

Determinants of Shares Prices of Plantation Companies Listed In Indonesia Sharia Stock Index (Issi) Before, During And After The Covid-19 Pandemic

Fransisca Maulida Chasanah, Sutan Emir Hidayat, Indra

Institut Agama Islam Tazkia, Indonesia

Email: fmaulida.chasanah@gmail.com

Abstract. *The purpose of this study is to analyze the effect of the variables to be discussed, namely Islamic banking financing, inflation, exchange rates, and world palm oil commodity prices on the stock prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI) before, when, and after the COVID-19 pandemic. This research uses a quantitative approach, using an explanatory research design to test the hypothesis of the relationship between variables. The data that has been collected is then processed and analyzed quantitatively using the SPSS program. To test the hypothesis that has been formulated in this research, multiple linear regression method are used on time series data using the SPSS program. Based on the results of the t test research, it shows that partially Islamic banking financing, inflation, exchange rates, and world palm oil commodity prices have a significant effect on the share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI). The results of the F test research show that simultaneously Islamic banking financing, inflation, exchange rates, and world palm oil commodity prices have a significant effect on the share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI). The coefficient of determination (R²) of this research is 0.842, where these results indicate that variations in the share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI) can be explained by Islamic banking financing, inflation, exchange rates, and world palm oil commodity prices, namely with a value of 0.842 or 84.2%. Meanwhile, the remaining 15.8% is explained by other variables outside the research variables. This research focuses on analyzing the variables of sharia banking financing, inflation, exchange rates, and world palm oil commodity prices, and their influence on the share prices of plantations listed on the Indonesia Sharia Stock Index (ISSI). Another limitation of this research is in terms of time, because this research will use a time period from January 2015 to June 2023, where this time period is expected to describe the state of the variables studied before, during and after the COVID- 19 pandemic. It is hoped that this research can help the government evaluate the*

policies implemented, and not ignore the negative impacts resulting from each policy made. Of course, it's nothing other than just for better conditions in the future. Apart from that, it is hoped that this research will provide benefits for companies, especially in the plantation sector, so that they can attract investors.

Keywords: *Plantation company shares, banking financing, inflation, exchange rates, world palm oil commodities*

INTRODUCTION

In Indonesia today, the plantation sector has had a significant influence on the Indonesian economy. Some people see the plantation business as an alternative to improve the family economy, expand employment opportunities, open business opportunities, and contribute to regional development (Syahza & Asmit, 2020). Therefore, the plantation sector is considered important for the economy, and efforts to improve performance in this sector are very relevant.

One indicator of performance in the plantation sector can be seen from the movement of company shares in that sector. It is known that there are 27 plantation companies that have been listed in stock trading in Indonesia. However, in recent years, the global crisis and uncontrollable fluctuations in macroeconomic variables have had an impact on plantation companies. Many companies are experiencing difficulties in continuing their business activities. This is coupled with fluctuating conditions in macroeconomic variables which also cause disruption to company conditions, which ultimately influences share price movements of plantation companies. The instability of share prices makes investors more careful in making decisions to invest in a company (Putri, Achsani, & Pranowo, 2019).

Investors consider it important to see how and what factors cause share price fluctuations. Several macroeconomic variables such as inflation and exchange rates are considered to have a significant role in this matter (Bahmani-Oskooee & Saha, 2015). This is also explained by Susanto (2015) that analysis of macro variables, including changes in exchange rates, inflation and interest rates, is a useful tool for forecasting changes in stock prices and assisting investors in making the right investment decisions.

If we talk about the crisis currently facing the world, it originates from various aspects both related to the economy, as well as other

problems outside the economic realm, such as the COVID-19 pandemic, the root of the problem lies outside the economic sector. The first positive case of COVID-19 in Indonesia was detected on March 2 2020, when two people were confirmed to have been infected by a Japanese citizen (DitJen P2P Kementerian Kesehatan, 2021). This crisis is characterized by high uncertainty over its duration and medium and long term economic impacts (Armantier et al., 2021). The government officially revoked the policy of Implementing Restrictions on Community Activities (PPKM) related to the Covid-19 pandemic, after President Joko Widodo announced it through a press conference at the State Palace in Jakarta, on Friday, December 30 2022. This decision was taken after considering the pandemic situation which was increasingly under control as well as studies deep (Sekretariat Presiden, 2022).

During this period, there was a decline in real gross domestic product, money circulation slowed down, and the unemployment rate increased. Several business sectors, including the financial sector such as banking, experienced disruption. The presence of this pandemic has caused an increase in banking credit/financing risk, this is motivated by a decline in debtor performance and ability to fulfill credit or financing payment obligations (Riani & Wulandari, 2022).

This research does not only focus on shares of plantation companies in general, but specifically on companies listed on the Indonesia Sharia Stock Index or ISSI. Where Indonesia is one of the largest Muslim countries in the world, and is supported by a large market to develop the sharia financial industry. ISSI is present as an indicator of the performance of the sharia stock market, which during the pandemic crisis looked more stable. This can happen because there are strict criteria applied to shares wishing to be included in the sharia share list (Pratitis & Setiyono, 2021).

This research will also specifically discuss the world palm oil

commodity. Where it is known that commodities and stock markets have a correlation, which develops over time and is very volatile, especially since the 2007–2008 financial crisis (Creti, Joëts, & Mignon, 2013). Supported by the condition that palm oil is an important product for the Indonesian economy. Apart from being used for domestic consumption, palm oil and its derivative products are exported abroad. Thus, palm oil has a role in generating foreign exchange.

