Paredes, Green, and Murinde (2016), is that due to their size, large firms have more retained earnings to fund themselves. However, some studies predict a negative relationship between size and net debt issued (López-Gracia, Sogorb-Mira 2008), and Chadha and Sharma (2015).

Pecking order theory holds that firms will prefer internal funds as asymmetric information is provided. Hence, there is a negative relationship between debt and profit, according to Myers (1984). Profitable companies have the potential to generate more money in the future. The need for external investment is reduced in successful firms. Our results were that there is no significant relationship between changes in profitability and debt ratio. As we note from the table that the result was that there is no statistically significant relationship between the company's profitability and the net issued debt, as the p-value was 0.173.

3.3.6: The relationship between net debt issued and the changes in conventional determinants of leverage in the existence of deficit variable

Table (3.7)

Regression analysis for the relationship between net debt issued and the changes in conventional determinants of leverage in the existence of deficit variable

Dependent Variable: Δ**D**				
	Coefficient	**Std. Error**	**t-Statistic**	**Prob.**
ΔT	0.115	0.051	2.225	0.027
ΔMTB	0.014	0.004	3.349	0.001
ΔLS	0.041	0.035	1.167	0.244
ΔP	-0.150	0.051	-2.932	0.004
DEF	0.454	0.052	8.690	0.000
R-squared	0.4120			
Adjusted R-squared	0.4016			
F-statistic	39.7940			
Prob (F-statistic)	0			
Durbin-Watson stat	2.1110			

Regression analysis of the model that achieves this equation

$$\Delta D_{it} = \alpha + \beta_t \Delta T_{it} + \beta_{mtb} \Delta MTB_{it} + \beta_{ls} \Delta LS_{it} + \beta_p \Delta P_{it} + DEF_{it} + e$$

Table 3.7 It regressed the same variables but added the deficit as another independent variable on the net debt issued. The new variable seems much larger in its effect. All the other variables' coefficients have been reduced regarding their effect. This result is agreed with Frank and Goyal's (2003) result that the financing deficit is empirically more relevant than other variables. The result supports the pecking order theory.

The outcomes and justifications for other variables follow the same pattern as those in the preceding section. The table shows a positive, statistically significant link between the company's financial deficit and the net debt issued.

Studies conducted in wealthy nations, such as those by Chirinko and Singha(2000), Frank and Goyal(2003), and Shyam-Sunder and Myers (1999), showed a positive correlation between financial deficit and net debt issued. The researcher points out that prior research, including Frank and Goyal's (2003) findings, which are consistent with our own, suggested that the financial deficit is a crucial deciding factor for the net issued debt.

3.3.7 Determinants of debt ratio

The final tests in this thesis will be conventional capital structure determinants to see if the results are consistent with the pecking order theory. Two proxies for capital structure are used: Debt ratio and liability ratio. Table 3.8 presents the results.

Table (3.8)

Regression analysis of the determinants of debt ratio

	Dependent Variable: TD				TL			
	Coefficient	Std. Error	t-Statistic	Prob.	Coefficient	Std. Error	t-Statistic	Prob.
T	0.319	0.048	6.596	0.000	0.372	0.077	4.853	0.000
MTB	0.000	0.004	0.054	0.957	0.010	0.006	1.579	0.115
LS	0.015	0.006	2.422	0.016	0.019*	0.010	1.907	0.058
P	-0.274	0.074	-3.716	0.000	-0.412	0.117	-3.535	0.001
R-squared	0.6285				0.7017			
Adjusted R-squared	0.5862				0.6678			
F-statistic	14.8589				20.66			
Prob (F-statistic)	0				0			
Durbin-Watson stat	0.7268				0.7457			

Regression analysis of the model that achieves this equation $\Delta TL_{it} = \alpha + \beta_t T_{it} + \beta_{mtb} MTB_{it} + \beta_{ls} LS_{it} + \beta_p P_{it} + e$

Regression analysis of the model that achieves this equation $\Delta TL_{it} = \alpha + \beta_t T_{it} + \beta_{mtb} MTB_{it} + \beta_{ls} LS_{it} + \beta_p P_{it} + e$

The researcher first applies the total debt as a dependent variable instead of net debt issued in the previous regressions to support our results in measuring the effect of conventional variables on financial leverage. Here, the results indicate that the market-to-book ratio variable is not significantly associated with total debt, as the p-value was 0.957, and the relationship between profitability and total debt was significant and negative, as expected. Profitable firms make more money, which they may utilize to finance future operating and capital needs. As a result, the corporation will be less likely to take on further risk by depending on loans. The debt ratio is positively favorable with the tangible and size characteristics. Fixed assets may be used as collateral to support and raise the leverage ratio of external loans. The pecking order idea states that larger corporations have a higher leverage ratio than smaller businesses. Due to their access to external funding sources, large businesses are frequently more varied and have higher borrowing rates.

