

THE EFFECT OF FINANCIAL STRUCTURE, FINANCIAL LEVERAGE, AND PROFITABILITY ON VALUE OF SHARES OF INDUSTRIAL COMPANIES

APPLIED STUDY ON A SAMPLE OF SAUDI INDUSTRIAL COMPANIES

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PURPOSE

THE purpose of this study is to investigate the effect of financial structure, financial leverage, and profitability on industrial company's value as a long term strategic analysis that helps the analyst in predicting future company's value on the light of the mentioned variables in addition to external environment.

Design/Methodology/Approach: *A sample was selected from Saudi industrial companies listed in Saudi Stock Market amounting Forty-six companies. The study used the brochures issued by Saudi capital market for four years during the period of 2009-2012.*

Findings: *The results confirm that there is statistically significant direct relationship between two independent variables: return on equity and capital structure and the dependent variable represented by stock market price. However, there is weak and inverse relationship between financial leverage and stock value, and this relationship is not significant, so there is no statistically significant relationship between financial leverage and company's value.*

Research Limitations/Implications: *This research examined the effect of financial structure, financial leverage, and profitability on industrial company's value. However, this study did not explore the other factors that affect company's value. This is considered as study limitation.*

Practical implications: *The results indicate that companies 'management have to pay attention to financing aspects represented by differentiation between different financing sources, and in particular investment debt funds in turn exceeds capital cost, which leads to increase and improve profitability, which have a positive impact in increasing the company value.*

Originality/Value: *This study will enable management of companie to have a better understanding of the impact of profitability and, which will lead to increased and improved company's values in order to increase shareholders' wealth.*

Key Words: *Financial Leverage, Financial Structure, Profitability, Stock Market Value, Company's Value.*

Introduction

The primary objective of published financial statements is to provide interested parties with necessary and useful information for decision-taking. The company's published analysis of financial statements in the current period and prior periods are considered as best method to estimate company's future

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performance and assessment of its situation. The development that accompanied financial analysis upon the emergence of strategic analysis is considered one of the best methods to measure all company's aspects, since analyst can measure all aspects of company's performance. He can after results evaluation extract valuable information about the effectiveness of company's operating, financing, and investment policies, as well as strengths and weaknesses points, which require management attention to address problems which appear in evaluation process. Financial analyst strategic activity is not only limited on that, but it extends to include the development required strategies for the company, to obtain competitive advantage, that helps it in increasing its market share, thereby increasing profitability and fixed sustainable growth rate, which leads to increase its value which is the strategic goal of financial Management. Therefore, this study is to shed light on the importance (the impact) of the financial structure, financial leverage, and profitability in company's value through studying the impact of these factors on a sample of Saudi Industrial Companies. The study has been divided to include the theoretical side of financial structure, financial leverage, and profitability, the study importance, its objectives, methodology which included its problem statement, population, sample, hypotheses, used statistical analysis, hypotheses testing, and finally results, discussion, and recommendations.

Study Theoretical Frame

Financial Structure

Financial structure includes all items of liabilities and equity, while liabilities include liabilities that are short-term and long-term liabilities, in other words, funds sources obtained by the company to finance its investments, whether short-term or long-term. There is a must to differentiate between financial structure concept and capital structure, since capital structure means long-term (long-term liabilities + equity) funding sources, while financial structure (funding structure) includes (short-and long-term liabilities + equity) (Palepu, 2005). Company's financial structure has a great importance in investment and financing decisions, due to its impact on profitability, as well as risk degree faced by the company due to its dependence and expanding on debt. Financial structure decisions affect Company's financial risk measured by leverage which is a ratio of borrowed to owned money.

Financial Leverage

Financial risks are linked with funding decisions; this means that it is linked with company selection of a combination of its financial structure. Financial leverage leads to high degree of risk faced by shareholders, so it increases the likelihood of its inability to service the debt. Therefore, financial policy tries the harmonization between the impact of borrowing and the return on equity, as well as the degree of risk faced by shareholders. So, it can be said that harmonization between debt and equity to conclude the optimal mix of financial structure that leads to reduce funds cost.

Financing Decisions

Each company works to determine its targeted financial structure parameters, in terms of its constituent elements and the proportion of each element in it. Through that it works to achieve its strategic objective represented by increase or maximize company's value. This requires that there should be a balance between the expected return, which resulted financial structure and the risks this return is subject to. Under ideal assumptions imposed by Modigliani and Miller for financial markets, the financing structure does not affect the capital cost and thus company's value remains constant and is not affected by financing structure. However, due to debts privilege of tax advantage given that their interests are exempted from tax, the presence of debt in its financial structure reduces capital cost, which leads to increased profitability, thus increasing the return on equity which will reflect positively on increment of company's value.

Financing Resources

Short-term Financing

The company needs short-term financing to finance its investments in working capital, which is a

must for production and sales continuity. Short-term financing is defined as due debt obligations in a period of time less than a year (Modigliani and Miller, 1958), and is divided as follows:

- **Commercial Credit**, it is a short-term financing the company obtained from creditors, and is represented by futures procurement, and it may be without cost (free) or with cost.
- **Bank credit**
- **Dues which are delayed** wages or taxes... etc, where the company can take advantage of the funds of these accounts in financing its short-term investments.