Basically, there has been quite a lot of research that discusses some of the problems above. Many of them discussed the impact of the COVID-19 pandemic on various sectors, such as how COVID-19 had an impact on energy company share prices falling Huang & Liu (2021), how the government responds to exchange rate volatility (Feng, Yang, Gong, & Chang, 2021). The impact of COVID-19 on inflation, interest rates, exchange rates, money supply, stock markets, global commodity prices and exports (Rahmayani, Oktavilia, & Putri, 2021). Its influence on inflation is also explained by Armantier et al. (2021) and Apergis & Apergis (2021). On the other hand, COVID-19 has also caused problems with company finances and financing (Khan, 2022). The performance and capacity of debtors is disrupted, and also has the potential to disrupt banking performance in credit management (Disemadi & Shaleh, 2020). Apart from that, there is also research conducted by Ma, Zhang, Ali, Kirikkaleli, & Khan (2021), where they investigated the causal relationship between natural resource commodity prices and economic growth in the pre- and post-Covid-19 periods.

Talking about natural resources and including commodities therein, there are several studies that try to discuss it. There is Creti, Joëts, & Mignon (2013) which investigates the relationship between price returns for 25 energy raw material commodities and stocks. And there is Amar, Belaid, Youssef, Chiao, & Guesmi (2021) which explains commodity and stockprices in major oil producing countries.

Agustina, Herdiyana, & Simamora (2019) in his research, he discussed inflation and the price of palm oil (CPO) on share prices in plantation sub-sector companies. Also explained by Nordin, Nordin, & Ismail (2014) regarding commodity prices (palm oil prices, oil prices, and gold prices), interest rates, and exchange rates on stock market performance. Putri et al. (2019) whose research discusses whether the share prices of palm oil issuers in Indonesia are influenced by macroeconomic variables (crude oil prices, exchange rates, inflation and interest rates) and financial performance variables (DER, ROA, ROE, EPS and AUR). There is Nkoro & Uko (2016) whose research talks about the relationship between exchange rate volatility, inflation, and stock price volatility. There is Susanto (2015) which also discusses inflation, exchange rates and interest rates on share prices. Study Ginting et al., (2016) which also explains macroeconomic variables, namely interest rates (BI Rate), exchange rates and inflation on changes in stock prices. Meanwhile research Cao, Ye, Zhang, & Li (2017) talks about trade credit financing and the risk of stock price crashes.

Another problem that previous studies have also tried to discuss is economics and finance regarding Islamic investment. Issues related to the performance of Islamic stock indices, the growth of Islamic finance, and the Islamic real-estate investment trust market are explained by Hassan, Aliyu, Saiti, & Halim (2020). Whereas Kabir, Still, & Bacha (2017), tries to investigate the risk-return profile of an optimized portfolio combining conventional equity, Islamic equity, Islamic equity with commodities, and conventional equity with commodities during crisis and non-crisis periods.

Therefore, with the many problems that have arisen starting with the presence of COVID-19, this research seeks to analyze the influence of sharia banking financing, inflation, exchange rates, and world palm oil commodity prices on the share prices of plantation companies listed

on the Indonesia Sharia Stock Index (ISSI) before, during and after the COVID-19 pandemic.

LITERATURE REVIEW

Capital Asset Pricing Model (CAPM) and Arbitrage Pricing Theory (APT)

Financial experts have developed two leading theories that are often used to explain stock return performance, namely the Capital Asset Pricing Model (CAPM) and Arbitrage Pricing Theory (APT). Capital Asset Pricing Model (CAPM) was introduced by Sharpe (1964) and Lintner (1965), while Arbitrage Pricing Theory (APT) was introduced by Ross (1976) (Kisman & Shintabelle, 2015).

Capital Asset Pricing Model (CAPM) is a theory that shows asset prices are related to their risk, with the assumption that the market portfolio is efficient, if at a certain level of risk it obtains a higher expected return (Soufian, 2001). CAPM explains that stock returns are the sum of the risk free rate plus beta multiplied by excess return (Kisman & Shintabelle, 2015). According to CAPM, stock returns are determined solely by market returns (Nordin et al., 2014).

Modern academic finance is built on the proposition that markets are fundamentally rational. The basic model of market rationality is the Capital Asset Pricing Model (CAPM). In capturing the idea that markets are essentially rational, the CAPM has made finance an appropriate subject for econometric study. The industry has relied on the CAPM to determine discount rates, to value investments in companies, to value the companies themselves, and to set sales prices in utility regulations (Dempsey, 2013).

In contrast to CAPM, APT states that stock returns are influenced by macroeconomic variables rather than market returns alone (Nordin et al., 2014). Arbitrage Pricing Theory (APT) is an alternative to CAPM.

APT is more general than CAPM, it allows for multiple risk factors and does not require identification of a market portfolio (Soufian, 2001). APT explains that returns can be predicted using several macro factors (such as GDP, inflation, exchange rates, etc.) (Kisman & Shintabelle, 2015).

Information Asymmetry

Information influences the decision-making processes used by individuals in households, businesses, and government. Individuals make decisions based on public information, which is freely available, and private information that is only available to a portion of society (Connelly, Certo, Ireland, & Reutzel, 2011). Stiglitz (2002) explains that information asymmetry occurs when “different people know different things”. Because some information is private, information asymmetry arises between those who hold the information, and those who could potentially make better decisions if they had it.

Signaling Theory

Signaling theory is concerned with reducing and explaining information asymmetry between signal givers (companies) and signal recipients or investors in the current context (Bergh, Connelly, Ketchen, & Shannon, 2014). This theory considers the effectiveness of five different signal components in reducing information asymmetry. These five components include signal observability, cost, credibility, frequency and consistency (Connelly et al., 2011). Despite its relevance for understanding interactions between investors and firms, the signaling theory literature has no application in the context of rapprochement. In practice, however, investors often use such signals to assess the appropriateness of a company's response, and to decide whether they want to remain investors in the future (Kharouf, Lund, Krallman, & Pullig, 2020).