We have re-tested the regression model using the total liabilities as a dependent variable. The results reinforce the previous results.

A larger level of tangible assets enhances the potential of using them as collaterals, so as seen in the table, there is a positive relationship between asset tangibility and total liabilities. Also, we note from the table that there is a positive relationship between the market-to-book ratio and liabilities because companies with a higher market-to-book ratio have higher growth opportunities, which increases reliance on debt in financing their new investments.

It is noticed from the table that there is a positive relationship between the size of the company and the liabilities. According to Myers (1984), larger business size reduces information asymmetry allowing firms to receive loans more easily than small firms. The Pecking Order theory may predict a positive relationship between size and total liabilities

Pecking order theory predicts that there will be a positive relationship between size and total liabilities. Larger companies have the high growth potential to make big investments, resulting in increased financial demands. When internal funds are depleted, corporations prefer debt over external equity to fund expansion potential, which carries a higher risk than investing in the asset in place (Ramalho, Silva 2009). According to them, companies with high growth potential raise debt when internal funds are insufficient.

Firms with large profits will employ less debt than less profitable companies. This is mostly attributable to the higher proportion of retained earnings available to the firms that make these large cash flows. Furthermore, according to the cost hierarchy, debt would take priority over equity use because the latter includes the issue of new stocks, which means a greater level of external ownership over a corporation.

Chapter Four
Conclusions and recommendations

4.1 Conclusions

This study used multiple linear regression to study the pecking order theory and whether it determines the financial policies of Palestinian companies. The result of the study was that the financial deficit is the most influential factor in determining the debt ratio in Palestinian companies, and it is what leads to the debt ratio in these companies. The researcher utilized three approaches for the study. The result was almost similar in those approaches, as a positive relationship exists between the net debt issued and the financial deficit.

This can be explained by the fact that after the initial public offering, companies hardly ever issue new shares, which is consistent with the pecking order theory, according to which companies first finance their financial deficits with retained earnings, then with debt, and by issuing new shares. According to the findings, retained profits and financial deficits have a negative and statistically significant association. This implies that because corporations prioritize retained earnings in the financial hierarchy, the smaller retained earnings are, the bigger the financial deficit.

It is found through the clear study evidence of the pecking order theory. The researcher found that financial deficit is the leader of the debt ratio in Palestinian companies. The result of testing the first model of the study was when the researcher examined variables other than the financial deficit. It can be concluded from the study that the net debt issued in Palestinian companies is negatively affected by the increase in cash dividends, and this means that companies do not depend on debt in such cases.

Results showed a negative relationship between the dividend payout ratio and debt. As Roseff (1982) suggests, companies with more debt pay smaller dividends to minimize the cost of acquiring external capital. They found a statistically significant negative relationship between leverage and dividend payout ratio. The more dividends paid out, the less money is available for reinvestment, forcing the company to rely on alternative long-term funding sources. Furthermore, research indicates that dividend payments negatively influence corporate savings. The relationship between the capital structure of

a corporation and its dividend and investment strategies is explained by the pecking order hypothesis. The business will choose debt over stock due to the negative effects of issuing shares as well as the transaction expenses, agency costs, and information asymmetry associated with debt.

The result of testing the effect of the net investment variable was that there is a statistically significant relationship with the debt ratio, where the p value was 0.00. Hence, it can be said that rather than other sources, debt covers investments in Palestinian companies. This confirms the pecking order theory in Palestinian companies and that it rules their financial policies.

Firms with positive net investments are more likely to have high leverage. High-growth corporations might benefit from asymmetric information regarding growth potential, which tends to discourage new stock issues in favor of debt. There is a negative relationship between debt issued and growth potential. Organizations with high growth potential demand more resources to purchase assets depending on the debt.

Increased assets and cash and cash equivalents will enhance the firm's capacity to pay the debt and increase creditors' trust in the company since these assets may be used as collateral for the debt. Furthermore, growth in current debt puts further constraints on the business's internal sources of financing, which leads, according to the pecking order theory, to the company issuing debt to overcome the lack of internal sources.

Similar to the first model, the results were in the second model, which indicated that the financial deficit is the ruler of the debt ratio in Palestinian companies. The direction of the relationship was positive and enforced the pecking order theory in the Palestinian market, where studies on developed countries indicate that an increase in debt offsets the increase in the financial deficit, and this is the essence of the pecking order theory, as companies will first resort to the retained earning, then move to debt and as a last resort, issue new shares.