Medium-term Financing

It is a financing source of the permanent part of financing investments in working capital and additional financing for fixed assets, including loans - term (3-7 years) and machinery and equipment loans.

Long-Term Financing

It is the supplementary part of financial structure, including property funds (shares retained earnings and reserves) and long-term borrowings (long-term loans + bonds)

Advantages and Disadvantages of Debt as a Source of Financing

First, the Advantages

1. Financing by indebtedness is less expensive than financing by shares because of tax savings.
2. Fixed borrowing costs, and also cost of loan contracting and bonds issuance is less than the cost of issuing stock.
3. Lenders have no right to vote in Shareholders General Assembly.
4. Borrowing may hinder company flexibility and in particular if borrowing through bonds due to large undertakings (Covenants).

Second, Disadvantages

1. Failure to pay interest or debt origin may lead to bankruptcy of the company.
2. Borrowing increases company's financial risk.
3. Indebtedness constitute financial burdens on company because it has due date.
4. Some loans allow imposing restrictions on the enterprise and in the process of issuing bonds in particular.
5. Some companies may find it difficult to obtain long-term loans due to the difficulty of obtaining such loans.

Advantages and Disadvantages of Financial Leverage: (Ahmed, 1994)

First, Advantages

1. Financing by borrowing is less expensive than stocks financing because of tax saving generated by, and due to borrowers exposure to risks relatively less than those shareholders face.
2. Borrowing cost represented by interest rate does not vary with profits level.
3. Investment in debt securities from investor's viewpoint is less risky than stocks investments.
4. Borrowing by bonds allows the company to require right call, and this condition achieves company's flexibility in case interest rate is decreased in the market.
5. Cost of loans contracting and bonds issuance is less compared with cost of stock issuing

Second, Disadvantages

1. Financial leverage leads to increase in financial risk of the company.
2. Loans maturities request the company to provide the necessary cash to pay it off on maturity.
3. The possibility of imposing restrictions on the company as a result of borrowing (Covenants).
4. Small companies face difficulty in obtaining long-term loans.

Profitability

Company's value depends on its revenue strength represented by its ability to make profits from sales (net profit margin), as well as its ability to invest in its assets to increase sales (assets turnover), and whenever the company is able to reduce its costs, whether sales cost, or general and administrative expenses, they will contribute in its profitability increment.

The company with high profitability from assets can detain greater part of its net annual profits to finance its needs and thus less dependence on debt, but by deducting debt interest expense (according to Modigliani and Miller (1958) swap theory), company value increased by debt ratio increment and this value will be maximized by using the indebtedness under the following assumptions:

- lack of cost mediation in securities sale and purchase
- The absence of taxes on individual income.
- The possibility of borrowing with one interest rate either for individuals or companies.
- The same information is available to shareholders and company management for future investment opportunities.

Therefore, company profitability is considered as an indicator of management efficiency, thereby increasing the demand for shares in the financial market by investors, which leads to increase in the market value, therefore, return on equity (ROE) was selected as an indicator of company profitability in this study.

Study General Framework

This study is considered exploratory with respect to Saudi industrial companies, as well as correlation one because it handles the relationship between financial structure, financial leverage, profitability, and market value.

Study Importance

The study importance is due to its focus on investigating the impact of number of important variables in industrial company value in Saudi Arabia, which may help finance and investment decision makers in the Kingdom to increase the level of accuracy of their decision.

Problem of the Study

New financial management in joint-stock companies aims to maximize the company market value or to maximize stock value in the market. Achievement of this goal depends on a number of variables that vary in its impact on company's value from one variable to another and from one market to another and from one sector to another Therefore, the problem of the study is to answer the following questions:

1. Does company capital structure listed in Saudi financial market on its share price in the market?
2. Is there any effect of leverage degree in industrial companies listed on the Saudi financial market on their stock prices in the market?

3. Is there any effect of profitability of industrial companies listed in Saudi financial market on their stock prices in the market?

Study Objectives

Study objectives were determined as follows:

1. To investigate the relationship between financial structures of Saudi industrial companies and their stocks market price.
2. To identify the relationship between leverage degree of Saudi industrial companies and their market value.
3. To identify the relationship between profitability of Saudi industrial companies and their stocks market price.

Hypotheses

Based on study model, the following hypotheses were formulated as follows:

The First Hypothesis

Ho: There is no effect of capital structure in Saudi industrial company's stock price in Saudi financial market.

The Second Hypothesis

Ho: There is no effect of leverage ratio capital structure in Saudi industrial company's stock price in Saudi financial market

The Third Hypothesis

Ho: There is no effect of profitability (return on equity) in Saudi industrial company's stock price in Saudi financial market.

Population and Sampling

The study population consists of all industrial public shareholding companies listed in Saudi stock market of 46 companies, a random sample was selected from study population of eight companies, which have been adopted to represent all industrial sectors.

Study Variables

Study variables are quantitative which were measured by using financial well-known methods. The variables have been identified as follows:

1. Share Market Price

Company's share price increment in the financial market is considered as a strategic objective for financial management, and leads to an increase in shareholders' wealth. This dependent variable will be measured in this study by the market value of company's share in the market.

2. Capital Structure

Financial structure includes the addition of capital structure and the rest of the liabilities side represented by short-term financing sources, so the capital structure is equal to long-term liabilities and equity, this independent variable has been measured in this study through the total long-term liabilities and equity.