Efficient Market Hypothesis Theory

Efficient Market Hypothesis Theory (EMH) implies that asset prices reflect all available information. In an efficient market, shares are fairly priced. This is because once information is available, market participants will act quickly based on that information. Therefore, active investment strategies are useless as they will not yield superior returns. The three types of market efficiency are (1) weak form, (2) semi-strong form, and (3) strong form. These three forms of market efficiency are known as predictability, event study, and inside information, respectively (Fama, 1970; Fama, 1991).

Plantation Company Shares

Indonesia itself is an agricultural country whose agricultural sector is the foundation for improving the welfare of the country and its people (Refianti, Weningsih, Rahmadani, Vutezah, & Christine, 2020), and in line with the current improvement in the national economy, this has had a positive impact on plantation companies in Indonesia. The rapid development of the plantation sector in recent years, supported by the large expansion of productive land and prospective markets, has also had an impact on the stock portfolio in the agricultural sector, especially plantations (Hutauruk, Mintarti, & Paminto, 2014).

The increase in area is an indicator of the increase in the amount of funds or financing needed for the development of plantation companies, as a result of the growth in managed plantation areas. The development of plantation areas certainly requires the most economical sources of financing, and allows for accelerated realization of plantation development, both internal and external, by considering cash outflow during development (Paminto, Setyadi, & Sinaga, 2016).

Table 1: Plantation Company

| Types of Large Plantation Plants | Number of Large Plantation Companies by Plant Type (Unit) |
|----------------------------------|--|
|----------------------------------|--|

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---------------|-------|-------|-------|-------|-------|-------|-------|
| Annual Plants | - | - | - | - | - | - | - |
| Rubber | 316 | 315 | 320 | 335 | 286 | 286 | 324 |
| Coconut | 107 | 107 | 107 | 107 | 107 | - | - |
| Palm oil | 1.600 | 1.592 | 1.695 | 2.165 | 2.056 | 2.335 | 2.892 |
| Coffee | 91 | 89 | 92 | 94 | 89 | 95 | 92 |
| Cocoa | 85 | 80 | 78 | 81 | 72 | 73 | 62 |
| Tea | 98 | 97 | 94 | 94 | 93 | 96 | 98 |
| Clove | 52 | 52 | 52 | 52 | 52 | - | - |
| Kapok | 1 | 1 | 1 | - | - | - | - |
| Quinine | 2 | 1 | 1 | - | - | - | - |
| Annual Plants | - | - | - | - | - | - | - |
| Sugarcane | 98 | 98 | 98 | 96 | 95 | 111 | 86 |
| Tobacco | 8 | 7 | 8 | 5 | 4 | 5 | 3 |

Source: (Badan Pusat Statistik, 2022)

The rapid growth of plantation commodities is generally related to companies operating in the agribusiness sector, both upstream industrial companies and downstream industrial companies. Basically, companies always need a certain amount of funds to finance their company operations. These funds can be obtained from outside the company, for example from loans or claims. For several well-known companies that have gone public, efforts to raise funds for operations can be obtained through selling shares to investors. The media used by companies to sell their shares to the public is the capital market (Ayudya, Suwandari, & Hartadi, 2017). The phenomenon that occurs shows that more and more plantation companies using internal funding sources are going public, namely obtaining funding from the public for plantation development by trading their shares on the Indonesian Stock Exchange (Paminto et al.,

2016).

Quite a number of agricultural companies, especially those operating in the plantation sub-sector in Indonesia, have joined and registered their companies on the capital market, so that the growth in the number of registered public companies represents a choice for investors to invest their capital (Ayudya et al., 2017).

Indonesia Sharia Stock Index (ISSI)

Indonesia, as one of the largest Muslim countries in the world, has an important role in developing sharia investment in the capital market, where one of the goals is to expand the market share of the sharia financial industry. The development of the Islamic capital market in Indonesia is growing rapidly, especially with the presence of the Indonesian Sharia Stock Index (ISSI) (Suciningtias & Khoiroh, 2015).

On May 12 2011, the Indonesian Sharia Stock Index (ISSI) was launched as a composite sharia stock index that records shares on the Indonesia Stock Exchange (BEI). ISSI is an indicator of the performance of the sharia stock market listed on the IDX. ISSI constituents are all sharia shares included in the Sharia Securities List (DES), and issued by the OJK, then listed on the main board and development board of the IDX. ISSI constituents take part in the re-selection process twice a year, namely in May and November, in accordance with the DES (Sharia Securities List) review schedule. Therefore, every selection period, there are always sharia shares that enter or leave to become ISSI constituents. The ISSI calculation method follows the calculation method like other BEI stock indexes, namely the weighted average of market capitalization, using December 2007 as the base year for ISSI calculations (Bursa Efek Indonesia, 2023).