Studies in developed nations, such as Shyam-Sunder and Myers (1999) and Frank and Goyal (2003), found a positive relationship between financial deficit and net debt, which comes in line with the pecking order theory. Previous studies, such as Frank and Goyal (2003), have shown that financial deficits are the most important and determining factor

for net-issued debt and that the remaining variables will have a minor impact on net debt issued when adding a deficit to the model. It is also found a positive relationship between net debt issued and asset tangibility, as increasing asset tangibility raises the problem of informational symmetry, as fixed assets are used as collateral for debt, so creditors' trust in the firm and lessens the likelihood of default.

Market-to-book ratio and debt findings are consistent with prior research that predicted a positive impact on the debt ratio because firms with larger market-to-book ratios have more prospects for expansion, which increases their reliance on debt to finance new investments. It can be concluded that, based on the study, the increase in the size of the company increases its dependence on debt because of its easy access to money in the financial markets and because the large company has a better reputation than the small one.

The most important thing that can be said here is that the financial deficit is the determining factor for the level of financial leverage in Palestinian companies based on the results of the study and that the increase in the financial deficit increases the companies' dependence on debt as well as on the retained earnings. All this gives evidence of the pecking order theory in Palestinian companies and confirms its rule of financial policies in Palestinian markets.

4.2 Recommendations

1. Palestinian companies should increase the use of debt in financing investments to take advantage of the tax advantages and not focus only on the retained return to reduce information asymmetry and raise the company's value.
2. Improving the level of companies' performance by focusing on the factors specific to the companies, as it was evident that these factors have an impact on the financial structure, such as increasing payout ratio, and focusing on the factors affecting net cash flow and improving the performance of companies to increase the company's performance.
3. Palestinian companies can guarantee an increase in the financial leverage ratio by managing working capital. This increase in the financial leverage ratio will include growth and stability in companies.

4 It is necessary for Palestinian companies to consider important matters, such as studying the sources of funding, comparing them, choosing the least costly one, determining the need for funding, and using the money in the most profitable investments.

5. Companies in Palestine must dictate great importance to the conventional factors other than a financial deficit as tangibility, market-to-book ratio, size, and profitability, in determining the optimal level of leverage issued when determining the funding sources.
6. It would also be beneficial to decrease the expenses associated with issuing debt and bond offerings and encourage banks to make loans to the companies. Furthermore, governments might make extra steps to minimize information asymmetry.
7. Companies should take into account when constructing their financial policy the results of this study and benefit from the ideas in the capital structure theories, especially the pecking order theory.
8. Palestinian companies should set policies to mitigate the impact of information asymmetry between external investors and company management.
9. Further work is needed, possibly to test other capital structure theories and take a more specific account of different models provided by previous studies.

References

Abdeljawad, I. and Mat Nor, F. (2017), The capital structure dynamics of Malaysian firms: timing behavior vs adjustment toward the target, *International Journal of Managerial Finance*, 13(3), 226-245. https://doi.org/10.1108/IJMF-09-2015-0170

Abdeljawad, I., & Abed-Rabu, K. (2019). Capital Structure Determinants of Palestinian Corporations. *Jordan Journal of Business Administration*, 15(3), 269-283.

Abdeljawad, I., & Nor, F. M. (2011). Timing behavior versus adjustment towards the target: What determines the capital structure dynamics, 1-18.

Abdeljawad, I., Mat-Nor, F., Ibrahim, I., & Abdul-Rahim, R. (2013). Dynamic capital structure trade-off theory: Evidence from Malaysia. *International Review of Business Research Papers*, *9*(6), 102-110.

Abdullazade, Z. (2020). Empirical Test of Pecking Order Theory for the US Listed Firms. *Available at SSRN 3583126*, 1-28. http://dx.doi.org/10.2139/ssrn.3583126

Abuhamda, E., Ismail, I., Bsharat, T. (2021). Understanding quantitative and qualitative research methods: A theoretical perspective for young researchers. *International Journal of Research 8*(2):71-87. DOI: 10.2501/ijmr-201-5-070

Addae, A. A., Nyarko-Baasi, M., & Hughes, D. (2013). The effects of capital structure on profitability of listed firms in Ghana. *European Journal of Business and Management*, *5*(31), 215-229.

Adesola, W. A., & Okwong, A. E. (2009). An empirical study of dividend policy of quoted companies in Nigeria. *Global Journal of Social Sciences*, 8(1), 85-101.