3. Financial Leverage

Financial risks are related with financing decisions, this means selection of the mix that forms its financial structure, so if the company is able to invest the borrowed funds with a return that exceeds the borrowing cost, then it can increase the return on equity, this is called trading with

equity, this independent variable has been measured in this study by dividing liabilities of third party on total assets.

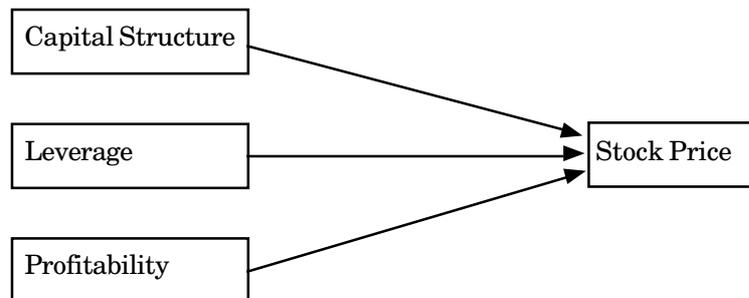
4. Profitability

Company's profitability reflects management efficiency in achieving profits from its operating assets; consequently, investors can judge management efficiency, especially if such judgment is measured through distributed dividends to net profits.

This independent variable was measured in this study through net profit rate to Return on Equity ROE, which reflects management ability to achieve profits.

Study Model

In light of study variables which was reviewed before, and to answer the questions that have been introduced in study problem, the model can be formulated as follows:



Study variables were measured as follows:

1. Stock price as dependent variable was measured by company's stock market values at the end of each year.
2. Capital structure as independent variable was measured through total debt to shareholders' equity ratio.
3. Financial leverage was measured as an independent variable through debt short-and debt to total assets.
4. Profitability as an independent variable was measured through Return on Equity (ROE).

Accordingly, the study model is as follows:

$$\text{Market value} = B_0 + B_1 \text{ Liabilities} + B_2 \text{ Debt Ratio} + B_3 \text{ ROE} + E$$

Theoretical Framework

Financing Structure

Financing structure refers to all types of funding sources used in financing the total assets of the project, so it is different from capital structure, which is represented by institution's permanent funding elements, which includes equity and long-term loans? Therefore, project capital structure is a part of its funding structure (Yahyaoui, 2002). There are various types of available funding sources for business organizations that take several classifications which vary from one writer to another according to classification target. Those who depend on ownership criterion differentiate between private funds and debts. There are people who divide these sources to traditional and modern, according to their appearance, taking into account recent trends regarding traditional securities (Mohammed, 2010).

Financial managers seek to achieve ideal capital structure for the project through the use of appropriate funding combination that leads to reduce financing cost to its minimal limit and increase market value of the shares. (Akintoye and Taylor, 1998). In contrast, financing funds concentration in a single source, which is owners money leads to in appropriate capital structure. The inappropriate capital structure is deemed inappropriate when it does not affect the project market value (Singhania and Seth, 2010). There are several factors that affect the formation of funding structure within the project. Some are internal based on the use of a combination of funding includes external debt and common and preferred shares, according to these projects needs of funding in addition to the quality of available investment opportunities to these projects. This is made through an exchange policy between risk and return and to conduct in-depth studies and for project financing and financing available investment alternatives needs in addition to study cost of each alternative funding in addition to study operational risk and management acceptance degree of risks surrounding and tax impact and the extent of tax benefits for alternative funding to another, as well as taking into account the flexible financing structure, on the other hand, there are external factors that affect financing structure and include lenders sensitivity to company's high indebtedness, and industry nature in which it operates in terms of competitiveness, growth and stability of sales and profits, and assets value (Shlash et al., 2008). All of these factors must be taken into account when designing project ideal financing structure, but practical status often differs, since actual and applied financing structure differs from ideal funding structure which management is trying to reach because of economic conditions, political and social variables the project has and therefore the weighted cost of funding sources are not in their minimal limits (Deiranieh, 1992).

The Concept and Importance of Financial Leverage and Financing Structure Theories

Financial leverage refers to use third party funds in financing in order to increase operating profit and taxes, which is loans ratio to total liabilities (Hawari 1996) and financial leverage degree measures company's exposure level to financial risk, and it also reflect the change of degree in earnings per share of operating profits resulting from earnings operating rate change before interests, and it is also defined as the use of other's funds (EBET), (Akintoye and Taylor, 1998) and taxes to achieve additional profits that benefited the company's owner's, so it depends on borrowing to finance company's operations in order to achieve a return that increases owner's profits. The financial leverage degree is increased by increasing use of external financing sources, and financial leverage can be increased by non-traditional financial instruments, such as the use of financial options and futures contracts (Fahmi 2008), some consider financial leverage as one of the terms invented by institutional mental for packaging undesired or negative things or to give a nice appearance, instead of saying borrowing or indebtedness which is a term that inspires risk and weakness we say financial leverage term that inspires confidence and strength. (Nibal, Qasaba, 2010). In general, the company needs of short-term financing depends on sales growth rate in addition to company's efficiency and effectiveness degree in managing company's working capital, and on long-run short term financing needs may to long-term financing, so management of any Project should make periodical evaluation for financing structure and determine the extent of dependence on debt funds in financing. According to Anandhi et al., (1999), the justification of financial leverage existence is project earnings achievement before (interest and taxes higher than the cost of funding and the increase or decrease in operating profits financing cost will lead to an increase or decrease) in return on equity. Some companies may reduce leverage level in order to reduce the risk level or because of unwillingness in adopting compressed financial policy in order to commit toward debt holder (Jensen, 1986). In contrast, Harris and Raviv, (1988), and Stulz, (1988), indicated that companies management may be forced to increase leverage at higher rates than the ideal rates in order to maintain control and voting power of old shareholders and thus reduce the likelihood of external control and that this policy will lead ultimately to enhance and strengthen those companies performance. In all cases, companies must study the efficiency of its operations and financing, and environmental conditions surrounding before deciding on leverage, because leverage is double-edged sword, so it can lead to achieve best results when they are characterized by operational and financial efficiency, and when circumstances surrounding the companies are suitable, its use can also lead to negative results

