

Effect of Profitability on the Stock Price of Luxury Goods Retail Companies in the Retailing Industry from Stock Market in Saudi Arabia

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Abstract

The purpose of this study is to analyze profitability by using the return on assets, return on equity and a net profit margin and know their effect on the stock price in order to know the relationship between profitability and the stock price. This study uses secondary data. The sample used are six luxury goods retailers companies in the retail industry from Stock Market in Saudi Arabia for the period from 2015 to 2019. Samples in this study were taken using purposive sampling technique. The data was collected from the index of the stock market in KSA (The Tadawul All Share Index "TASI"). Independent variables in this study are the return on assets (ROA), the return on equity (ROE) and the net profit margin (NPM). The dependent variable is the stock price (SP). Multiple linear regression analysis was used to test hypotheses in this study. EViews program was used to calculate the multiple linear regression. It has been confirmed that the data is suitable for conducting a multiple linear regression analysis, and this was done by test the unit root by using ADF and PP techniques on the time series of this study, and examining multicollinearity test, heteroscedasticity test and normality test. The results of the multiple linear regression analysis showed that the (ROA) partially has a significant positive effect on the stock price, and that the (ROE) partially has a positive but not significant

effect on the stock price, and that the (NPM) partially has a significant negative effect on the stock price, and that the three profitability variables combined have a significant positive effect at the same time on the stock price. The study recommends relying on profitability when evaluating the stock price, because the results of this study as well as the results of similar studies showed that the profitability have a significant effect on the stock price.

Keywords: Financial Analysis, Financial Ratios, Stock Price, Profitability, ROA, ROE, NPM.

1. Introduction

1.1. Background of the Study

Saudi Arabia is a rich country at the level of Arab countries, and its economy is growing rapidly among the countries of the world. This sustainable economic growth made the level of income for individuals high, and this led to an increase in spending on luxury services and products such as cars, hotels, perfumes, watches, etc. Saudi Arabia is investing in economic diversification and has made the retail industry a major path for growth, and it is supporting this industry by encouraging retail investments. Saudi Arabia has appeared as a country with the luxury products industry as one of the largest industries among the Arab Gulf states, due to changing economic trends, accelerating digital transformation and change and the evolution of consumer tastes. Young people in Saudi Arabia have one of the highest income rates in the world, and this has led to an increase in the demand for luxury products in the country (Sheridan, 2021). The Kingdom is investing in economic diversification and has established retail as a key growth channel. This promotes the growth of the retail sector by promoting public spending in retail infrastructure projects. The luxury products industry in Saudi Arabia is considered one of the growing industries, as its size in 2020 amounted to approximately 15.7 billion US dollars, and there are expectations to increase its size by 7% annually between 2021

and 2026 to reach approximately 23.6 billion US dollars (Expert Market Research, 2021).

The capital markets and the securities industry is one of the important indicators to know the progress of the economic process of a country, and this is because the companies listed in the stock market are large companies and have value in the state, so when the performance of the capital market declines, this leads to a decline in the real performance of the sector (Sutrisno, 2001). According to Tease (1993), he found that the stock market has an important role in the state's economy and in the allocation of resources, because it acts as a source of funds and has the ability to determine the value of companies and their ability to lend and borrow, and it also acts as an intermediary between money owners and companies wishing to obtain financing to expand their production lines and businesses, it is also a platform for trading and investment through the purchase of shares and bonds between governments, companies, organizations and individuals, so the stock market is one of the most important activities that lead to achieving sustainable economic growth because it helps in the investment and productivity process in the country. There are two functions performed by the capital market, the first function: capital market is a means to financing companies through investors in order to develop their business and meet their financial needs, and the second function: capital market is a means for individuals to invest in securities such as bonds and stocks (Wartoyo and Nurhayati, 2018). According to Shower and Al Ajlouni (2018), it can be said that the performance of the stock market is one of the important points for the market value and performance of companies, because the performance of companies is reflected in response to stock market changes, as well as the presence of other external factors that affect the industry and the economy. Cherif and Gazdar (2010) considered that the main function of the stock market is to create an exchange for the buyers and sellers to benefit from in order to exchange and trade shares, bonds and securities. The stock market is an attractive investment destination for investors

looking for returns and profits, and investors get high or low returns according to the risks that the investor agrees to bear, so investors and financial institutions must have a research department to analyze and evaluate stocks and know their appropriate prices. (Hashim and Shahrumszaki, 2020).

Tadawul (The Saudi Stock Exchange) is the only stock exchange in Saudi Arabia. Joint stock companies started in Saudi Arabia in the 1930s, when the first joint stock company was the Arab Automobile Company. The emergence of the Saudi Stock Exchange was in the late seventies, as the number of joint stock companies in the country increased as a result of the nationalization of foreign companies. In 1975 the number of companies became approximately 14 public companies, and the market remained informal until the Saudi government established the National Stock Exchange in the early eighties. A Ministerial Committee was formed in 1984 with the aim of regulating and developing the market. This committee is composed of: Saudi Arabian Monetary Agency (SAMA), Ministry of Finance and National Economy and Ministry of Commerce. In the beginning, the governmental body responsible for monitoring and regulating market activities was the Saudi Arabian Monetary Agency (SAMA), until July 2003, the Capital Market Authority (CMA) was established. (CMA) is the only regulating and supervising body of the capital market, it issues the necessary regulations and rules that protect investors and ensure efficiency and justice in market. On March 19, 2007, the Council of Ministers approved the establishment of the Saudi Stock Exchange (Tadawul) as a joint stock company, consisting of 21 sectors, each sector containing companies with joint businesses operating under one industry (Asiri and Alzeera, 2013).

Investors and creditors use a company's financial report because it is the main source of information for making an investment decision. The analysis of financial ratios of the company's financial report is used to read and understand its past performance for expect future performance. Ratio analysis is also useful in knowing the company's financial position such as liquidity and funding sources. This means that

the analysis of financial ratios affects the stock prices on the stock exchange, and this is illustrated by the resulting change in supply and demand. Kusumawati (2016) focused on the financial performance of companies, as a company interested in profit from selling shares must show excellent performance that helps it attract investors to buy its shares and attract capital, which is reflected in the financial statements, this makes it valuable and increases its valuation in the capital market. There are many companies that have great achievements shown in their financial statements such as earnings per share, market share and asset growth, but some companies are ignoring their main goal of Creating added value for stockholders (Brigham and Houston, 2018). Financial performance can be defined as the use of accounting information from the company's financial statements for the purpose of analyzing them in order to make useful financial decisions.

The stock price is the present value of the income that the shareholders will take in in the future. The market price is the current price of a stock in a market, which is the easiest price to determine. The closing price is the market price at the closing of the exchange, meaning it is the price that the seller and the buyer agreed upon at the end of the exchange day. Hutami (2012) classifies stocks in terms of valuation into three classes:

1. Book Value: It is the value calculated on the accounting basis and prepared by the accounting department in the company issuing the shares. It is the remaining value of the assets after deducting the company's liability.
2. Market Value: It is the price that is formed according to supply and demand in the capital market (secondary market), and this price reflects the value of the company, which is reflected in the stock price at the stock market, and this market value is not affected by loans or issuers.
3. Intrinsic Value: It is the value that determines the fair price of the share, so that this price reflects the real value of the share. The term (overvalued) indicates that the market value of the stock is greater than the intrinsic value, this means that

the stock price is overvalued, and in this case: selling the stock is the best. The term (undervalued) indicates that the market value of the stock is less than the intrinsic value, this means that the stock price is undervalued, and in this case: buying the stock is the best.

The stock price is important to the company, because it reflects the value of the company to the investors, for example, when the stock price is high, the value of the company will rise to the investors. Theoretical variations are affected by the law of demand and supply as well as affected by the company's financial performance. It can be said that the stock price in the market is the expectations of investors, so it is considered an indicator of the investment value of the company. When the company's financial performance increases, the stock price will rise indirectly, because investors in the stock exchange will assume that the company's value increases due to good performance, which leads to compensation for investors as well as dividends, also, the opposite could happen if the company's financial performance declined, which would lead to a drop in the share price in the stock exchange (Purnomo, 2008).