Afzal, Z. (2012). *The determinants of capital structure: A comparative study of public and private firms*. unpublished master dissertation, Tilburg University

Agliardi, E., Agliardi, R., & Spanjers, W. (2016). Corporate financing decisions under ambiguity: Pecking order and liquidity policy implications. *Journal of Business Research*, *69*(12), 6012-6020. https://doi.org/10.1016/j.jbusres.2016.05.016

Albanez, T. and de Lima, G.A.S.F. (2014), "Effects of Market Timing on the Capital Structure of Brazilian Firms", Emerging Market Firms in the Global, *Economy International Finance Review*, Volume 15, 307-351. https://doi.org/10.1108/S1569-376720140000015013

Allini, A., Rakha, S., McMillan, D. G., & Caldarelli, A. (2018). Pecking order and market timing theory in emerging markets: The case of Egyptian firms. *Research in international business and finance*, *44*, 297-308. https://doi.org/10.1016/j.ribaf.2017.07.098

Al-Najjar, B. (2011). The inter-relationship between capital structure and dividend policy: empirical evidence from Jordanian data. *International Review of Applied Economics*, 25(2), 209-224. https://doi.org/10.1080/02692171.2010.483464

Asquith, P., & Mullins Jr, D. W. (1983). The impact of initiating dividend payments on shareholders' wealth. *Journal of business*,65(1), 77-96.

Atiyet, B. A. (2012). The pecking order theory and the static trade off theory: comparison of the alternative explanatory power in French Firms. *Journal of Business Studies Quarterly*, *4*(1), 1-14.

Awan, A. G., & Bashir, S. (2016). Determinants of capital structure of textile industry in Pakistan. *Ind. Eng. Lett*, *6*, 56-64.

Baker, H. K., & Gerald, M. (2011). Trade-off, pecking order, signaling, and market timing models. Capital Structure and Corporate Financing Decisions, Theory, Evidence, and Practice, *John Wiley & Sons*, 4(46) , 171-190**.**

Baker, M., & Wurgler, J. (2002). Market timing and capital structure. *The journal of finance*, *57*(1), 1-32. https://doi.org/10.1111/1540-6261.00414

Baskin, J. (1989). An empirical investigation of the pecking order hypothesis. *Financial management*, 18(1), 26-35. https://doi.org/10.2307/3665695

Bessler, W., Drobetz, W., & Grüninger, M. C. (2011). Information asymmetry and financing decisions. *International Review of Finance*, *11*(1), 123-154. https://doi.org/10.1111/j.1468-2443.2010.01122.x

Bhama, V., Jain, P. K., & Yadav, S. S. (2015). Does firms' pecking order vary during large deficits and surpluses? An empirical study on emerging economies. *Procedia Economics and Finance*, *30*, 155-163. https://doi.org/10.1016/S2212-5671(15)01279-4

Bhama, V., Jain, P. K., & Yadav, S. S. (2016). Testing the pecking order theory of deficit and surplus firms: Indian evidence. *International Journal of Managerial Finance*, (15), 155-163. https://doi.org/10.1016/S2212-5671(15)01279-4.

Brush, T. H., Bromiley, P., & Hendrickx, M. (2000). The free cash flow hypothesis for sales growth and firm performance. *Strategic management journal*, *21*(4), 455-472. https://doi.org/10.1002/(SICI)1097-0266(200004)21:4<455::AID-SMJ83>3.0.CO;2-P

Bradley, M., Jarrell, G. A., & Kmi, E. H. (1984). On the existence of an optimal capital structure: Theory and evidence. *The journal of Finance*, *39*(3), 857-878.

Cassar, G., & Holmes, S. (2003). Capital structure and financing of SMEs: Australian evidence. *Accounting & Finance*, *43*(2), 123-147. https://doi.org/10.1111/1467-629X.t01-1-00085

Chatzinas, G., & Papadopoulos, S. (2018). Trade-off vs. pecking order theory: evidence from Greek firms in a period of debt crisis. *International Journal of Banking, Accounting and Finance*, *9*(2), 170-191.

Chadha, S. and Sharma, A.K. (2015), "Determinants of capital structure: an empirical evaluation from India", *Journal of Advances in Management Research*, 12(1), 3-14. https://doi.org/10.1108/JAMR-08-2014-0051

Celik, S., & Akarim, Y. D. (2013). Does market timing drive capital structure? Empirical evidence from an emerging market. *International Journal of Economics and Financial* Issues, 3(1), 140.

Cheng, H. (2015). *Determinants of capital structure in Asian firms: new evidence on the role of firm level factors, industry characteristics, and institutions* (Doctoral dissertation, University of Leicester).