if things were not as desired (Ali, 2010). The leverage is considered on one of the factors that affect the shape and nature of financing structure within the project.

Literature Review

Jameel (2013) study aims at testing the impact of financial leverage on the performance of firms listed at Palestinian Security Exchange according to accounting performance measures namely return on assets (ROA), return on equity (ROE), return on sales (ROS), sales growth, and market value of the firm measured by Tobin's Q. On the other hand, the research is an attempt to know which one of them is more influenced by the financial leverage. The sample of the study consisted of (20) corporations listed on the Palestinian Security Exchange during the period 2004-2011. The research used the multiple regression in order to analyze and test the hypothesis. The study revealed that the financial leverage has a negative impact on accounting performance measures, and the market value of the firms according to Tobin's Q and this impact extends for several subsequent years.

The study recommends that the Palestinian corporations management should make financial study and evaluate the financial structure in order to reach the best optimal ratio of leverage within the financial structure to ensure that the positive impact of leverage on the financial performance and the market value of these companies, and enacting economics laws that allow to Palestinian corporation to use loan bonds and other financial instruments that allow for multiple alternatives to these corporations while using leverage in funding.

Alroud (2013) study aimed to investigate the impact of solvency of financial market value of share price in Jordanian commercial banks. To achieve these objectives financial ratios of solvency of financial short-term and long-term and coverage ratios solvency of the financial statements of commercial banks Jordanian from 2001 till the year 2010 were collected. The study sample consisted of Jordanian commercial banks amounting (15) banks listed in Amman Stock Exchange. Simple Regression Analysis was used to test independent variable (solvency), and share's market value. The study concluded that the proportion of cash solvency short term has been interpreted to (0.79) of the whole variance of the market value of the stock price, and that the ratio of debt to total equity of financial solvency long-term has been interpreted to (0.60) of the variance total market value of the share price, while the effect of variable Interest Coverage of solvency cover interest and taxes on the market value of the share price is weak, where interpreted to (0.24) of the variance total market value of the stock price, and the study recommended that Jordanian run commercial banks need to take into account the interest rate, because of its impact on benefits.

Abdallah (2012) study investigates the trends of working capital management (aggressive and conservative policies) and its effect on firms' profitability and value. Using annual data for 59 industrial firms listed in Amman Stocks Market for the period of 2003 to 2011, the results show that following conservative investment policy by having high level of short term investment have positive effect on the firm's profitability and value. However, following the aggressive financing policy has a negative impact on the firm's profitability and value. Finally, this study finds that firm Size, firm Growth, and Gross Domestic Production (GDP) Growth has a positive impact on the firm's profitability and value with no effect of financial leverage, but financial leverage have a significant effect on firm value.

Islam (2012) study aimed at revealing the impact of the financial structure of adverse group of Jordanian public shareholding companies listed on Amman Financial Market on profitability represented by earning per share (EPS), and on policies of the distributions of profits represented by Dividends per Share (DPS). In order to achieve the objectives of the study, this researcher used the published financial data of a random sample of (75) companies for the period 2007-2009. The necessary data to conduct the study, namely, the financing structure expressed by debt, the corporate profitability expressed by earning per share. Statistical methods were used to analyze the data, specifically simple regression by using the statistical package SPSS Version 18. In addition, other methods were used such as the

descriptive statistics method (mean, standard deviations, the highest value, lowest value). The study concluded the following results:

There is no statistically significant relationship between the independent variable represented by debt (DR) and the dependent variable represented by earnings per share (EPS). However, the relationship between these two variables (DR and EPS) varies between the different sectors represented in its correlation coefficient (R). They also differ in direction represented by the type (R) positive or negative. The results also showed that the ability of manager of Jordanian public shareholding companies to use debt for generating profits varied as per sector.

Second, the study showed that there is no statistically significant relationship between independent variable (DR) and the dependent variable policies of dividends (DPS). The study shows that the ratio of distributed dividends between the three sectors is varied. The Financial Sector ranked first in the proportion of dividends distributed to its shareholders. This indicates that the manager in the other two sectors (Industrial and Service companies) have failed in using the borrowed money to make profits and thus in their ability to distribute dividends to their shareholders.