There are many variables that can affect the company's stock price, and these variables may be related to the company's internal environment or come from the external environment (Suad, 2008). Considering internal factors such as condition of financial company, prospects of return, inflation rate, marketing strategy, amount of profit, level of risk, and deposit interest rate, all of these can be affect on the stock price (Brigham and Houstorn, 2018). Also, given the external factors surrounding the company's environment, the stock price can be affected by factors such as economic, psychological, trade, political, and others (Sutrisno, 2012).

According to Besley and Brigham (2007), the justification for the continuity and existence of any company is profit, which is considered one of the important indicators for evaluating the company's financial performance, and most theories in

financial management agree that the main goal of companies that the company's management should seek is to maximize the owners' wealth by maximizing the company's value in stock market. The establishment of the company must have clear objectives to seek profit by obtaining maximum profit so that the continuity of the company can be maintained. The purpose of looking for profit requires each company to be able to carry out certain strategies and certain policies so that they remain competitive and keep abreast of the increasingly rapid times. In addition, profit by obtaining maximum profit is done to achieve the company's goals both in the long and short term. It can be said that there are three main goals and purposes for establishing companies, the first purpose is in order to achieve the maximum possible profit, the second purpose is for the prosperity of shareholders and owners, and the third purpose is to maximize the market value of the company and its stocks. These three goals are actually not substantially different, only achieving the goals that each company wants to achieve is different (Alfiyah and Lubis, 2021). The primary financial objective of companies is to increase the welfare of their investors. When the company's stock prices are high, this is reflected in the exchange of profits and capital, as the stock price is directly proportional to its profits. According to Kusumawati (2016) companies wishing to get profit from the sale of stocks must first show excellent financial performance in order to attract as much investment as possible in the market. This attractive ability is considered one of the important aspects in evaluating the company, and this ability is shown through the financial statements. Most of the companies listed on the stock exchange have high achievements to achieve their financial goals, but there are some companies that do not pay attention to the goal of maximizing the wealth of owners, which is the main goal of financial management in companies to attract capital and investors. The company's financial result is one of the most important evaluation criteria that helps to attract many parties in the business environment, such as the authorities, competitors and investors. In order for the financial statements to be attractive to

investors, they must be analyzed from all sides in order to ensure the company's financial ability and efficiency, so the main purpose of the company's financial analysis is to determine the company's position by obtaining financial values for investment decisions. Investors review company's annual financial accounts and reports to evaluate the historical and current financial performance of a company to project the future financial performance of a company. According to Rafiq et al. (2013), the goal of investors is to earn certain returns by owning shares, so they anticipate and calculate the returns they want to achieve before buying stocks. When the results are less than expected, these results will influence their investment decisions. Analysts and financial managers are important parties in analyzing and evaluating the share price in the market and help in making investment decisions by investors. Market investors need to know the most important factors affecting the stock price and its movements.

Profitability is one of the most important aspects of businesses' survival. The purpose of profitability is to measure the effectiveness of management in the company, and to know the amount of profits that have been achieved through investment and sale. The company's profits rise as its profitability increases, as well as the stock price and investor returns. Investors are looking for companies that have high profitability, and they are interested in profitability analysis to know the company's ability to take profits in order to make their investment decisions, which is to obtain returns from their stocks and increase the stock price in the stock market (Nadyayani and Suarjaya, 2021). Profitability ratio is a central measure to the performance of a company. Through information from the profitability ratio, the company's consolidated financial information users can view the company's ability to generate profits. Investor also can use the information about profitability ratio to predict the stock price, because the level of the company's ability to generate earnings will affect the company's stock price increase. If condition of company are favorable or promising to gain profits in the future, many investors will be attracted to invest their

funds to buy the shares. A growing number of investors who buy the shares, of course, will drive up the stock price to be higher. Investors should examine and analyze different types of investment that can be chosen since there are many types of investments. Profitability ratios which are one of the fundamental analysis tools of financial ratios indicate the company's ability to generate profits and it is one of the ways to determine the performance of the company (Razdar and Ansari, 2013). According to Keef and Roush (2001), measures that reflect the capital and profitability are the best measures of financial performance. There are three common ratios for measuring profitability: return on assets, return on equity, and net profit margin.

- Return on Assets (ROA): According to Kasmir (2017) that (ROA) is the ratio that calculates the return generated by using the company's assets. The (ROA) is useful for determining the level of effectiveness of operations in the company as a whole. The rise in this ratio gives a good indication of the company's position because it reflects the company's ability to effectively use its assets in order to generate profits. The low percentage also indicates a weak profit generation using the assets.
- Return on Equity (ROE): According to Kasmir (2017) that (ROE) is the ratio that calculates net income after tax using own capital. The rise in this ratio gives a good indication of the company's position, because it shows the efficiency of the company's use of own capital and its ability to increase profits.
- Net Profit Margin (NPM): According to Kasmir (2017) that (NPM) is the ratio that calculates profit by comparing sales with earnings after interest and taxes. The rise in this ratio gives a good indication of the company's position, because it reflects the company's ability to generate a large net income using its sales, and this increases investors' demand for the company's stocks, which leads to an increase in its prices.

1.2. Objective of the Study

The objective of this study is to explore the effect of profitability on the stock price of retailing of luxury goods Industry from stock market in Saudi Arabia, and investigate the impact of return on assets, return on equity and net profit margin on the stock prices in this industry.

1.3. Study Problem and Questions

Based on the above background and objective of the study, the research questions in this study are as follows:

Does return on asset (ROA) affect the stock price of retail luxury goods companies in the Retailing Industry from stock market in Saudi Arabia?

Does return on equity (ROE) affect the stock price of retail luxury goods companies in the Retailing Industry from stock market in Saudi Arabia?

Does net profit margin (NPM) affect the stock price of retail luxury goods companies in the Retailing Industry from stock market in Saudi Arabia?

Does profitability (ROA, ROE & NPM) affect the stock price of retail luxury goods companies in the Retailing Industry from stock market in Saudi Arabia?

1.4. The Scope of the Study

A regression model is used to describe the relationship between the variables in this study. The dependent variable here is the stock price, and the independent variables are: Return on assets, Return on Equity and Net Profit Margin. The period from 2015 to 2019. Retail Industry in Saudi Arabia consists of 8 companies. In this research, 6 companies were sampled from the industry: United Electronics Company (EXTRA), Saudi Automotive Services Co (SASCO), Jarir Marketing Co, AlHokair Company, Saudi Company for Hardware (Saco) and Al Hassan Shaker Co. Two companies were excluded from Retail Industry: Abo Moati Co and Baazeem Trading Co, due

to the lack of complete data required for the study period. Data is used from the index of the stock market in KSA (The Tadawul All Share Index "TASI").

1.5. Importance and Benefit of the Study

- Importance of study: The importance of this study appears when looking at the importance of analyzing the profitability ratio and stock prices and matching with the great and accelerating development in retail luxury goods companies, and this increase in growth leads to expansion in this industry and the emergence of investors willing to invest in retail companies, so investors will need to collect applicable studies in this industry and review them in order to make their investment decisions, therefore it is interesting to conduct this study, which it considered the first of its kind for this industry in Saudi Arabia. The variables of this study are important in evaluating the performance of companies in the stock market. Return on assets is the ratio that shows how efficiently a company is using its owned and borrowed assets to generate returns and generate profits. The return on equity ratio is important and useful for investors because it shows how efficient the company is in using and managing its own money perfectly to achieve a high net income. The net profit margin is the ratio that shows the company's ability to collect returns through its sales, this ratio is important for investors to assess the company's operating activity and to know the strength of the sales side in achieving profits.