According to Bursa Efek Indonesia (2019) currently, the sharia share selection criteria published by the OJK are as follows :

1. The company does not carry out prohibited business activities.

The prohibited business activities are as follows:

- a. Gambling or games that are classified as gambling;
 - b. Trade that is prohibited according to sharia includes:
 - 1) Trade transactions that do not involve the delivery of goods/services;
 - 2) Trading with false offers/demands;
 - c. Ribawi financial services, namely:
 - 1) Interest-based banking;
 - 2) Interest-based financing companies;
 - d. Risk buying and selling transactions that have elements of uncertainty (gharar) and/or gambling (maisir), including conventional insurance;
 - e. Producing, distributing, trading and/or providing prohibited goods, including:
 - 1) Goods or services are haram in substance (haram li-dzatihi);
 - 2) Haram goods or services that are not due to their substance (haram lighairihi) as determined by the MUI DSN;
 - 3) Goods/services that can damage morals and/or have detrimental properties;
 - f. Involved in transactions that contain elements of bribery (risywah).
2. The company is said to meet the specified financial ratios, if it meets the following criteria:
 - a. The ratio of total interest-based debt to total assets does not exceed 45%;
 - b. The ratio of total interest income and other non-halal income to total business income and other income does not exceed 10%

Sharia Banking Financing

In Indonesia, banking is a financial sector that is one of the pillars of economic growth, both for lower middle class and upper middle class society. The banking sector is a liaison institution between those who want to increase the value of their wealth through saving or investment, and those who need funds through credit (Annisaa, Ismail, & Hidayat, 2019).

If we discuss more specifically from the sharia side, the core of business is not only to seek profit or income, but also to make social responsibilities based on sharia principles. Sharia refers to the commands, prohibitions, instructions and principles that Allah SWT has conveyed to mankind relating to their behavior in this world and safety in the after life. In sharia transactions, sharia banks must present the form, terms and limits of financial transactions to achieve their goals. With this explanation, it can be concluded that maqashid Syari'ah and Sharia must always be integrated in Islamic bank operations to achieve happiness and prosperity in this world and the here after. Maqashid Syari'ah is used to see masalahah (benefits) and make decisions in all aspects of human life (Ismail & Muqorobin, 2017). With current economic problems becoming increasingly complex, they must be handled with Islamic social financial management, by applying methods and models adapted to current conditions (Ismail & Aisyah, 2022).

In Indonesia itself, banking is one of the financial sectors that supports economic growth, both for lower middle class and upper middle class society. The banking sector is an intermediary institution between those who want to increase the value of their wealth through saving or investment, and those who need funds through credit. The first sharia bank in Indonesia to be established was Bank Muamalat Indonesia, namely in 1992. After the establishment of Bank Muamalat, the government began to implement a sharia banking system, as evidenced by the issuance of Law Number 10 of 1998. This law is proof

of the Indonesian government's recognition regarding sharia banking, although it has not been specifically explained. The law only explains the operational principles of sharia banks which are divided into two, namely conventional banks which are based on interest principles, and banks based on sharia principles (Annisaa et al., 2019).

In his book Ascarya (2006) explained that sharia bank financing products, especially in the first form, are aimed at channeling investment and public savings into the real sector with productive purposes, in the form of joint investment (investment financing) carried out with business partners (creditors), using a profit sharing pattern (mudharabah and musyarakah); in the form of own investment (trade financing); to those who need financing using buying and selling patterns (murabahah, salam, and istishna). Then there is the rental pattern (ijarah and ijarah muntahiya bittamlik).

Ascarya, (2006) continued that of the various financing products offered by sharia banks, there are three main financing products that dominate the financing portfolio of sharia banks, namely investment financing, working capital financing, and financing of various goods and properties. Other products that are also considered quite important are export financing, project financing, agricultural financing, and manufacturing and construction financing. The type of contract used for financing is more specific according to their respective characteristics. For example, project financing uses a profit sharing pattern (mudharabah, and musyarakah), manufacturing and construction financing uses a buying and selling pattern, namely producing or building (istishna, and parallel istishna), agricultural financing uses a buying and selling pattern with reservations (salam, and salam parallel), while export financing can use a profit sharing pattern (mudharabah and musyarakah) or a buying and selling pattern (murabahah).

Inflation

Inflation can be used as a general economic benchmark, because inflation figures reflect the condition of a country's economic stability. It is known that inflation is influenced by the amount of production and public demand which results in rising and falling prices (Himmati & Sari, 2021).

A high inflation rate indicates that an economy is experiencing disruption, whether in the form of declining exports due to decreased competitiveness, decreased savings and investment, or other disruptions such as what occurred some time ago, namely the presence of the COVID-19 pandemic. In conditions like this, the government must be responsive in determining policies that will bring the inflation rate back to a reasonable level. If we look at the meaning, what should be underlined in the definition of inflation is that it includes the following aspects:

- 1) *Tendency*. Tendency for prices to increase, meaning that at a certain time it is possible for prices to decrease but still show a tendency to increase.
- 2) *Sustained*. This price increase does not only occur at a certain time or once, but continuously over a long period of time.
- 3) *General level of prices*. The price level in question is the price level of goods in general so that it is not just the price of one type of item (Sukendar, 2000).

Highly fluctuating inflation rates reflect the great uncertainty in the value of money, production levels, distribution and direction of economic development, which can give rise to false expectations and manipulation which can endanger the economy as a whole. On the other hand, low inflation also does not benefit the economy, because it reflects low purchasing power and demand for goods and services which in turn slows down economic growth (Badan Pusat Statistik Kepulauan Riau,

2021).

When viewed in general, inflation can be classified based on various points of view depending on the causal factors, namely inflation originating from the demand side (demand-side inflation), inflation originating from the supply side (supply-side inflation), or a combination of both (demand-supply inflation). From the supply side, the causes of inflation can come from increases in wages (wage cost push inflation) and increases in the prices of imported goods (import cost inflation). Meanwhile, from the demand side, inflation is caused by an increase in demand which is not balanced by supply (demand pull inflation) (Sutawijaya & Zulfahmi, 2012).

Exchange Rate

If we refer to the exchange rate based on experts' understanding, it can be concluded that the main thing to focus on is the exchange rate between two different currencies. The exchange rate has the price or value of a country's currency which is measured in foreign currency when making purchases or shopping from abroad. There are three types of exchange rates, namely selling rate, buying rate and middle rate. Then, changes in exchange rates can experience two types of assessment, namely appreciation and depreciation. Appreciation of a country's currency means that the value of that country's currency has increased relative to other currencies. This causes imports to become cheaper, while exports become more expensive. Conversely, when a country's currency depreciates, the value of that country's currency becomes less valuable than other currencies. As a result, exports become more affordable and more profitable (Rezandy & Yasin, 2021).