Sumayya (2012) study is trying to find out the impact of the financial structure on financial decisions in small and medium enterprises. The research also aims to try to build an empirical model that measures the relationship between various financial decisions and financial structure in small and medium enterprises. To achieve this purpose, a field study was carried out over a sample of small and medium enterprises in Warqia state (in Algeria) through the study of financial structure impact on study sample institutions financial decisions. The study concluded that there is a direct correlation between borrowing and investment decision, while the decision of the distribution loses its meaning in small and medium enterprises.

Akhtar, et al., (2012) study aimed to measure the impact of leverage on corporate financial performance applied on oil and energy companies sector. The study tested a hypothesis that states: companies with high rates of profitability are seeking to increase leverage. The study examined the effect of leverage on rate of return on assets index of, return on equity, the number of times to cover benefits and debt, the ratio of dividends to equity, and net operating profit, and growth in sales, earnings per share. The results showed that financial leverage leads to improve companies financial situation, thereby increasing the chances of growth within the sector in which they operate.

Hashemi and Zadeh, (2012) study aimed to test the effect of financial leverage on dividend policy. The research sample consisted of 74 public joint stock company of the companies listed on Tehran Stock Market in the period between 2003-2010. The study used multiple regression to test the hypotheses. The results show that there is a reversed correlation between financial leverage and dividend policy and therefore, the companies that have high leverage will distribute less profits to shareholders when compared to companies with low leverage.

Subai'i (2012) study examines the relationship between financial leverage and return on assets at the level of each sector of the three economic sectors of the Kuwaiti economy. The study sample consisted of (54) companies from the Kuwaiti public shareholding companies. The study concluded that there is a positive relationship between financial leverage and return on investment for all economy sectors.

Al Nuaimi et al., (2011) study aimed to investigate the impact of funding mix in the market value of insurance companies listed in Jordanian Amman Financial Market. The study sample consisted of insurance companies listed in Amman Stock Market in order to test the effect of leverage on each of common stock return on, return on equity and earnings per share of dividends and company's market value. The study used the simple regression and multi-path analysis to test the relationship between the variables. The study concluded that leverage and return on equity have no statistically significant effect in insurance company's market value of shares in Jordan.

Al Taleb, and Al Shubiri (2011) study examines profitability, growth in investment opportunities, assets size, and liquidity variables. The study linked these variables with debt ratio with study sample. The study sample consisted of (60) industrial company listed in Amman Stock Market. The study results showed that the debt ratio has a positive relationship with growth rate in total assets, while it has an inverse relationship with liquidity and structural assets, in contrast, the study showed that growth in investment opportunities variable has a positive relationship with long-term debt, and that assets size variable has a positive relationship with long-term debt and an inverse relationship with short-term debt, and the study also showed that profitability and liquidity variable has no relationship with change in debt size.

Mahira (2011) study aimed to investigate the effect of firm profitability and its financial leverage on capital structure in automobile sector companies in Pakistan. To achieve the research goals the capital structure of 11 listed firms has been analyzed by adopting an econometric framework over a period of five years. By estimating regression analysis and checking the relationship of estimated model through Correlation Coefficient Test, the study found that the profitability of the firm and its financial leverage have no significant impact on the capital structure of the studied firms during the examined period. In addition, there is no any significant relation between profitability and financial leverage on the capital structure of a firm.

Singhania and Seth, (2010) study aimed to link company's characteristics with financing structure characteristics in an attempt to find a common denominator between company characteristics and financing method. The study sample consisted of 963 companies from companies listed in Bombay Stock Exchange during the period of 2004-2008. Company's financial structure was analyzed and compared with the texts of various finance theories. The study tested a basic hypothesis that states, there is a positive relationship between debt ratio at any time and a set of variables: company size, company's liquidity, company's growth rate, the rate of company's debt coverage rate. The study concluded that there is an inverse relationship between debt ratio on one hand and company growth rate and company's liquidity, and the coverage rate of company's debt on the other hand and there is a positive relationship between debt ratio and company size.

Aasia (2010) study aimed to investigate the extent of leverage and dividend policies effect for a sample of 403 companies listed in Karachi financial market for the period 2002 to 2008. Since leverage in the study is represented by debt ratio. The study showed that financial leverage has an effect in dividend policies. On the other hand, the study showed that financial leverage has a negative effect on dividend distribution.

Stefan (2009) study aimed to find the relationship between the financial structure and monetary policies and their impact on assets value. The study sample consisted of 17 countries for the period 1986-2007. Results showed that financial structure affects monetary policies, which in its turn affect the assets prices of (residential real estate, stocks). The study showed the impact of inflation in those policies and assets prices.

Dana (2008) study aimed to identify external and internal factors that affect stock return in Amman stock market. The study population consisted of all companies in Amman Stock Market. The study sample consists of (60) companies. The study found that there is significant statistical relationship between inflation rate, interest rate, number of employees, and the size of the company capital with stock return, and no significant statistical relationship between balance of payment and stock return, and also no significant statistical relationship between the gross domestic product and stock return.