- Benefit of study: This study can provide useful information for managers, financial analysts, investors, decision makers and others, in order to know the extent of the impact of these factors on the stock prices of this industry, as well as to know the degree of impact of profitability and whether it is considered the main reason or there are more important factors than them In determining the share price of sector companies, such as economic conditions and rumors, for example, especially with some conflicting results from previous studies. This research is also among the studies that conducted a market study for the period preceding the spread of the

Corona virus, as it studied the effect of profitability on the stock price in the normal case away from the negative effect resulting from the virus, so this study will be useful and will support the decisions of stakeholders when viewing it.

1.6. Review of Literature

- Murniati's (2016) study discusses the relationship between independent variables: return on assets (ROA), return on equity (ROE), net profit margin (NPM), debt to Assets ratio (DAR), debt to equity ratio (DER) and size the company with the dependent variable: stock price (SP), for 11 companies in the food and beverage industry listed on the Indonesia Stock Exchange during the period from 2011 to 2014. This study uses the associative approach (causal relationship) with purposive sampling (non-random samples), using multiple regression analysis. The results of this study show that (ROA) has the greatest effect on (SP) and it is a positive effect on the stock price, and that (ROE) and (NPM) have a positive effect on (SP). This study is useful in showing the difference in the effect of profitability variables on stock prices, and that each variable can have a different effect from the other.

- Wartoyo and Nurhayati (2018) conduct a study on the effect of net profit margin (NPM), return on assets (ROA) and return on equity (ROE) on share price (SP), for industrial sector companies (31 companies) listed on the Indonesia Stock Exchange in 2016. This study uses the descriptive method and multiple linear regression analysis technique. The results of this study show that (NPM) and (ROA) have no effect on (SP) individually, and that (ROE) has a positive effect on the stock price, and the results show that (NPM), (ROA) and (ROE) effect on (SP) at the same time. This study helps to know the financial performance more clearly because it analyzes the effect of each independent variable alone on the dependent variable, as well as the effect of all the independent variables together on the dependent variable.

- Objective of the study by Islahuzzaman et al. (2021) is to determine the effect of the variables: Return on Assets (ROA), Return on Equity (ROE) and Net Profit

Margin (NPM) on the share price of 15 agricultural companies listed on the Indonesia Stock Exchange during the period from 2015 to 2019. This study employs multiple linear regression models using time series data analysis. The results of this study show that (ROA) has a positive significant effect on the stock price, which gives investors the knowledge of how to use corporate assets to make a profit, and that (ROE) has little effect on the stock price, and that (NPM) has little effect on (SP) meaning The company's net income does not reflect the fluctuations in the share price, and that the three independent variables at the same time greatly positive affect the share prices, meaning that the high value of the three combined ratios attract investors due to the increase in the profitability index.

- Sunaryo's study (2020) discusses the effect of net profit margin (NPM), return on assets (ROA) and return on equity (ROE) on stock prices of 9 metal companies listed on the Southeast Asian Stock Exchange (Indonesia, Malaysia, Thailand, Filipina and Singapore) during the period from 2012 to 2018 using hypothesis test, F test and t test. The results of this study show that (NPM), (ROA) and (ROE) do not have a significant effect on (SP). This study gives an idea about the metal industry and that the effect of profitability ratios is small on the stock prices of this industry.

- Pradhan (2017) has conducted a study about the effect of Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin (NPM), Earnings per Share (EPS) and Dividends (DPS) on the dependent variable share price (SP) of 13 banks business in Nepal from 2007 to 2014 using linear regression analysis. The results show that (ROA), (EPS) and (DPS) have a positive effect on the share prices of banks in Nepal, that (ROE) has less positive effect, and (NPM) has Negative effect on prices (SP).

- Objective of the study of Razaqat et al. (2021) is to determine the effect of the variables: return on equity, net profit margin, return on assets, debt equity ratio, firm size, earnings per share, current ratio, operating cash flow ratio, and asset turnover ratio on the stock price (SP) of 18 technology companies listed on NASDAQ from

2015 to 2019. The study uses multiple regression analysis, multicollinearity, ANOVA, normality, heteroscedasticity, autocorrelation test, Pearson correlation. The results of this study show that return on assets (ROA), earnings per share and company size have a positive significant effect on (SP), and that debt equity ratio, net profit margin (NPM) and return on equity (ROE) have a negative insignificant effect on (SP), and that the current ratio and the asset turnover ratio have a negative significant effect on (SP), and that the independent variables collectively have a positive significant effect on the share price of the companies.

- Objective of the study by Bayrakdaroglu et al. (2017) is to determine the effect of the variables: return on assets (ROA), return on equity (ROE), net profit margin (NPM), gross profit margin (GPM) and operating profit margin (OPM) on the stock price of 87 diversified companies that are traded at ISE-100 in Turkey during the period from 2012 to 2017 using regression analysis. The results of this study show that only the variable (NPM) explains the changes in (SP) and has a positive effect, and the other variables have no effect on (SP) of the companies of this study.

- Alaagam's (2019) study discusses the impact of net profit margin (NPM), return on assets (ROA) and return on equity (ROE) on stock prices of 11 banks listed on the Saudi Stock Exchange (Tadawul) during the period from 2011 to 2018 using panel data analysis and Autoregressive Distributed Lag (ARDL) model. The results of this study show that there is a positive significant association between (ROA) and stock prices in the short term, and the results also show that there is no relationship between profitability and stock prices in the long term.

2. Methodology and Data

2.1. The Model

The multiple regression analysis formula used in this research is:

$$\text{Stock Price} = \beta_0 + \beta_1 \text{ROA} + \beta_2 \text{ROE} + \beta_3 \text{NPM} + e$$

Where: - (ROA) return on asset = net income ÷ total assets

- (ROE) return on equity = net income ÷ equity

- (NPM) net profit margin = net income ÷ sales

- β_0 = constant of model

- $\beta_{1,2,3}$ = parameters of model (Regression Coefficients)

- e = random error

2.2. Variables

A variable is a quantity (a number or a letter) that can take various and different values that change over time. Variables can be divided into two basic types: independent variables and dependent variables. This division is based on the ability of the variable to influence without the intervention of another variable. The independent variables are considered variables that have no dependence on other variables, and they depend on the researcher who is doing the study, they are also called the expectation variables, and they determine the value of the dependent variable. The dependent variables are considered variables that depend in their change on the independent variables, meaning that their values will not change until the value of one of the independent variables is changed, and the direction of change is determined by a function that gives the relationship between the independent variables and the dependent variable. Independent and dependent variables can be distinguished by knowing the main differences:

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- In the definitions: The dependent variable is a variable that follows and is affected by another variable, while the independent variable is a variable that does not follow any other variable and depends on the researcher who is doing the experiment.
 - In the nomenclature: The dependent variables are called the expected variables, meaning they are the variables that are expected by the independent variables, while the independent variables are called the predictors, meaning they are the variables that predict the changes of the dependent variables.
 - In dependence: The dependent variables depend on independent variables, while the independent variables depend on several external influencing factors, the most important of which is the researcher, and the dependent variables depend on external factors indirectly because of their dependence on the independent variables.
 - In uses: The dependent variables are used to know the results of the experiment directly, while the independent variables are used to know the values of the dependent variables. It can be considered that the independent variables have an indirect effect on the outcome of the experiment.
 - In the advantages: The researcher can control the independent variables and obtain them simply and easily by using some simple and uncomplicated techniques and techniques that do not need mathematical equations such as the dependent variables, while no one can control the dependent variables and manipulate them from the researcher, as they are considered far from any forms of bias.

2.3. Dependent Variable

- Stock Price is one of the important indicators of the successful management of companies. After the rise in the stock price of a company, those wishing to invest will consider that the company has succeeded in managing its business. It can be said that the stock price is the closing price in the stock exchange during the observation period for the stocks that investors notice and monitor their movements

always. Investors' trust is very beneficial for the issuer, as the more trust there are in the company issuing stocks, the more investors want to own and buy the stocks of this company. The higher the demand for the issuer's stocks, the higher the stock price with it. If the company managed to maintain the high price of its stocks, this would lead to an increase in the trust of investors and those willing to buy, which would lead to an increase in the company's value (Sunaryo, 2020). According to Hidayat et al. (2021), the price of existing stocks in the market reflects the performance of companies, and the increase in the stock price indicates an improvement in the company's performance. It is noted that stock prices are always changing and volatile, so investors want to own stocks that increase with experience.