Chirinko, R. S., & Singha, A. R. (2000). Testing static tradeoff against pecking order models of capital structure: a critical comment. *Journal of financial economics*, 58(3), 417-425. https://doi.org/10.1016/S0304-405X(00)00078-7

Cobham, D., & Subramaniam, R. (1998). Corporate finance in developing countries: new evidence for India. *World development*, *26*(6), 1033-1047. https://doi.org/10.1016/S0305-750X(98)00025-4

Chung, R., Firth, M., & Kim, J. B. (2005). Earnings management, surplus free cash flow, and external monitoring. *Journal of business research*, *58*(6), 766-776. https://doi.org/10.1016/j.jbusres.2003.12.002

DeAngelo, H., & Masulis, R. W. (1980). Optimal capital structure under corporate and personal taxation. *Journal of financial economics*, *8*(1), 3-29. https://doi.org/10.1016/0304-405X(80)90019-7

Dedes, V. (2010). Reconciling capital structure theories: how pecking order and tradeoff theories can be equated.

De Jong, A., Verbeek, M., & Verwijmeren, P. (2011). Firms' debt–equity decisions when the static tradeoff theory and the pecking order theory disagree. *Journal of Banking & Finance*, *35*(5), 1303-1314. https://doi.org/10.1016/j.jbankfin.2010.10.006

De Medeiros, O. R., & Daher, C. E. (2004). Testing static tradeoff against pecking order models of capital structure in Brazilian firms. *Available at SSRN 631563*, 1-15 http://dx.doi.org/10.2139/ssrn.631563

Dommes, K., Schmitt, M., & Steurer, E. (2019). Capital Structures in German Small and Mid Caps: Does Trade-Off or Pecking Order Theory Explain Current Reality Better?. *Journal of Financial Risk Management*, *8*(3), 147-162. https://doi.org/10.4236/jfrm.2019.83010

Dong, M., Loncarski, I., Horst, J. T., & Veld, C. (2012). What drives security issuance decisions: Market timing, pecking order, or both?. *Financial Management*, *41*(3), 637-663. https://doi.org/10.1111/j.1755-053X.2012.01213.x

Enjolras, G., Sanfilippo, G., & Soliwoda, M. (2021). What determines the capital structure of farms? Empirical evidence from Poland. *Baltic Journal of Economics*, *21*(2), 112-132. https://doi.org/10.1080/1406099X.2021.1972587

Fama, E. F., & French, K. R. (2000). Forecasting profitability and earnings. *The journal of business*, *73*(2), 161-175. https://doi.org/10.1086/209638

Fama, E. F., & French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *The review of financial studies*, *15*(1), 1-33. https://doi.org/10.1093/rfs/15.1.1

Guner, A. (2016). The determinants of capital structure decisions: New evidence from Turkish companies. *Procedia economics and finance*, *38*, 84-89. https://doi.org/10.1016/S2212-5671(16)30180-0

Frank, M. Z., & Goyal, V. K. (2003). Testing the pecking order theory of capital structure. *Journal of financial economics*, *67*(2), 217-248. https://doi.org/10.1016/S0304-405X(02)00252-0

Hadi, A. R. A., & Suryanto, T. (2016). Capital Structure Determinants: Evidence From Palestine and Egypt Stock Exchanges. *Ikonomika: Jurnal Ekonomi dan Bisnis Islam*, *1*(2), 118-130.

Handoo, A., & Sharma, K. (2014). A study on determinants of capital structure in India. *IIMB Management review*, *26*(3), 170-182. https://doi.org/10.1016/j.iimb.2014.07.009

Huang, C., Ma, X., & Lan, Q. (2014). An empirical study on listed company's value of cash holdings: an information asymmetry perspective. *Discrete Dynamics in Nature and Society*, *2014*, 1-12. https://doi.org/10.1155/2014/897278

Jarallah, S., Saleh, A. S., & Salim, R. (2019). Examining pecking order versus trade-off theories of capital structure: N ew evidence from J apanese firms. *International Journal of Finance & Economics*, *24*(1), 204-211. https://doi.org/10.1002/ijfe.1657

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American economic review*, *76*(2), 323-329. https://www.jstor.org/stable/1818789

Jensen, M. C., & Meckling, W. H. (1979). Theory of the firm: Managerial behavior, agency costs, and ownership structure. In *Economics social institutions* (pp. 163-231). Springer, Dordrecht.