Data Processing and Hypotheses Formulation

In this part an applied study was carried out on a sample of industrial public shareholding companies in Saudi Arabia, the study included the following:

1. The relationship between financial structure (Liabilities) and stock market price.

2. The relationship between financial leverage (Debt Ratio) and stock market price.
3. The relationship between profitability (ROE) and stock market price.
4. To find the multiple regression models for company's stock price through study data, on the following model:

$$M. Value = B_0 + B_1 Liabilities + B_2 Debt Ratio + B_3 ROE + E$$

A sample was selected from industrial public shareholding companies listed in Saudi financial market to study its financial statements during the period from 2009 until 2012, and these companies are:

FIBCO
National Co. for Glass Industries
Alojain
Saudi Industrial Investment Group
Saudi International Petrochemical Company
Saudi Kayan Petrochemical
Saudi Paper Manufacturing
SABIC

Statistical Analysis and Hypothesis Testing

First, Descriptive Statistical Measures

Through reviewing descriptive statistical measures of study variables the following can be noticed:

1. The mean

The mean of dependent variable (the company value) of the sample companies are shown in the following Table.

Table No. 1: Stock Market Value of Sample Companies

Stock Market Value						
Company's Name	Fiscal Year	2009	2010	2011	2012	Mean
FIBCO		39.5	25.9	24.12	44.5	33.505
National Co. for Glass Industries		41	36.5	33.8	25.5	34.2
Alojain		26	22.25	17.3	14.45	20
Saudi Industrial Investment Group		21.75	19.9	22.9	22	21.6375
Saudi International Petrochemical Co.		22.55	26	19.8	19.25	21.9
Saudi Kayan Petrochemical Co.		19.05	18.25	18.95	12.25	17.125
Saudi Paper Manufacturing		43.8	38.3	37.5	30.2	37.45
SABIC		82.5	106	97.5	90.75	94.1875

Table No. 2: Capital Structure Mean of Sample Companies

Capital Structure						
Company's Name	Fiscal Year	2009	2010	2011	2012	Mean
FIBCO		183957	174306	164395	145693	167087.75
National Co. for Glass Industries		564335	576863	537132	471513	537460.75
Alojain		2317215	2330912	2676805	2538558	2465872.5
Saudi Industrial Investment Group		20647381	20710800	18774406	16573812	19176599.75
Saudi International Petrochemical Co.		13800335	13347297	11170036	10915100	12308192
Saudi Kayan Petrochemical Co.		43091868	44312295	41060220	34652383	40779191.5
Saudi Paper Manufacturing		1015624	837562	775832	653130	820537
SABIC		239654604	238530631	227910671	218637125	231183257.8

Table No. 3: Financial Leverage Mean of Sample Companies

Financial Leverage						
Company's Name	Fiscal Year	2009	2010	2011	2012	Years Mean
FIBCO		0.24	0.22	0.25	0.25	0.24
National Co. for Glass Industries		0.11	0.1	0.09	0.08	0.095
Alojain		0.85	0.84	0.83	0.82	0.835
Saudi Industrial Investment Group		0.72	0.76	0.77	0.77	0.755
Saudi International Petrochemical Co.		0.51	0.5	0.52	0.53	0.515
Saudi Kayan Petrochemical Co.		0.57	0.64	0.67	0.69	0.6425
Saudi Paper Manufacturing		0.63	0.61	0.62	0.62	0.62
SABIC		0.64	0.62	0.59	0.56	0.6025

Table No. 4: Return on Equity Mean of Sample Companies

ROE						
Company's Name	Fiscal Year	2009	2010	2011	2012	Years Mean
FIBCO		0.16	0.15	0.1	0.16	0.1425
National Co. for Glass Industries		0.1	0.14	0.14	0.08	0.115
Alojain		-0.05	0.08	-0.02	0.08	0.0225
Saudi Industrial Investment Group		0.06	0.07	0.09	0.09	0.0775
Saudi International Petrochemical Co.		0.02	0.06	0.1	0.08	0.065
Saudi Kayan Petrochemical Co.		-0.01	-0.01	-0.02	-0.05	-0.0225
Saudi Paper Manufacturing		0.18	0.21	0.15	0.15	0.1725
SABIC		0.08	0.18	0.21	0.17	0.16

Pearson Correlation Coefficient

Through reviewing the following table, which shows the correlation between study variables the following is indicated:

Table No. 5: Correlations

		M.V.	F.L.	C.S.	ROE
Pearson Correlation	ROE	0.643	-0.408	0.276	1
Sig. (2-tailed)		0.008	0.315	0.509	–
N		8	8	8	8
Pearson Correlation	C.S	0.900(**)	0.169	1	0.276
Sig. (2-tailed)		0.002	0.689	–	0.509
N		8	8	8	8
Pearson Correlation	F.L	-0.093	1	0.169	-0.408
Sig. (2-tailed)		0.827	–	0.689	0.315
N		8	8	8	8
Pearson Correlation	M.V	1	-0.093	0.900(**)	0.643
Sig. (2-tailed)		–	0.827	0.002	0.085
N		8	8	8	8

** Correlation is significant at the 0.01 level (2-tailed).

- Some independent variables are directly correlated with the dependent variable (the share price), the highest correlation was between capital structure and company’s share’s value, amounting (90%), while the correlation was inversely with leverage amounting (9%). It is noted that the correlation is statistically significant in return on equity and capital structure while it is not considered statistically significant with respect to leverage variable.
- There is a weak correlation between the independent variables.