2.4. Independent Variables

1- Return on Assets (ROA): According to Horngren et al. (2009), return on assets calculates how well a company uses its assets to generate income. In the same context, Gitman et al. (2011) told that the return on assets reflects the effectiveness of the company's management in achieving returns through its assets.

Return on assets is calculated as follows: $ROA = \frac{Net\ Income}{Total\ Assets}$

2- Return on Equity (ROE): Syamsuddin (2009) stated that: "Return On Equity (ROE) is a measurement of the income available to the owners of the company (both ordinary shareholders and preferred shareholders) for the capital they invest in the company". This ratio indicates the efficiency of capital use itself. According to Reilly and Brown (2012), the return on equity is very important to shareholders, because it is an indicator to the rate of return that the company achieves using the capital provided by shareholders. The more this ratio, the better.

Return on equity is calculated as follows: $ROE = \frac{Net\ Income}{Total\ Equity}$

3- Net Profit Margin (NPM): Kasmir (2012) states that, "Net income is a profit that has been deducted from costs that are the expense of the company in a certain period,

including taxes". While Syamsuddin (2009) stated that, "Net Profit Margin is the ratio between net profit (net profit) and sales after deducted with expenses including tax compared to sales.

Net profit margin is calculated as follows:
$$NPM = \frac{Net\ Income}{Revenue\ (Sales)}$$

2.5. Hypotheses:

The research hypothesis is defined as a temporary solution or interpretation that is scientifically formulated, in which the researcher tries to verify the validity of this interpretation using the material he has, so that he sets his decisions and experiences as a solution to the research problem. When writing hypotheses, they must be written in a way that makes them closely related to the research problem, so that the researcher must be fully aware of the problem and the options for solutions to it. A scientific research hypothesis must have several characteristics to be considered a scientific research hypothesis, and the most important of these characteristics are: the possibility of verifying the hypothesis through data collection and analysis, the hypothesis's connection to the problem to be solved, the hypothesis's relationship with facts and results of previous studies, the accuracy and simplicity of the hypothesis and the ability to explain the phenomenon based on the hypothesis. The hypothesis consists of three basic elements: (1) Variables: There are two types of variables: the independent variable: the variable whose behavior and results are being studied, and the dependent variable: the variable being studied in order to know the relationship of the independent variable in it. (2) The relationship of the variables to each other. (3) Statistical population: It is the sample on which the study should be conducted. The validity of the hypothesis is tested statistically by following the following steps: determining the relationship that may result if the hypothesis is true, developing a model for the hypothesis that is zero or alternative, collecting data related to the problem, using inferential statistics in order to know the probability of occurrence of the hypothesis where the process of acceptance and

rejection is based on comparing the probability of a hypothesis occurring with the statistical significance that was chosen.

When formulating a scientific hypothesis, the following matters must be taken into account: the hypothesis is comprehensive for all aspects of the research and its selection is not random, the formulation of the hypothesis is either in denial or proof and is not both in negation and proof in order to give the ability to verify it experimentally, the formulation of the hypothesis in a way that is easy to understand and easy to identify, the variable clarity and identification of predictions and assumptions related to the hypothesis. Based on the formulation of the research problem, the hypotheses that can be made in this study are:

H1: (ROA) has a significant positive effect on stock prices of Retail luxury goods companies in the Retailing Industry from stock market in Saudi Arabia for the 2015 - 2019 period.

H2: (ROE) has a significant positive effect on stock prices of Retail luxury goods companies in the Retailing Industry from stock market in Saudi Arabia for the 2015 - 2019 period.

H3: (NPM) has a significant positive effect on stock prices of Retail luxury goods companies in the Retailing Industry from stock market in Saudi Arabia for the 2015 - 2019 period.

H4: (ROA), (ROE), and (NPM) have a significant positive effect simultaneously on stock prices of Retail luxury goods companies in the Retailing Industry from stock market in Saudi Arabia for the 2015 - 2019 period.

2.6. Data Collection Method

The study data was taken using the annual financial statements published by luxury retail companies that were listed on the stock exchange in the Saudi Arabia. Retail Industry in Saudi Arabia consists of 8 companies, 6 companies were sampled from

the industry, two companies were excluded from Retail Industry due to the lack of complete data required for the study period. The secondary data sources in this study are the financial statements of the companies included in the study sample. These financial statements are available on the Saudi Stock Exchange (Tadawul) website. Information and financial data extracted from the financial statements are organized in the form of panel data. The panel data method helps the researcher to use the regression model in order to test the model and extract the results. The companies' financial statements (statement of financial position and income statement) were used to calculate return on assets, return on equity and net profit margin. Concerning the stock price, the data for the stock prices for this study were collected from the website: investing.com. The company's stock prices are available on a monthly basis, so the annual price was calculated by taking the average of the prices by adding the monthly prices in each year and dividing it by the number of months in the year.

2.7. Multiple Linear Regression

Multiple linear regression is one of the advanced statistical methods that ensure the accuracy of inference in order to obtain significant and reliable research results by finding a mathematical equation that expresses the relationship between the variables. Multiple linear regression is used to explain the relationship between a continuous dependent variable and two or more independent variables in order to predict the value of the dependent variable based on the value of the independent variables. The idea of multiple linear regression is based on semantic relationships that use what is known as scattering or dispersion. After obtaining the results of the multiple regression equation, it must be ensured that these coefficients are statistically acceptable, meaning that they are statistically significant. Multiple linear regression can be applied through Microsoft Excel, but it is preferable to use statistical software specialized in statistics and econometrics such as IBM SPSS Statistics and EViews, which greatly simplifies the process of using multiple linear regression equations, models and formulas. The importance of linear regression in

its relative simplicity, accurate results, and widespread use in many disciplines, because it provides mathematical formulas that are easy to interpret and predict, and linear regression can be applied to various fields in business and academic study, as it is used in the biological, behavioral, environmental, social and business sciences. Linear regression models have become a proven way to predict the future in a scientific and reliable manner, and it helps business leaders and institutions to make better decisions using linear regression techniques, where institutions collect large amounts of data and then analyze them using linear regression for better manage reality rather than relying on experiments.

In this study, the analysis technique used is Multiple Linear Regression analysis, and it was used to test the hypothesis in this study. According to Anderson et al. (2011), multiple regression analysis is the process of analyzing and studying the extent to which one dependent variable is related to the independent variables. Multiple linear analysis is important in calculating the degree of influence of independent variables on dependent variable, as well as showing the direction of the effect of the multiple linear regression equation (Ghozali,2011). In this study, EViews software was used to calculate linear regression. EViews program is considered one of the advanced programs used in conducting standard analysis as well as in the processes of building, estimating and studying economic models. This program is useful and has very distinct results for researchers in the economic field. Several regression models such as multicollinearity, heteroskedasticity, autocorrelation and misspecification, and it also contains many advanced techniques that are used in analyzing time series, methods and mechanisms for checking and detecting unit root and cointegration tests, in addition to Panel data analysis.