JS Ramalho, J., & da Silva, J. V. (2009). A two-part fractional regression model for the financial leverage decisions of micro, small, medium and large firms. *Quantitative Finance*, 9(5), 621-636. https://doi.org/10.1080/14697680802448777

Kayo, E. K., & Kimura, H. (2011). Hierarchical determinants of capital structure. *Journal of banking & finance*, *35*(2), 358-371. https://doi.org/10.1016/j.jbankfin.2010.08.015

Kester, W. C. (1986). Capital and ownership structure: A comparison of United States and Japanese manufacturing corporations. *Financial management*, 15(1) 5-16. https://doi.org/10.2307/3665273

Kim, H. J., Sohn, P., & Seo, J. Y. (2015). The capital structure adjustment through debt financing based on various macroeconomic conditions in Korean market. *Investigación económica*, *74*(294), 155-172. https://doi.org/10.1016/j.inveco.2015.11.005

Komera, S., & Lukose PJ, J. (2014). Corporate bankruptcy, soft budget constraints, and business group affiliation: Evidence from Indian firms. *Review of Pacific Basin Financial Markets and Policies*, *17*(03), 1-28. https://doi.org/10.1142/S0219091514500167

Kopecky, K. J., Li, Z. F., Sugrue, T. F., & Tucker, A. L. (2018). Revisiting M&M with taxes: An alternative equilibrating process. *International Journal of Financial Studies*, *6*(1), 1-12. https://doi.org/10.3390/ijfs6010010

Kouki, M., & Said, H. B. (2012). Capital structure determinants: new evidence from French panel data. *International journal of business and management*, *7*(1), 214-229. http://dx.doi.org/10.5539/ijbm.v7n1p214

Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *The journal of finance*, *28*(4), 911-922 *https://doi.org/10.2307/2978343*

Leary, M. T., & Roberts, M. R. (2010). The pecking order, debt capacity, and information asymmetry. *Journal of financial economics*, 95(3), 332-355.

Lemmon, M. L., & Zender, J. F. (2010). Debt capacity and tests of capital structure theories. *Journal of Financial and Quantitative Analysis*, *45*(5), 1161-1187. https://doi.org/10.1017/S0022109010000499

Lima, M. (2009). An insight into the capital structure determinants of the pharmaceutical companies in Bangladesh. In *GBMF Conference* (pp. 1-17).

Lim, T. C., Chai, R., Zhao, D., & Lim, X. Y. (2012). Capital structure and political patronage: Evidence from China. *American Journal of Business and Management*, *1*(4), 177-182. https://doi.org/10.11634/216796061706189

López-Gracia, J., & Sogorb-Mira, F. (2008). Testing trade-off and pecking order theories financing SMEs. Small Business Economics, 31(2), 117-136 https://doi.org/10.1007/s11187-007-9088-4

Mahajan, A., & Tartaroglu, S. (2008). Equity market timing and capital structure: International evidence. *Journal of Banking & Finance*, *32*(5), 754-766.

Martinez, L.B., Scherger, V. and Guercio, M.B. (2018), "SMEs capital structure: trade-off or pecking order theory: a systematic review", Journal of Small Business and Enterprise Development, 26 (1), 105-132. https://doi.org/10.1108/JSBED-12-2017-0387

Mateev, M., Poutziouris, P., & Ivanov, K. (2013). On the determinants of SME capital structure in Central and Eastern Europe: A dynamic panel analysis. *Research in international business and finance*, *27*(1), 28-51. https://doi.org/10.1016/j.ribaf.2012.05.002

Mat Nawi, H. (2015). *Determinants of capital structure in small and medium sized enterprises in Malaysia* (Doctoral dissertation, Brunel University London).

Mouamer, F. M. A. (2011). The determinants of capital structure of Palestine-listed companies. *The Journal of Risk Finance*.

Mazur, K. (2007). The determinants of capital structure choice: evidence from Polish companies. *International Advances in Economic Research*, *13*(4), 495-514. https://doi.org/10.1007/s11294-007-9114-y

Michaelas, N., Chittenden, F., & Poutziouris, P. (1999). Financial policy and capital structure choice in UK SMEs: Empirical evidence from company panel data. *Small business economics*, *12*(2), 113-130. https://doi.org/10.1023/A:1008010724051

Miglo, A. (2011). Trade-off, pecking order, signaling, and market timing models. *Capital structure and corporate financing decisions: Theory, evidence, and practice*,9(6), 171-191.

Mihalca, G., & Antal, R. (2009). An empirical investigation of the trade-off and pecking order hypotheses on Romanian market. In *ASMDA. Proceedings of the International Conference Applied Stochastic Models and Data Analysis* 13 ,109. Vilnius Gediminas Technical University, Department of Construction Economics & Property.

Miller, M. H. (1977). Debt and taxes. *the Journal of Finance*, *32*(2), 261-275.

Miller, M. H. (1988). The Modigliani-Miller propositions after thirty years. *Journal of Economic perspectives*, *2*(4), 99-120.