Multiple Regression Analysis

By using multiple regression method, to determine the impact of independent variables on dependent variable, the general model was as follows:

$$M. Value = 15.643 + 0.802 L - 0.067 Debt Ratio + 0.395 ROE$$

- BO = (15.643) This figure means that the impact of other variables other than the study variables lead to increased share price with an average of 15.643 Riyals.
- B1 = (0.802), this figure means that if the capital structure is increased by one unit, this will lead to increase of company’s value by (0.802) units, with the condition that all other variables in the model are constant, and that the relationship between this structure and company value is a direct correlation.

This enhances the first alternative hypothesis that there is an impact of financial structure on company’s value.

- B2 = (0.216) This figure means that an increase in debt ratio (financial leverage) by one unit, will lead to increase in company's value by (0.216) unit and all other variables in the model are constant, and this also indicates that there is a positive relationship between financial leverage and company value, which enhances the first alternative hypothesis that there is an impact of financial leverage on company value.
- B3 = (0.395) This figure means that an increase in return on equity rate by one unit, will lead to increase in company's value by (1.973) unit, with all other variables in the model being constant, this indicates that there is a direct correlation between return on equity and company's value, as companies with high profitability transmit a signal to investors that the operating, investment and financing management is good, which leads to increase in their share's value in the financial market, and thus increase the company's value.

Model Parameters Test

To test model parameters, T- test was used; the results were as shown in the following Table No. 6.

Table No. 6: Test Results of Model Parameters

Variable Name	T test	Sig. Level
Constant	2.664	0.05
Financial structure	10.829	0.000
Leverage	-0.862	0.437
ROE	4.935	0.008

The table above indicates that the independent variables represented by return on equity and capital structure are significant with a confidence level more than (95%), and the model cannot be adopted without it, while the independent variable represented by leverage is not significant at a confidence level of 95%, which indicates the use of the model without it. Therefore, the model can be used as follows:

$$M. Value = 15.643 + 0.802 L + 0.395 ROE$$

Simple Regression

To test the hypotheses that have been formulated before, and to determine the effect of the independent variables on the dependent variable (the company value), simple regression has been used, the following table show the results:

Table No. 7: Descriptive Statistical Measures for Study Variables

Variable's Name	B0	B	T	F	R ²	Sig.
Financial Structure	24.039	0.900	5.046	25.462	0.809	0.002
Financial Leverage	39.990	-0.093	0.229	0.52	0.009	0.827
ROE	13.499	0.463	2.058	4.235	0.414	0.008

First Hypothesis Test

Table 7 shows a positive relationship between capital structure and company's share's value, since R² value is (0.809), and this means that (81%) of the variation in the dependent variable (company's share's value), can be explained by the change in the capital structure. Since (Sig.) = (0.002) which is less than (0.05), the null hypothesis is rejected and the alternative is accepted, this means that

capital structure has an impact on company's shares value, therefore the relationship between financial structure and company value can be written as follows:

$$M. Value = 24.039 + 0.90 Liabilities.$$

So the increase by one unit will increase the company's value by 0.90 units

Second hypothesis Test

Table No. 7 shows an inverse relationship between leverage and company's share value, since R² value is (0.009), and this means that (0.9%) of the variation in the dependent variable (company's value), can be explained by the change in the leverage (debt ratio).

Since (Sig.) = (0.827) which is more than (0.05), the null hypothesis is accepted, this means that

Third hypothesis Test

Table No. 7 shows a positive relationship between return on equity and company's value, since R² value is (0.414), and this means that (41.4%) of the variation in the dependent variable (company's value), can be explained by the change in return on equity. Since (Sig.) = (0.008) which is less than (0.05), the null hypothesis is rejected and the alternative hypothesis is accepted, this means that return on equity has an impact on company's value, therefore, the relationship between return on equity and company's value can be written as follows:

$$M. Value = 13.499 + 0.463 ROE$$

So the increase of return on equity by one unit will increase the company's share value by 0.463 units.

Summary of Results

The study concluded a number of results represented in:

1. There is a statistically significant direct relationship between two independent variables: the return on equity and capital structure and the dependent variable represented by market stock price. However, there is a weak and inverse relation between leverage and stock value, and this relationship is not significant, so there is no statistically significant relationship between financial leverage and company's value.
2. There is a positive relationship between capital structure and return on equity upon multiple regression analysis, it was shown that the strongest relationship was between capital structure and dependent variable (company's stock value).
3. There is a clear impact of financial structure and return on equity on company's value through investigating these variables the financial analyst can predict company's future value.

Recommendations

Through the results that have been previously reviewed the following can be recommended.

1. Company's management have to pay attention to financing aspects represented by differentiation between different financing sources, and in particular investment debt funds in are turn exceeds capital cost, which leads to increased and improved profitability, which have a positive impact in increasing the value of company.
2. Company's management should pay attention to profitability and dividend because of their positive impact in increasing and improving company value, thus increasing shareholder's wealth.
3. Company's management should be aware of the positive impact of financial structure and profitability on company's value, taking into account the conditions of external environment as an important factor in the analysis of their strategies.

4. Shareholders and investors can through study and analysis of the financial structure as an indicator of operational and investment strategy to predict company's future value as an analysis and strategic long-term.