3. Interpretation of Results

3.1. Descriptive Analysis

Descriptive analysis is a type of data analysis that helps show, describe or summarize data points in a simplified way in order to read these data and extract important information from it. Descriptive analysis is one of the most important steps in conducting statistical data analysis, as it shows the relationship between variables and it also analyzes variables data and shows mean, median, minimum, maximum, observations and standard deviation of the data and other useful results for the purpose of the study. From the data of this study, the following descriptive analysis results were extracted:

Table 1: Group Statistics

	PRICE	ROA	ROE	NPM
Minimum	8.6	-0.123681	-0.445287	-0.261207
Maximum	161.05	0.343982	0.598588	0.130403
Median	38.805	0.052971	0.136082	0.038364
Mean	50.84967	0.079285	0.158964	0.03216
Std. Dev.	41.90855	0.115635	0.245849	0.088074
Observations	30	30	30	30

Based on Table 1, the stock price obtained a minimum variance of 8.6 SR, a maximum variance of 161.05 SR, a median of 38.805 SR and a rating score of 50.84967 SR with a 30 observations. Return on assets obtained a minimum variance of -12.36%, a maximum variance of 34.39%, a median of 5.29% and a rating score of 7.92% with a standard deviation of 11.56% and a 30 observations. Return on equity obtained a minimum variance of -44.52%, a maximum variance of 59.85%, a median of 13.60% and a rating score of 15.89% with a standard deviation of 24.58% and a 30 observations. Net profit margin obtained a minimum variance of -26.12%, a maximum variance of 13.04%, a median of 3.83% and a rating score of 3.216% with a standard deviation of 8.8074% and a 30 observations.

3.2. Correlation Table

Correlation is the relationship between two measurable variables that are observed simultaneously on each individual or unit of the statistical group, and the main objective of the correlation analysis is to find an appropriate formula to determine the strength of the relationship between two variables. Correlation analysis calculates the degree of correlation between two variables using numbers known as the correlation coefficient. The correlation coefficient is a measure of the degree to which the movements of the two variables are correlated, and the range of values for the correlation coefficient is from -1.0 to 1.0. According to Sugiyono (2010), it is possible to give an explanatory scale for the degree and strength of the correlation between the variables as follows:

0,8 – 1,00: too strong correlation

0,6 – 0,79: strong correlation

0,4 – 0,59: medium correlation

0,2 – 0,39: low correlation

0,0 – 0,19: too low correlation

From the data of this study, the following correlation analysis results were extracted:

Covariance Analysis: Ordinary Sample: 2015 - 2019 Included observations: 30

Table 2: Correlation Analysis Results (C: Correlation, P: Probability)

	PRICE	ROA	ROE	NPM
PRICE	C: 1.000000 P: 0.0000	C: 0.893255 P: 0.0000	C: 0.846244 P: 0.0000	C: 0.657223 P: 0.0001
ROA	C: 0.893255 P: 0.0000	C: 1.000000 P: 0.0000	C: 0.936915 P: 0.0000	C: 0.826016 P: 0.0000
ROE	C: 0.846244 P: 0.0000	C: 0.936915 P: 0.0000	C: 1.000000 P: 0.0000	C: 0.867235 P: 0.0000
NPM	C: 0.657223 P: 0.0001	C: 0.826016 P: 0.0000	C: 0.867235 P: 0.0000	C: 1.000000 P: 0.0000

Based on Table 2, through the results of the correlation analysis it is shown that there is a very strong correlation between the stock price and the return on assets with correlation coefficient = 0.893. There is also a very strong correlation between the stock price and the return on equity with correlation coefficient = 0.846. The results show that the net profit margin has a strong correlation with the stock price with correlation coefficient = 0.657. ROA & ROE correlation coefficient values are 0.936, ROA & NPM correlation coefficient values are 0.826 and ROE & NPM correlation coefficient values are 0.867.

3.3. Test the Unit Root by Using ADF and PP Techniques

There is an implicit but essential assumption behind the regression theory that uses time series in estimation, which is that these time series have the property of stability, and in the absence of stability, the regression we get between time series variables is often (Regression Spurious), meaning that The mean and variance of the variable are not independent of time. This is because time series data often have a general trend that reflects certain conditions that affect all variables, making them change in the same direction despite the absence of a real relationship between them, and this often happens in waves of depression or stagnation that sweep across the various economies of the world. The condition of stability is essential in the study and analysis of time series, and unless the time series are stable, sound and logical results will not be obtained. If the time series are unstable in their levels, it means that they contain a unit root, and this will lead to the existence of a false regression (regression spurious) and problems in the analysis and standard inference. The goal of unit root tests is to examine the time series of all variables during the study period, to ensure their dormancy, and to determine the integration rank of each variable separately. Therefore, it is necessary to ensure the integrity of the data by conducting unit root tests for time series.

Table 3: Test unit root by using ADF and PP techniques (At 2nd Difference)

Variables	ADF Test (None Trend and Intercept)			PP Test (None Trend and Intercept)		
	Method	Statistic	Probability	Method	Statistic	Probability
Price	Fisher Chi-square	62.1957	0.0000	Fisher Chi-square	63.2485	0.0000
	Choi Z-stat	-6.15803	0.0000	Choi Z-stat	-6.23465	0.0000
ROA	Fisher Chi-square	30.5197	0.0023	Fisher Chi-square	30.4034	0.0024
	Choi Z-stat	-2.58818	0.0048	Choi Z-stat	-2.56451	0.0052
ROE	Fisher Chi-square	46.5047	0.0000	Fisher Chi-square	46.5047	0.0000
	Choi Z-stat	-3.88038	0.0001	Choi Z-stat	-3.88038	0.0001
NPM	Fisher Chi-square	40.5117	0.0001	Fisher Chi-square	40.3724	0.0001
	Choi Z-stat	-3.62932	0.0001	Choi Z-stat	-3.60044	0.0002

Augmented Dikey-Fuller test (ADF) and Phillips-Perron test (PP) were applied to the time series of this study, and the result was that the variables are unstable At Level and At First Differences, and the variables are stable At Second Difference with None Trend and Intercept as shown in the Table 3 as found in the probabilities which all point to a degree less than 1%.

3.4. Multicollinearity Test

According to Ghozali (2006), the objective of the multicollinearity test is to discover whether there is a correlation between the independent variables included in the regression model. It often takes the value: $VIF > 10$ to indicate that there is no multicollinearity problem. The results of Multicollinearity test showed the following:

Table 4: Multicollinearity Test

Constant	R ²	VIF
ROA	0.878545	8.2335
ROE	0.905226	10.5514
NPM	0.753585	4.0582

Based on Table 4, all independent variables have a VIF value less than 10 (except for ROE because it tends to be similar and not very different from ROA traits). This means that there is no multicollinearity, so the data is good to use regression model.

3.5. Heteroscedasticity Test

According to Ghozali (2006), the objective of the heteroscedasticity test is to detect the lack of inequality of variance that may occur from one residual observation to another observation. scatterplot graph is used to detect the heteroscedasticity.

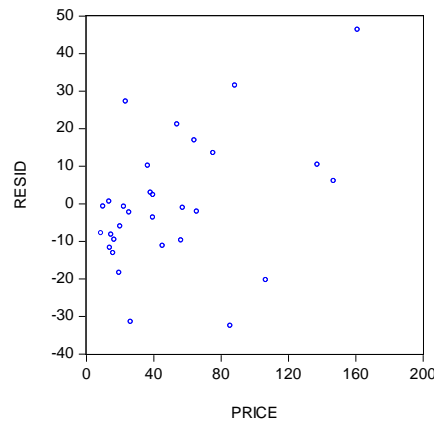


Figure 1: Scatterplot Graph for Heteroscedasticity Test

In Figure 1, the scatter graph shows that the points are randomly distributed and spread under the number zero and above on the residual regression axis. It is also noticed that there is no specific pattern formed from these spread points in the figure. This indicates that there was no heteroscedasticity in this study and that the regression model is testable.

3.6. Normality Test

The normality test is to find out and determine whether there is a normal distribution in the residual confounding variables or the regression model. According to Humiang (2012), the aim of the normality test is to find out whether there is a normal distribution between the dependent variable and the three independent variables in

the regression model. The normality test to test the data used in regression analysis on parametric statistics requires that the data be normally distributed (Edison, 2016). According to Ghozali (2006), the purpose of the normality test is to verify that the regression model and the residuals are normally distributed.

To test for Normality, there are many methods to test for the Normal Distribution:

Method 1: By calculating the value of (Lilliefors) and comparing its probability with the degree of significance of 5%, if (Lilliefors probability) is greater than 5%, this indicates that the distribution is normal.