Meanwhile, if we look at the influencing factors, there are three main factors that influence the demand for foreign exchange. First, the import payment factor. The higher the import of goods or services, the greater the demand for foreign exchange, which ultimately causes the

exchange rate to tend to weaken. On the other hand, if imports decrease, the demand for foreign exchange decreases, which ultimately leads to a strengthening of the exchange rate. Assuming other factors do not change (*ceteris paribus*). Second, the capital outflow factor. This factor is described as the greater the capital outflow, the greater the demand for foreign exchange, which will ultimately weaken the exchange rate. Capital outflows are described as the placement of Indonesian residents' funds abroad, and the payment of debts of Indonesian residents (both private and government) to foreign parties. Third, speculative activities. This condition can be described as the more foreign exchange speculation activities carried out by speculators, the greater the demand for foreign currency, causing a weakening of the local currency exchange rate against foreign currencies. Foreign exchange speculators are actors in the foreign exchange market whose activities aim to profit from the weakening of the exchange rate (Suseno & Simorangkir, 2004).

Plantation Commodities

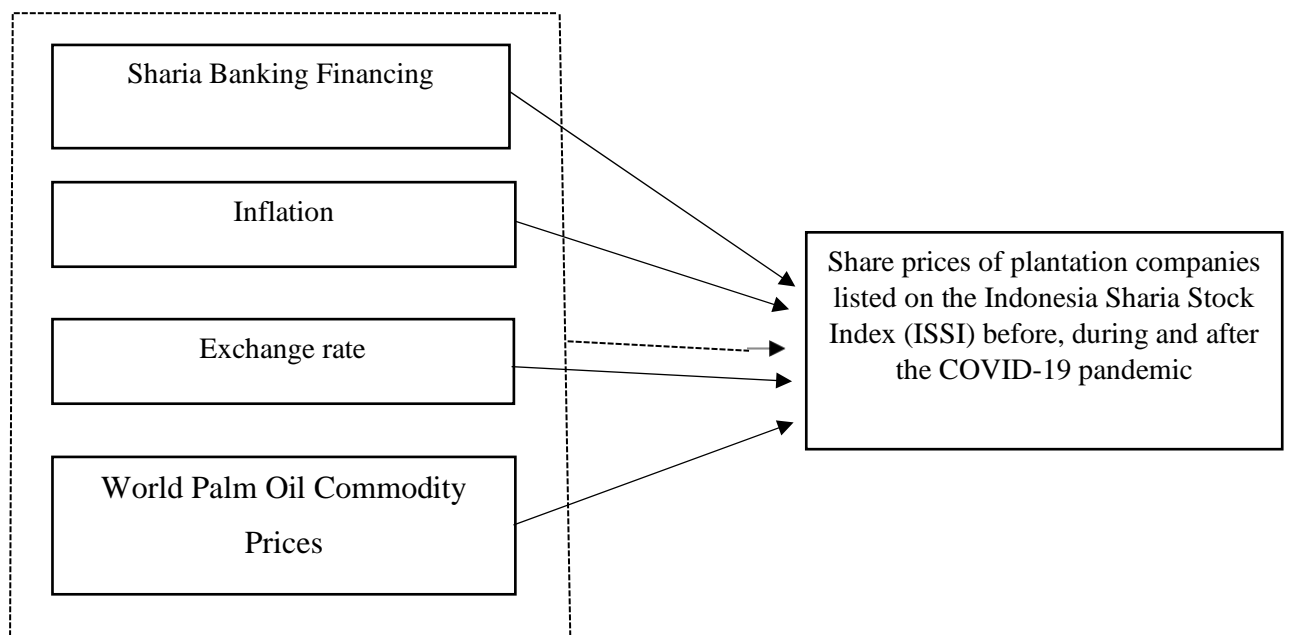
Indonesia is known as a country rich in natural resources, and over the years has implemented many policies to increase the production of pulpwood, logs, palm oil and rubber (Obidzinski & Chaudhury, 2016). The results of these efforts led Indonesia to become the world's largest exporter of palm oil, the world's second largest producer of cocoa and rubber. This success occurred because of the excellent potential in planting plantation products in Indonesia. Factors such as land area, skilled and available labor in sufficient numbers, as well as global demand for various plantation products such as palm oil, rubber and cocoa, are attractive for foreign investment in the plantation sector. This will have an impact on increasing the volume and selling price of plantation commodity exports (Palm Palm, Rubber and Cocoa) (Lubis, Firdaus, & Sasongko, 2015).

As time went by, it was discovered that oil palm plantation

commodities were developing quite well. With increasing demand for biofuels, vegetable oils and processed foods, the development of oil palm plantations can easily fill the gap in the forestry sector. The idea of a crisis in the forestry sector and the need for alternative national income has triggered and opened up opportunities for oil palm plantations to develop rapidly in Indonesia (Susanti& Maryudi, 2016).

FRAMEWORK

The rationale for this research is explained as follows:



Picture 1: Conceptual Framework Before, During, and After the COVID-19 Pandemic Source: Modification of (Refianti et al., 2020)

RESEARCH METHODOLOGY

Research Design

This research uses a quantitative approach, which will explain the variable relationship between share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI), sharia banking financing, inflation, exchange rates, and world palm oil commodity prices. Quantitative research usually uses an explanatory design, where the object of explanatory research is to test the hypothesis of the relationship between variables.