Miller, M. H., & Rock, K. (1985). Dividend policy under asymmetric information. *The Journal of finance*, 40(4), 1031-1051. https://doi.org/10.1111/j.1540-6261.1985.tb02362.x

Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: a correction. *The American economic review*, *53*(3), 433-443. https://www.jstor.org/stable/1809167

Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American economic review*, 48(3), 261-297. https://www.jstor.org/stable/1809766

Myers, S. C. (1984). *Capital structure puzzle* (No. w1393). National Bureau of Economic Research.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics*, 13(2), 187-221. https://doi.org/10.1016/0304-405X(84)90023-0

Nguyen, H. H., Ho, C. M., & Vo, D. H. (2019). An empirical test of capital structure theories for the vietnamese listed firms. *Journal of Risk and Financial Management*, 12(3), 148. https://doi.org/10.3390/jrfm12030148

Nhung, N. T. P., Lien, N. P., & Hang, D. T. T. (2017). Analyze the determinants of capital structure for Vietnamese real estate listed companies. *International Journal of Economics and Financial Issues*, *7*(4), 270-282.

Panda, B., & Leepsa, N. M. (2017). Agency theory: Review of theory and evidence on problems and perspectives. *Indian Journal of Corporate Governance*, *10*(1), 74-95. https://doi.org/10.1177/0974686217701467

Prasad, S., Green, C. J., & Murinde, V. (2001). *Company financing, capital structure, and ownership: A survey, and implications for developing economies* (No. 12). SUERF Studies.

Rajan, R. G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *The journal of Finance*, *50*(5), 1421-1460. https://doi.org/10.1111/j.1540-6261.1995.tb05184.x

Vigneron, L. (2012). Pecking Order Versus Trade Off Theory and the Issue of Debt Constraint Problem?. Available at SSRN 2139963.http://dx.doi.org/10.2139/ssrn.2139963

RAZAK, A., HISYAM, N., & ROSLI, M. N. (2014). A test between pecking order hypothesis and static trade-off theory: An analysis from Malaysian listed firms for

periods of year 2007 to 2012. *International Journal of Business* & Commerce, 3(5), 99-117.

Roerink, S. H. S. (2014). *Testing the static trade-off theory and the pecking order theory of capital structure: Evidence from Dutch listed firms* (Bachelor's thesis, University of Twente).

Rossi, M. (2014). Capital structure of small and medium enterprises: the Italian case. *International journal of globalisation and small business*, *6*(2), 130-144. https://dx.doi.org/10.1504/IJGSB.2014.066471

Serrasqueiro, Z., & Caetano, A. (2015). Trade-Off Theory versus Pecking Order Theory: capital structure decisions in a peripheral region of Portugal. *Journal of Business Economics and Management*, *16*(2), 445-466. https://doi.org/10.3846/16111699.2012.744344

Seifert, B., & Gonenc, H. (2010). Pecking order behavior in emerging markets. *Journal of International Financial Management & Accounting*, *21*(1), 1-31. https://doi.org/10.1111/j.1467-646X.2009.01034.x

Setyawan, I. R. (2015). An empirical study on market timing theory of capital structure. *International Research Journal of Business Studies*, *4*(2).

Shen, C. H. H. (2014). Pecking order, access to public debt market, and information asymmetry. *International Review of Economics & Finance*, *29*, 291-306. https://doi.org/10.1016/j.iref.2013.06.002

Shyam-Sunder, L., & Myers, S. C. (1999). Testing static tradeoff against pecking order models of capital structure. *Journal of financial economics*, *51*(2), 219-244. https://doi.org/10.1016/S0304-405X(98)00051-8

Singh, A., & Hamid, J. (1992). *Corporate financial structure in developing countries* (No. 1).

Smith Jr, C. W., & Watts, R. L. (1992). The investment opportunity set and corporate financing, dividend, and compensation policies. *Journal of financial Economics*, *32*(3), 263-292. https://doi.org/10.1016/0304-405X(92)90029-W

Sofat, R. and Singh, S. (2017), "Determinants of capital structure: an empirical study of manufacturing firms in India", *International Journal of Law and Management*, 59(6), 1029-1045. https://doi.org/10.1108/IJLMA-05-2016-0051

Gracia, J. L., & Mira, F. S. (2003). Pecking order versus trade-off: An empirical approach to the small and medium enterprise capital structure. *Working papers= Documentos de trabajo: Serie EC-(Instituto Valenciano de Investigaciones Económicas)*, (9), 1-36. http://dx.doi.org/10.2139/ssrn.393160

Thomas, A. E. (2013). Capital Structure and Financial Performance of Indian Cement Industry. *BVIMR Management Edge*, 6(1), 44-50.

Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. *The Journal of finance*, *43*(1), 1-19.