Empirical Distribution Test for RESID

Hypothesis: Normal

Sample: 2015 - 2019

Included observations: 30

Table 5: Normality Test by Lilliefors

Method	Value	Adj. Value	Probability
Lilliefors (D)	0.139476	NA	> 0.1
Cramer-von Mises (W2)	0.10941	0.111233	0.0789
Watson (U2)	0.099234	0.100887	0.0877
Anderson-Darling (A2)	0.56305	0.578534	0.1327

Based on Table 5, the results of the above normality test indicate that the value of (Lilliefors) is 0.139476 and its probability is greater than 10% means that it is also greater than 5%, it can be concluded that the data used in this study are normal distribution data.

Method 2: Observe the spread of data around the diagonal line and follow it. When the data spreads next to the diagonal line, and these data follow the direction of the diagonal line, this indicates that the model takes the normal distribution, and when the data spreads far from the diagonal line, and these data do not follow the direction of the diagonal line, this indicates that the model does not achieve a normal distribution.

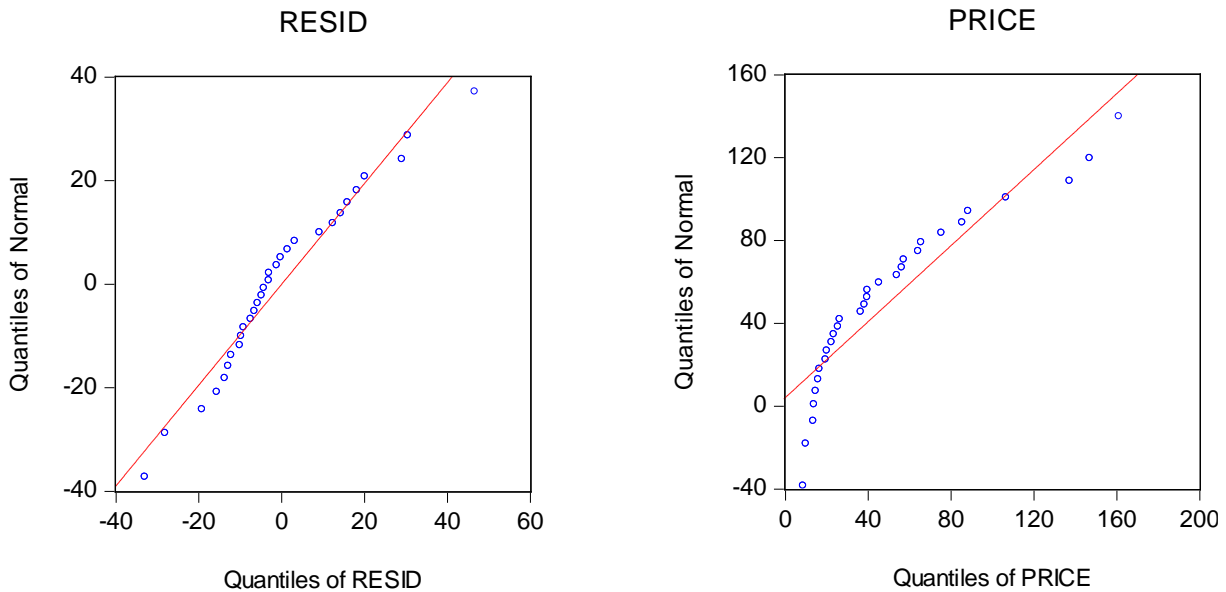


Figure 2: Normality Test by observe the spread of data

According to Figure 2, the study data are spread next to the diagonal line, and this data follows the direction of the diagonal line. This indicates that the model takes a normal distribution.

Method 3: By calculating the value of (Jarque-Bera) and comparing its probability with the degree of significance of 5%, if (Jarque-Bera probability) is greater than 5%, this indicates that the distribution is normal.

Based on Figure 3, the results of the above normality test indicate that the value of (Jarque-Bera) is 2.249495 and its probability is 32.47% greater than 5%. Also by looking at the graph, it can be seen the shape of the normal distribution. It can be concluded that the data used in this study are normal distribution data.

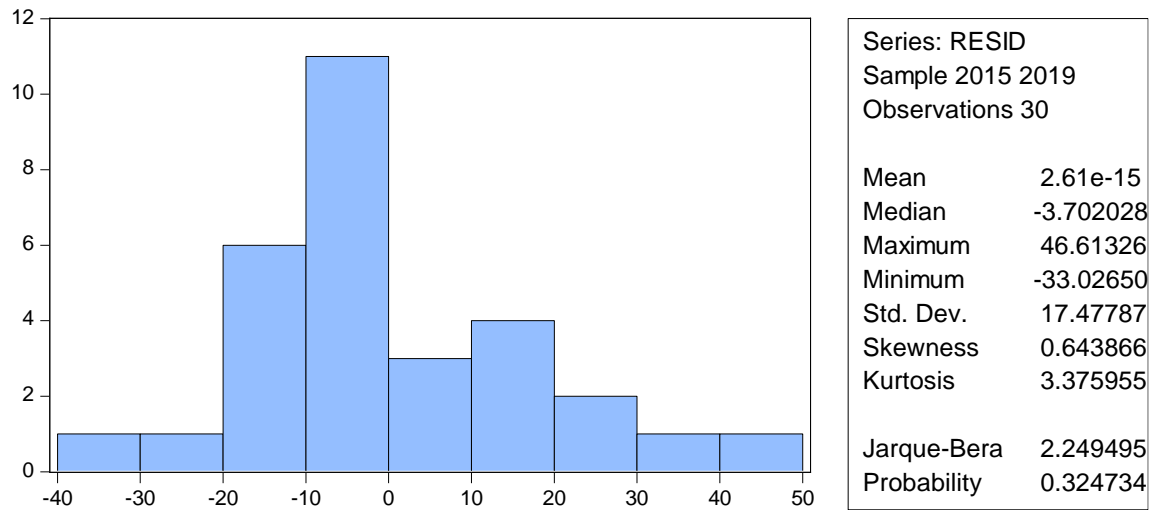


Figure 3: Normality Test by Jarque-Bera

3.7. Cointegration Test (Granger Causality Test)

Non-stationary sequences are subject to pseudo-regression, and the importance of co-integration is to test whether the causality described by the regression equations is pseudo-regression, so the Engel-Granger test is used to explain the causality of the dependent variable through the independent variables.

Step One: VAR Lag Order Selection (Determining the optimum slowdown period):
Endogenous variables: PRICE, ROA, ROE & NPM

Exogenous variables: C Included observations: 18 Sample: 2015 – 2019

Table 6: VAR lag order selection criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-17.60329	NA	0.00013	2.400365	2.598225	2.427647
1	39.04157	1.82034*	1.50E-06	-2.11573	-1.126428*	-1.979318
2	59.72302	20.68146	1.25e-06*	-2.635891*	-0.855148	-2.390351*

* Indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan - Quinn information criterion

Based on Table 6, the lowest score for AIC, SC and HQ resides at Lag 2, which means VAR Lag at 2.

Step Two: Granger Causality Test:

Table 7: Granger Causality Test

Null Hypothesis	F-Statistic	Prob.
ROA does not Granger Cause PRICE PRICE does not Granger Cause ROA	4.25934 0.14368	0.0378 0.8675
ROE does not Granger Cause PRICE PRICE does not Granger Cause ROE	3.4639 0.1613	0.0623 0.8527
NPM does not Granger Cause PRICE PRICE does not Granger Cause NPM	1.01271 3.11407	0.3902 0.0785

Based on Table 7, there is a causal relationship that goes from ROA to PRICE at a probability of 5%, there is a causal relationship that goes from ROE to PRICE at a probability of 10%, and there is also a causal relationship that goes from PRICE to NPM at a probability of 10%. And based on Table 7 there is no causal relationship going from PRICE to ROA, PRICE to ROE, and NPM to PRICE.