The data used comes from secondary data taken from annual published reports, and this data describes the situation in Indonesia based on the variables used. The data that has been collected is then processed and analyzed quantitatively using the SPSS program to provide an explanation and meaning of the results of the quantitative analysis. According to Chandra (2012) to analyze the influence of the independent variables on the dependent variable, you can use a multiple linear regression model.

Research Population and Sample

This research uses a non-probability sampling method with a purposive sampling approach, which means that the sample is selected based on an assessment of the characteristics of the sample members in accordance with the research objectives (Agustina et al., 2019).

In this research, samples were used that had the following characteristics:

- 1) Plantation sub-sector companies listed on the Indonesia Sharia Stock Index (ISSI).
- 2) Has complete stock price time series data, starting from the research period January 2015 to June 2023.

Based on the criteria above, a sample of 6 plantation sub-sector companies was obtained that met the criteria, namely as follows:

Table 2: Research Sample

| No. | Company Code | Company Name | Recording Date |
|-----|--------------|-------------------------------------|------------------|
| 1 | AALI | Astra Agro Lestari Tbk | 09 December 1997 |
| 2 | ANJT | PT Austindo Nusantara Jaya Tbk | 08 May 2013 |
| 3 | DSNG | PT Dharma Satya Nusantara Tbk | 14 June 2013 |
| 4 | GZCO | Gozco Plantations Tbk | 15 May 2008 |
| 5 | LSIP | PP London Sumatra Indonesia Tbk | 05 July 1996 |
| 6 | PALM | PT Provident Investment Bersama Tbk | 08 October 2012 |

Source: Modification of (Agustina et al., 2019)

Data and Data Sources

The data used in this research were collected from publication documentation published by Yahoo Finance for data on share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI); Financial Services Authority (OJK) for sharia banking financing data; Bank Indonesia (BI) for inflation data; Bank Indonesia (BI) for exchange rate data; and the World Bank for data on world palm oil commodity prices. Then, more specifically, this research took a time period from 2015 to 2023. The data used was on a monthly scale, namely from January 2015 to June 2023. So 102 data were obtained.

Data Engineering and Analysis

Data analysis techniques are concerned with processing data to answer problem formulation and test research hypotheses. The data analysis techniques used in this research include the following:

Classic Assumption Test

a. Normality test

In this research, data normality was tested using the

Kolmogorov-Smirnov test to compare the distribution of the data to be tested with the standard normal distribution. The basic analysis used in the Kolmogorov-Smirnov test is as follows:

- 1) If the significance value is \geq the real level (0,05), then the data distribution is declared normal.
- 2) If the significance value is $<$ the real level (0,05), then the data distribution is declared not normal.

b. Multicollinearity Test

This research was carried out by looking at the Variance Inflation Factor (VIF) to show that each independent variable becomes a dependent variable and is regressed against other independent variables. Variability of the selected independent variable that is not explained by other independent variables. The cut off value for multicollinearity is $VIF \geq 10$, with the following criteria:

- 1) If $VIF \geq 10$, then multicollinearity occurs.
- 2) If $VIF < 10$, then multicollinearity does not occur (Ghozali, 2011).

c. Heteroscedasticity Test

The method used is a Scatterplot graph between the predicted value of the dependent variable, namely ZPRED (X axis) and the residual SRESID (Y axis). If the points are spread randomly and evenly above and below the number 0 (zero) on the Y axis, then heteroscedasticity does not occur in the regression model, so the model is suitable for use to predict the dependent variable based on the independent variable input (Ghozali, 2011).

d. Autocorrelation Test

Detection to test autocorrelation can be done using the Durbin-Waston test (DW test). The hypothesis tested is as follows: $H_0 =$ no autocorrelation ($\rho = 0$)

$H_A =$ there is autocorrelation ($\rho \neq 0$).

Inferential Statistical Analysis

a. Multiple Linear Regression Analysis

Multiple linear regression analysis is a statistical technique used to analyze the influence and relationship between a single dependent variable and several independent variables (Silalahi, 2006). The following is a multiple linear regression equation used to test the influence of Islamic banking financing, inflation, exchange rates, and world palm oil commodity prices on share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI) before, during and after the pandemic COVID-19 is as follows:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 D_i + e$$

Information:

Y_i : Share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI)

β_0 : Constant

β_1 : Partial regression coefficient of sharia banking financing variables

β_2 : Partial regression coefficient of the inflation variable

β_3 : Partial regression coefficient of the exchange rate variable

β_4 : Partial regression coefficient of the world palm oil commodity price variable

X_1 : sharia banking financing

X_2 : Inflation

X_3 : Exchange rate

X_4 : World palm oil

commodity prices e :

Error

b. Coefficient Analysis

The coefficient of determination (R^2) is used to measure the extent to which the model is able to explain variations in the dependent

variable, with values ranging between zero and one. The value $R^2 = 0$ indicates that the independent variable is unable to explain the variation in the dependent variable, while the value $R^2 = 1$ indicates that the independent variable is fully capable of explaining the variation in the dependent variable.

c. F test

The F test is used to test the simultaneous influence of independent variables on the dependent variable (Ghozali, 2011). The F test is carried out based on several basic analyzes as follows:

- 1) Comparison of F_{count} with F_{table}
 - a. If $F_{count} \leq F_{table}$, then H_0 is accepted and H_1 is rejected.
 - b. If $F_{count} > F_{table}$, then H_0 is rejected and H_1 is accepted.
- 2) Comparison of significance values with real levels
 - a. If the significance value is \geq the real level (0,05), then H_0 is accepted and H_1 is rejected.
 - b. If the significance value is $<$ the real level (0,05), then H_0 is rejected and H_1 is accepted.

d. t test

The t test is used to partially test the influence of independent variables on the dependent variable (Ghozali, 2011). The t test is also carried out based on several basic analyzes as follows:

- 1) Comparison of t_{count} with t_{table}
 - a. If $|t_{count}| \leq t_{table}$, then H_0 is accepted and H_1 is rejected.
 - b. If $|t_{count}| > t_{table}$, then H_0 is rejected and H_1 is accepted.
- 2) Comparison of significance values with real levels
 - a. If the significance value is \geq real level (0,05), then H_0 is accepted and H_1 is rejected.
 - b. If the significance value is $<$ the real level (0,05), then H_0 is

rejected and H1 is accepted.