References

- Aasia A., Waqas R. & Yasir K. (2011). Impact of financial leverage on dividend policy. Empirical evidence from Karachi Stock Exchange-listed companies. *African Journal of Business Management*, 5(4), 1312-1324.
- Abdallah, B. (2012). Trends in working capital management and its impacts on firm's profitability and value. *Journal of Studies and Business Research*, 2, 59-68.
- Ahmed, I.F. (1994). Financial structure and financial leverage and its impact on uses of funds, risk, profitability and cost-weighted capital, unpublished study presented to Arab Institute for Banking and Financial Studies, Amman.
- Akhtar, S., Javed, B., Maryam, A., & Sadia, H. (2012). Relationship between financial leverage and financial performance: Evidence from fuel & energy sector of Pakistan. *European Journal of Business and Management*, 4(11), 7-17.
- Akintoye A., & Taylor, C. (1998). Risk analysis and management of private finance initiative projects. *Engineering Construction and Architectural Management Journal*, 5(1), 9-21.
- Al Nuaimi, M.A., & Moh'd, A. (2011). Impact funding mix in the market value of Jordanian insurance companies listed in Amman Financial Market. *Journal of Accounting Thought*, 15(2), 283-301.
- Al-Sheikh, Fahmi (2008), Financial Analysis, 1st Edition. Ramallah, Palestive.
- Al Taleb, G. & Al Shubiri, F. (2011). Capital structure decision and debt maturity structure: An empirical evidence from Jordan. *Journal of Commerce*, 3(4), 49-60.
- Ali, Y.I. (2010). Leverage and operational analysis and its impact on evaluation of companies financial performance: Applied study on a sample of Saudi Arabia Petrochemical Industries companies. *Journal of Commercial Studies*, 34(2), 41-83.
- Alroud, S.F. (2013). Impact of solvency of financial on market value of the share price in the Jordanian commercial banks. (9th International Scientific Conference proceeding of Arab economic situation and future options) 24-25 April 2013, Zarqa University, Jordan.
- Anandhi, B.S., Sunder, G., & Benn, R.K. (1999). Information technology effects on performance as performance as measured by Tobin's q., *Management Science Journal*, 45(7), 1008-1024.
- Dana, B.Y. (2008), Determining the factors that effect on stock return in Amman stock market (master thesis), Middle East University, Jordan.
- Deiranieh, R. (1992). Determinants of financial structure in Jordanian industrial companies (master thesis), University of Jordan, Jordan.
- Harris, M., & Raviv, A. (1988). Corporate control contests and capital structure. *Journal of Financial Economics*, 21(1), 55-86.
- Hashemi, S.A., & Zadeh, F.K. (2012). The impact of financial leverage operating cash flow and size of company on the dividend policy (case study of Iran). *Interdisciplinary Journal of Contemporary Research in Business*, 3(10), 264-270.
- Hawari, S. (1996). Financial management - decision-making approach, Cairo: Ain Shams Library.
- Islam, F.A. (2012). The impact of the financial structure of Jordanian public shareholding companies on its profitability and dividends policies: An empirical study, (master thesis), Middle East University, Jordan.
- Jameel, H.A. (2013). The effect of financial leverage on the performance of firms listed at Palestinian security exchange: An empirical study, *Alazhar University Journal*, 15(1), 281-318.
- Jensen, M.C. (1986). Agency cost of free cash flow, corporate finance and takeovers. *American Economic Review*, 76(2), 323-339.
- Mahira, R. (2011). Effect of profitability & financial leverage on capital structure: A case of Pakistan's automobile industry. *Economics and Financial Review*, 1(4), 50-58.
- 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.
- Mohammed, S. (2010). Towards optimal financing structure selection for economic institution: A case study industrial complex during the period of 2004-2007, Algeria. *Journal of Human Sciences*, 46, 59-69.

- Nibal, Q. (2010). Causes of the global financial crisis and proposed solutions, Amman: University of Jerash, Jordan, research presented to the conference on contemporary economic crises, causes, consequences and treatment.
- Palepu, K.G., Paul M.H., and Victor, L.B. (2003). Business analysis and valuation using financial statements: Text and cases (3rd ed.). Mason, OH: Thomson South-Western.
- Shlash, S. (2008). The determinants of financial structure in business companies, Applied case in Jordanian public shareholding companies listed in Amman financial market. *Manara Journal*, 14(1), 45-81.
- Singhania, M., Seth, A. (2010). Financial leverage and investment opportunities in India: An empirical study. *International Research Journal of Finance and Economics*, 40(June), 215-226.
- Stefan, G., & Assenmacher-Wesche, K. (2008). Financial structure and the impact of monetary policy on property prices. IMFS Working Paper Series 16, Institute for Monetary and Financial Stability (IMFS), Goethe University, Frankfurt.
- Stulz, R.M. (1988). Managerial control of voting rights: Financing policies and the market for corporate control. *Journal of Financial Economics*, 20(1-2), 25-54.
- Subai'I, B.M. (2012). The relationship between financial leverage and return on investment in Kuwaiti public shareholding companies, (master thesis), Middle East University – Amman – Jordan.
- Sumayya, L. (2012). The impact of financial structure on financial decision for small and middle firms (master thesis), Warqla University – Algeria.
- Yahyaoui, M. (2002). Determination of optimal financial structure for Algerian public economic institutions. University of Mohammed Khudair Biskra. *Journal of Human Sciences*, 3, 90-91.