3.8. Regression Analysis

Regression analysis is one of the statistical tools that makes a statistical model and formulates an equation in order to estimate the relationship between a single quantitative variable, the dependent variable, and several quantitative variables known as the independent variables. This model is used to estimate the value of the dependent variable as well as to find out the type of relationship between the

variables. Here, regression analysis was performed in its three forms: Pooled Regression Model, Fixed Effect Model and Random Effect Model, and the results were compared to choose the best model for estimating the regression equation.

Table 8: Results of Pooled Regression Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	22.11831	4.29681	5.147611	0
ROA	312.0285	84.122	3.709238	0.001
ROE	59.39704	44.79144	1.32608	0.1963
NPM	-169.455	77.5403	-2.185379	0.0381

Based on Table 8 shows the results of a pooled regression model which examined the relationship of stock price with ROA, ROE and NPM. The results show that the ROA has a positive significant relation with the stock price at the 1% significance level. ROE has a positive relation but non-significant with the stock price. NPM has a negative significant relation with stock price at the 5% significant level.

Table 9: Results of Fixed Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	36.55897	8.775046	4.166243	0.0004
ROA	5.745656	155.0816	0.037049	0.9708
ROE	107.2193	44.17186	2.427321	0.0243
NPM	-99.77637	107.9117	-0.924611	0.3657

Based on Table 9 shows the results of a fixed effect model which examined the relationship of stock price with ROA, ROE and NPM. The results show that the ROA has a positive relation but non-significant with the stock price. ROE has a positive significant relation with the stock price at the 5% significance level. NPM has a negative relation but non-significant with the stock price.

Table 10: Results of Random Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	23.18097	5.69928	4.06735	0.0004
ROA	261.3706	86.40208	3.02505	0.0055
ROE	81.14604	41.68032	1.946867	0.0624
NPM	-185.1131	78.93235	-2.345213	0.0269

Based on Table 10 shows the results of a random effect model which examined the relationship of stock price with ROA, ROE and NPM. The results show that the ROA has a positive significant relation with the stock price at the 1% significance level. ROE has a positive significant relation with the stock price at the 10% significance level. NPM has a negative significant relation with (SP) at the 5% significant level.

3.9. Housman Test

The Housman test is used to determine the best model between a fixed effect model and a random effect model.

H0: difference in coefficients of fixed effect model & random effect model is not systematic.

H1: difference in coefficients of fixed effect model & random effect model is systematic.

Table 11: Correlated Random Effects - Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.466634	3	0.1406

Based on Table 11, the result of the Hausman test shows that the probability is 14.06%, and this result is greater than 5% as well as greater than 10%, so we accept H0, which means that the best model is a Random Effect Model.

3.10. Multiple Linear Regression Analysis & The Model (Equation)

Multiple linear regression is one of the advanced statistical methods that ensure the accuracy of inference in order to improve research results through optimal use of data in finding causal relationships between the phenomena of the subject. Multiple linear regression is about finding a mathematical equation that expresses the relationship between many variables, one of which is a dependent variable and the other variables are independent. This means that it is used in predicting changes in the dependent variable that affects several independent variables. Therefore, the use of multiple linear regression is important to explain the relationship between the dependent variable, which must be continuous, and the independent variables, which may be continuous or discontinuous, and its idea depends on the semantic relationships that use what is known as the form of dispersion or spread. Based on output from EViews:

Dependent Variable: PRICE

Method: Panel Least Squares (Cross - section random effects)

Sample: 2015 - 2019

Periods included: 5

Cross - sections included: 6

Total panel (balanced) observations: 30

Table 12: Results of Multiple Linear Regression & Weighted Statistics (Random Effect Model)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	23.18097	5.69928	4.06735	0.0004
ROA	261.3706	86.40208	3.02505	0.0055
ROE	81.14604	41.68032	1.946867	0.0624
NPM	-185.1131	78.93235	-2.345213	0.0269
R-squared	0.721299	Mean dependent var	32.56425	
Adjusted R-squared	0.689142	S.D. dependent var	29.92634	
S.E. of regression	16.68534	Sum squared resid	7238.412	
F-statistic	22.43002	Durbin-Watson stat	1.396053	
Prob (F-statistic)	0			

Based on Table 12, can be expressed by a mathematical equation as follows:

$$\text{STOCK PRICE} = 23.181 + 261.371 \text{ ROA} + 81.146 \text{ ROE} - 185.113 \text{ NPM}$$

From the equation of the multiple regression model the following can be observed:

1. Constant (C) value of the model = 23.181. This value indicates that the stock price = 23,181 when the return on assets, return on equity and net profit margin = zero.
2. ROA value of the model = 261.371. This value indicates that the stock price will increase by 261.371 when the return on assets increases by one unit and other independent variables are constant.
3. ROE value of the model = 81.146. This value indicates that the stock price will increase by 81.146 when the return on equity increases by one unit and other independent variables are constant.
4. NPM value of the model = -185.113. This value indicates that the stock price will decrease by 185.113 when the net profit margin increases by one unit and other independent variables are constant.

3.11. Coefficient of Determination (R^2)

Coefficient of Determination is a measure that assesses the ability of the model to predict or interpret a result in the preparation of linear regression, it indicates the degree of correlation between the variables in the model, symbolized by R^2 because it is equal to the square of the correlation coefficient. R^2 takes values between 0 to 1 and the closer the value of the coefficient of determination to 1 this indicates a low value of the random error. So, R^2 is the percentage change in the dependent variable, which is explained by the linear regression model. In general, a high R^2 indicates that the model fits well with the data.

Based on Table 12, it is concluded that there is a strong correlation between the independent variables and the dependent variable in the model, because the R-square value is 0.721299 which is close to 1. This indicates and explains that the regression

equation explains 72.13% of the change in the dependent variable (SP) that occurred due to the change in the independent variables (ROA, ROE & NPM), and the rest of the change of 26.87% occurred due to factors other than the independent variables (residual) and is also due to the random error.

3.12. Analysis of Variance (ANOVA)

Analysis of variance (ANOVA) is one of the important analyzes in the multiple linear regression model. It contains a set of statistical models in addition to other procedures associated with these models. It compares the statistical averages of various groups by dividing the total variance into various parts. The first methods of analysis of variance were developed by the statistician and geneticist Ronald Fisher in the twenties and thirties of the last century, so it is sometimes known as Fisher's analysis of variance. In decision making, this method is called "analysis of variance" which tests whether the averages are all equal at once without decreasing the probability of making a correct decision or increasing the probability of error when making it. It is called ANOVA for short. This method of statistical analysis is based on what is known as the F-Test, which mainly depends on the analysis of variance.

3.13. Hypothesis Test: Simultaneous Test (F-Test)

The F-Test is based on the F-statistic, which is the value obtained from performing ANOVA or regression analysis to find out if the means between two or more groups are significantly different. F-test is performed between a dependent variable with two or more independent variables, and the test result shows a group of variables are jointly significant. If the result is significant, this means that the results most likely did not happen by chance. If the result is not significant (not statistically significant), this means that the independent variables have no effect on the dependent variable in the model. In general, if calculated F value in the test is larger than F critical value (F tabular value), and if calculated F probability is less than significance ratio 5%, then the null hypothesis (H0) is rejected and alternative hypothesis (H1) is accepted

and the model is considered significant, meaning that the independent variables have A real significant effect on the dependent variable.

The F-Test is used to find out the result of the research hypothesis H4:

H4: (ROA), (ROE), and (NPM) have a significant positive effect simultaneously on stock prices of Retail luxury goods companies in the Retailing Industry from stock market in Saudi Arabia for the 2015 - 2019 period.

Based on Table 12, F-Test probability result is 0 and it is less than 5%, so null hypothesis (H0) is rejected and alternative hypothesis (H1) is accepted and the model is significant, it means ROA, ROE and NPM simultaneously affect into stock price (SP), and that means accepting H4.