Tong, G., & Green, C. J. (2005). Pecking order or trade-off hypothesis? Evidence on the capital structure of Chinese companies. *Applied economics*, 37(19), 2179-2189. https://doi.org/10.1080/00036840500319873

Umer, U. M. (2014). Determinants of capital structure: Empirical evidence from large taxpayer share companies in Ethiopia. *International Journal of Economics and Finance*, *6*(1), 53-65. https://doi.org/10.18092/ulikidince.363126

Vanacker, T. R., & Manigart, S. (2010). Pecking order and debt capacity considerations for high-growth companies seeking financing. *Small Business Economics*, *35*(1), 53-69. https://doi.org/10.1007/s11187-008-9150-x

Wasserman, N. (2006). Stewards, agents, and the founder discount: Executive compensation in new ventures. *Academy of Management Journal*, *49*(5), 960-976. https://doi.org/10.5465/amj.2006.22798177

Wang, Z. (2013). *The pecking order hypothesis or static tradeoff theory: research on capital structure based on a UK sample* (Master's thesis, University of Twente).

Wiagustini, N. L. P., Ramantha, I. W., Sedana, I. B. P., & Rahyuda, H. (2017). Indonesia's capital structure: Pecking order theory or trade-off theory. *International Journal of Applied Business and Economic Research*, *15*(16), 119-131.

Yıldırım, D., & Çelik, A. K. (2020). Testing the pecking order theory of capital structure: Evidence from Turkey using panel quantile regression approach. *Borsa Istanbul Review*, 21(4), 317-331. https://doi.org/10.1016/j.bir.2020.11.002

Yuan, Y. (2018). Does the pecking order theory apply to Chinese publicly traded companies? Evidence from manufacturing sector. *Modern Economy*, *9*(12), 2233-2247. https://doi.org/10.4236/me.2018.912138

كلية الدراسات العليا

جامعة النجاح الوطنية

سلوك نظرية الترتيب لهيكل رأس المال
دليل من الشركات الفلسطينية

اعداد

محمد ناصر جرادات

اشراف

د. اسلام عبد الجواد

قدمت هذه الرسالة استكمالا لمتطلبات الحصول على درجة الماجستير في التمويل بكلية الداراسات العليا
في جامعة النجاح الوطنية في نابلس، فلسطين

2022

سلوك نظرية الترتيب لهيكل رأس المال دليل من الشركات الفلسطينية

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الملخص

خلفية الدراسة:

السياسات التمويلية لها تأثير كبير على ربحية وأداء الشركات. هناك العديد من النظريات التي تحدثت عن هيكل رأس المال، بما في ذلك نظرية الترتيب النقر. جاءت هذه الدراسة للوقوف على مدى قابلية تطبيق نظرية الترتيب على السياسات التمويلية في الشركات الفلسطينية.

هدف الدراسة:

تهدف الدراسة إلى تحديد مدى انطباق نظرية الترتيب على سياسات التمويل في الشركات الفلسطينية، وما إذا كانت تحكمها، وتحديد ودراسة محددات الرافعة المالية في الشركات الفلسطينية وما هو اتجاه هذه العلاقة بين هذه المتغيرات والرافعة المالية.

منهجية الدراسة:

دراستنا هي دراسة كمية ، استخدمنا بيانات لشركات فلسطينية من 2006–2019 استخدمنا أسلوب الانحدار الخطي المتعدد لتحليل البيانات واختبار الفرضية وتحديد العلاقات بين المتغيرات.

نتائج الدراسة:

وجدنا ان العجز المالي هو الحاكم الفعلي لنسبة الدين في الشركات الفلسطينية واتجاه العلاقة كان ايجابيا. كما وجدنا أن هناك علاقة إيجابية بين العجز المالي وصافي الدين الصادر ووجدنا أن هناك علاقة سلبية

بين العجز المالي والأرباح المحتجزة، كما وجدنا أن هناك علاقة سلبية بين صافي الدين المصدر وتوزيعات الأرباح النقدية ، التدفق النقدي بعد الفائدة والضرائب وعلاقة إيجابية مع صافي الاستثمار والتغير في رأس المال العامل. وجدنا أيضًا أن المتغيرات التقليدية الملموسية و القيمة السوقية إلى القيمة الدفترية والحجم ولها علاقة إيجابية بالرافعة المالية وهناك علاقة سلبية بين الربحية والرافعة المالية.

الاستنتاجات:

نظرية الترتيب هي الحاكمة للسياسات التمويلية في الشركات الفلسطينية، وأن الشركات الفلسطينية تعتمد على الأرباح المحتجزة والدين في تمويل استثماراتها.

الكلمات المفتاحية: نظرية الترتيب؛ العجز المالي؛ الرافعة المالية؛ هيكل رأس المال.