RESEARCH RESULTS AND DISCUSSION

Estimation Results of the Stock Price Determinant Model

Before testing the hypothesis, the model assumptions must first be tested. This assumption test aims to determine whether a model coefficient meets the assumptions of the regression model or not. Some of the assumption tests used include:

Collinearity Test (Multicollinearity)

The multicollinearity test is used to determine whether there is a very strong relationship between two or more independent variables in a multiple linear regression analysis test (Priyastama, 2017). To determine whether or not there is multicollinearity in the regression model by looking at the VIF (Variance Inflation Factor) value in the regression model, if the value is $1,00 < VIF < 10,00$ and $Tolerance > 0,10$ then multicollinearity does not occur (Priyastama, 2017). Data for each variable was processed using SPSS 26 for Windows. The results of the multicollinearity test in this research can be seen in the following table:

Table 3: Multicollinearity Coefficients

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-------|------------|-----------------------------|------------|---------------------------|-------|------|-------------------------|-----|
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | 37503,724 | 6246,333 | | 6,004 | ,000 | | |
| | Financing | -,609 | ,085 | -,536 | -,000 | ,282 | 3,55 | |

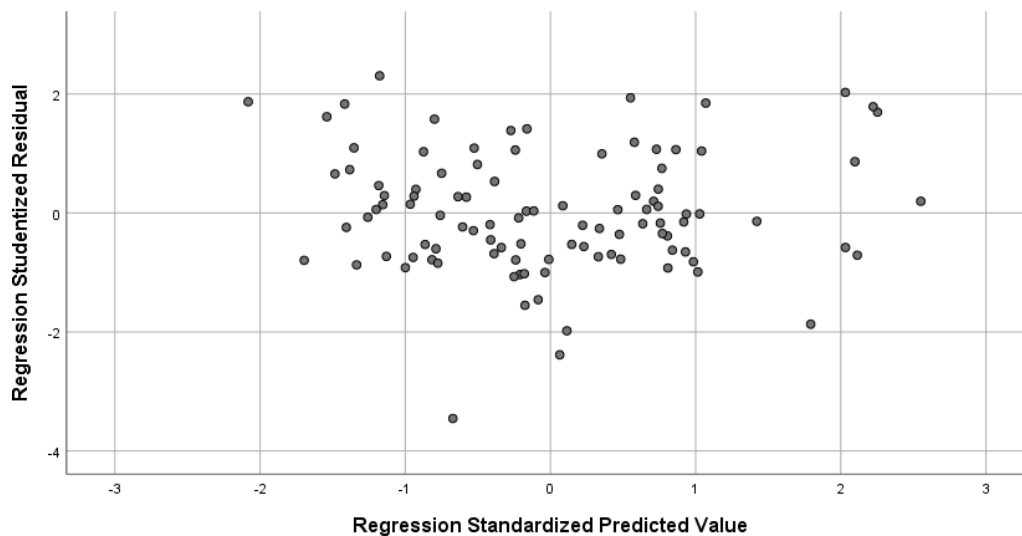
| | | | | | | | |
|-----------------------------|----------------|---------------|-------|----------------|------|------|-----------|
| | | | | 7,17 | | | 0 |
| | | | | 7 | | | |
| Inflation | 128982,3 64 | 12902,3 27 | ,449 | 9,99 7 | ,000 | ,779 | 1,28 3 |
| Exchange rate | -1,696 | ,453 | -,277 | - 3,74 7 | ,000 | ,287 | 3,49 0 |
| Palm Oil Commodit ies | 5,137 | 1,067 | ,308 | 4,81 4 | ,000 | ,384 | 2,60 3 |
| COVID-19 | - 1305,335 | 617,495 | -,140 | - 2,11 4 | ,037 | ,358 | 2,79 4 |

a. Dependent Variable: Stock Price

Source: Research Data (reprocessed)

Based on the data above, it can be seen that the VIF value of Sharia Banking Financing (X1) is $1,000 < 3,550 < 10,000$, the VIF value of Inflation (X2) is $1,000 < 1,283 < 10,000$, the VIF value of Exchange Rates (X3) is $1,000 < 3,490 < 10,000$, the value The VIF of World Palm Oil Commodity Prices (X4) is $1,000 < 2,603 < 10,000$, and the VIF value of Covid-19 (D) is $1,000 < 2,794 < 10,000$ so that all variables can be concluded to have no symptoms of multicollinearity. It can also be seen that the Tolerance value for all independent variables is $> 0,100$. So it can also be concluded that there is no multicollinearity between the independent variables in this research (Priyastama, 2017).

Heteroscedasticity Test



Picture 2:

Heteroskedasticity Scatterplot Source: Research Data (reprocessed)

The output above shows that all independent variables are concluded that heteroscedasticity does not occur in the regression model. The scatter plot shows that there is no particular pattern, such as the points forming a certain regular pattern, so heteroscedasticity does not occur. In a scatter plot, the data is spread across quadrants, so that the data is homogeneous and there is no heteroscedasticity deviation (Priyastama, 2017).