3.14. Hypothesis Test: Individual Parameter Significance Test (t-Test)

The t-Test is one of the most common and important statistical tests that are widely used by researchers to measure the significant differences between the means, meaning that the t-test is used to test a hypothesis related to the arithmetic mean. The t-Test is between the dependent variable and one independent variable. According to Ghozali (2006), a t-Test is important to clarify and know the degree of influence of one independent variable in the model in part on the dependent variable. The t-Test is used to find out the result of the research hypotheses H1, H2, and H3:

H1: (ROA) has a significant positive effect on stock prices of Retail luxury goods companies in the Retailing Industry from stock market in Saudi Arabia for the 2015 - 2019 period.

Based on Table 12, the results of t-Test between stock price and ROA show that the value is significant because the probability of t-Test for ROA is 0.0055 (less than 5%) and coefficient of ROA is positive equal 261.371. From the above indicates that ROA has a significant positive effect on stock price, and that means accept H1.

H2: (ROE) has a significant positive effect on stock prices of Retail luxury goods companies in the Retailing Industry from stock market in Saudi Arabia for the 2015 - 2019 period.

Based on Table 12, the results of t-Test between stock price and ROE show that the value is no significant because the probability of t-Test for ROE is 0.0624 (more than 5%) and coefficient of ROE is positive equal 81.146. From the above indicates that ROE has a positive but not significant effect on stock price, and that means reject H2.

H3: (NPM) has a significant positive effect on stock prices of Retail luxury goods companies in the Retailing Industry from stock market in Saudi Arabia for the 2015 - 2019 period.

Based on Table 12, the results of t-Test between stock price and NPM show that the value is significant because the probability of t-Test for NPM is 0.0269 (less than 5%) and coefficient of NPM is negative equal -185.1131. From the above indicates that NPM has a significant negative effect on stock price, and that means reject H3.

3.15. Comparing the Results with Previous Studies

- Effect of ROA on Stock Price: Return on assets is a rate that is calculated in order to know the ability of companies to generate profits using their assets, and a higher return on assets leads to an increase in the value of the company and an increase in the stock price in the stock exchange. Based on the results of multiple linear regression, ROA has a significant positive effect on the stock price. This finding is supported by the results of Murniati (2016), Islahuzzaman et al. (2021), Pradhan (2017), Rifaqat et al. (2021) and Alaagam (2019).

- Effect of ROE on Stock Price: Return on equity is useful for investors as it shows them the level of income generated from shareholders' investments, and this ratio is useful for comparing companies in the industry. The higher this ratio, the better

indicator of the company's efficiency in dealing with shareholders' investments. If conditions are good, this will lead to higher corporate profits and improved profitability. Based on the results of multiple linear regression, ROE has a positive but not significant effect on the stock price. This finding is supported by the results of Islahuzzaman et al. (2021), Pradhan (2017) and Alaagam (2019).

- **Effect of NPM on Stock Price:** Net profit margin is the rate that measures the ability of sales to generate profits, calculated by dividing the net profit after tax by sales. A high percentage of net profit margin indicates that the company has the ability to produce efficiently, which increases investor confidence and raises the share price in the stock market. Based on the results of multiple linear regression, NPM has a significant negative effect on stock price. This finding is supported by the results of Murniati (2016) and Pradhan (2017).

- **Effect of ROA, ROE and NPM on Stock Price:** The three combined ratio measures are useful for measuring the profitability of companies to attract investors. Investors can think about how the company can efficiently generate income on net sales, income from the amount of assets used and the ability to make profits with its own capital. If these three ratios are of high value, then the share price and the value of the dividend will rise more easily, and the result can also be important for investors to predict the share price of the company that is able to give a gain. Based on the results of multiple linear regression, ROA, ROE and NPM have a significant positive effect on stock price. This finding is supported by the results of Wartoyo and Nurhayati (2018) and Islahuzzaman et al. (2021).

4. Summary, Conclusions and Recommendations

4.1. Summary

Stock prices are the most widely used indicators by investors to make their investment decisions because they are easily available as well as the high importance and value of this indicator. Stock price changes in the stock exchange are always of interest to investors. The timely change in the share price is one of the most important indicators for investors, because understanding the reasons for the rise and fall in prices helps investors achieve exceptional profits. Investing in stocks offers the advantage of earn high returns. Fundamental variables in the share price are very useful for investors as it will help them in making profitable investment decisions.

This study was conducted to find out whether there is a relationship between the profitability ratios of luxury goods companies in the retail industry of the stock market in the Kingdom of Saudi Arabia and the share price of these companies for the purpose of trying to find out whether it is possible to guide the profitability ratios of companies when investors make their investment decisions.

4.2. Conclusions

In the analysis part of the research, more than one profitability ratio was studied and the variables used for the study are: return on assets (ROA), return on equity (ROE) and net profit margin (NPM). Datasets related to stock prices and profitability ratios were obtained from the analysis software (EViews). The hypotheses of the study were tested in order to determine the relationship between profitability ratios and share price through a multiple regression model. To apply a regression model, the necessary conditions must be acceptable. The stability of the variables was tested by unit root tests by applying the Augmented Dikey-Fuller test (ADF) and the Phillips-Perron test (PP) on the time series of this study, it was observed that the variables are stable at the second difference. It was also noted that there was no Multicollinearity

relationship between the independent variables, also there was no Heteroscedasticity in the study model, and through the test of Normality it was concluded that the data used in this study are normal distribution data, and therefore the data is good for use in the regression model. In regression analysis, regression analysis was performed in its three forms: Pooled Regression Model, Fixed Effect Model and Random Effect Model, and Random Effect Model was chosen as the best model for estimating the regression equation based on the Hausman test. It is observed that there is a strong correlation between the independent variables and the dependent variable in the model, because the R-square value is 0.721299 which is close to 1.

The final conclusions of this research are:

- 1- Effect of ROA on stock price: based on the results of multiple linear regression; the results of the t-Test between stock price and return on assets show that ROA has a significant positive effect on SP.
- 2- Effect of ROE on stock price: based on the results of multiple linear regression; the results of the t-Test between stock price and return on equity show that ROE has a positive but not significant effect on SP.
- 3- Effect of NPM on stock price: based on the results of multiple linear regression; the results of the t-Test between stock price and net profit margin show that NPM has a significant negative effect on SP.
- 4- Effect of ROA, ROE and NPM on stock price: based on the results of multiple linear regression; the results of the F-Test between stock price and return on assets, return on equity and net profit margin show that profitability variables have a significant positive effect on SP.

4.3. Recommendations

The investor is recommended to put the profitability at the forefront of the points that must be examined when taking the decision to invest in the luxury retail sector in Saudi Arabia, as it has been proven that the profitability have a significant effect on

the stock price. However, considering only one factor while investing, e.g. profitability, cannot bring about successful results to achieve the desired goals. For this reason, it is recommended that investing in stocks should be supported by diversifying a group of factors such as liquidity, indebtedness and solvency, taking into account other micro and macro-economic factors. It is recommended that the time period of more than five years be extended so that the results are more accurate and logical, as well as the use of various methods and not only using correlation and regression analysis, but also other methods such as a fixed random model, a fixed effect analysis, a generalized method of moments or other. It is also recommended to expand the scope of the study, such as by including two or more sectors for research. From the results of this study, the ratio of return on assets, return on equity and net profit margin has a significant impact at the same time on the stock price, so investors are recommended to pay attention to these ratios when making investment decisions in luxury goods retailers. Also, luxury goods retail companies are recommended to pay attention to improving these ratios, because it has been proven that these three ratios have a simultaneous effect on the share price and are considered important in evaluating investment and buying shares. Investors who want to buy a stake in a luxury retailer should pay special attention to (ROA), because it has a partial effect on the market share price, as the (ROA) ratio can be used to determine an investment decision. Also, for users of financial statements who will make a decision, they should not rely on statements about (ROE), but should also pay attention to other factors and ratios regarding stock price appreciation such as company size, economic factors, solvency ratio, asset ratio and other liquidity ratios.

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 - Concerning the stock price, the data for the stock prices for this study were collected from the website: investing.com.
 - The companies' financial statements (statement of financial position and income statement) were used to calculate ROA, ROE and NPM.