Autocorrelation Test

Autocorrelation is that there is a correlation between the residuals in period t and the residuals in the previous period (t-t). A good regression model is that there is no autocorrelation and is tested using Durbin-Watson (Priyastama, 2017). Based on the Durbin-Watson table, the values obtained are:

DW= 0,967, DL=1,5969, DU=1,7596, 4-DL=2,4031, K=4, N=102

Table 4: Autocorrelation Summary Model

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-----------|----------|-------------------|----------------------------|---------------|
| 1 | ,922 a | ,849 | ,842 | 1758,891 51 | ,967 |

a. Predictors: (Constant), COVID-19, Inflation, Financing, Palm Oil Commodities, Exchange Rates

b. Dependent Variable: Stock Price

Source: Research Data (reprocessed)

The output above shows that DW has a value of 0,967 so it is located between $DW < 4-DL$, namely $0,967 < 2,4031$ or $DW < DU$, namely $0,967 < 1,7596$ so there is no definite conclusion as a result (Priyastama, 2017). Next, a run test will be carried out to conclude with certainty whether there really is no autocorrelation. Data is said to have no autocorrelation if the significant value is above 0,050. The following are the results of the test runs:

Table 5: Run Autocorrelation Test

Runs Test

Unstandardized
Residuals

| | |
|-------------------------|-------------------------|
| Test Value ^a | 3973,16849 ^b |
| Cases < Test Value | 101 |
| Cases >= Test Value | 1 |
| Total Cases | 102 |
| Number of Runs | 3 |
| Z | ,141 |
| Asymp. Sig. (2-tailed) | ,888 |

a. Mode

b. There are multiple modes. The mode with the largest data value is used.

Source: Research Data (reprocessed)

Based on the output above, the significance value is 0,888, which means it is greater than 0,050, so it can be concluded with certainty that there are no symptoms of autocorrelation in this research data.

Normality Test

The normality test in this study aims to determine whether the data taken comes from a normally distributed population or not. In this research, the normality test used was the Kolmogorov-Smirnov technique with the help of SPSS 26 for Windows. A measuring instrument can be said to be significant if $\alpha = 0,050$, which means that, if the p value is $> 0,050$, then the sample used by the researcher comes from a normally distributed population. On the other hand, if the p value is $< 0,050$, then the sample used by the researcher does not come from a normally distributed population (Priyastama, 2017). The results of the normality test in this research can be seen in the following table:

Table 6: One-Sample Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test

Unstandardized

| | | Residuals |
|----------------------------------|----------------|-------------------|
| N | | 102 |
| Normal Parameters ^{a,b} | Mean | ,0000000 |
| | Std. Deviation | 1714,80200403 |
| Most Extreme Differences | Absolute | ,080 |
| | Positive | ,078 |
| | Negative | -,080 |
| Statistical Tests | | ,080 |
| Asymp. Sig. (2-tailed) | | ,102 ^c |

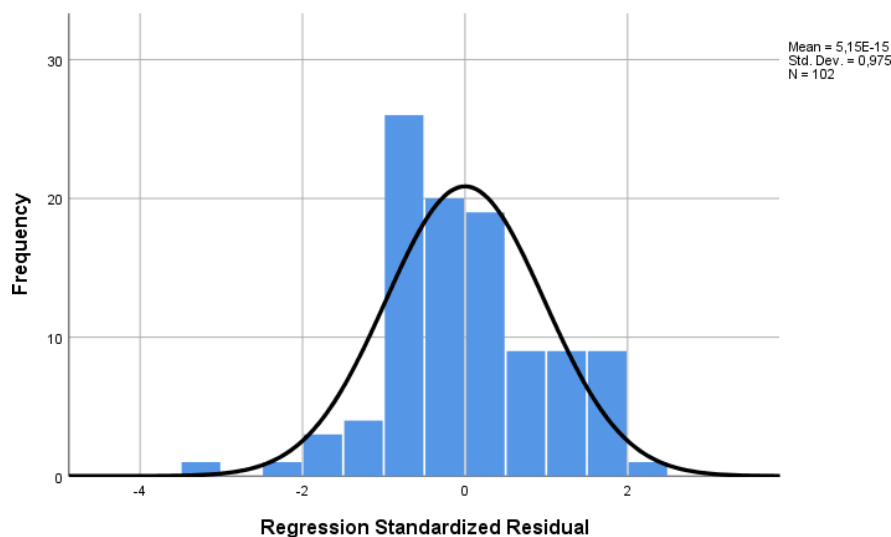
a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance

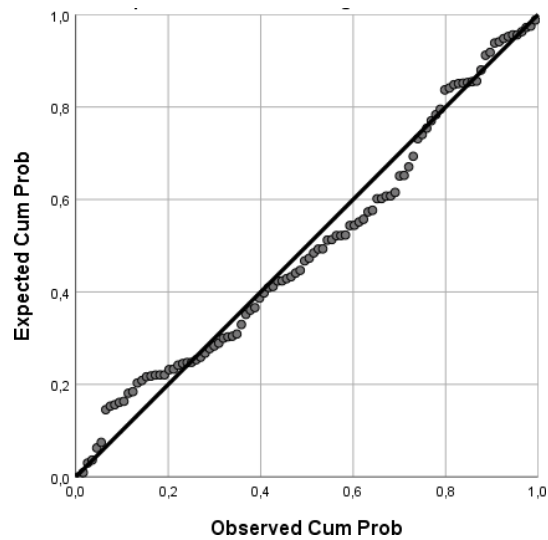
Correction.

Source: Research Data (reprocessed)



Picture 3: Normality

Test Histogram Source: Research Data
(reprocessed)



Picture 4: Normal PP Plot of Regression Standardized Residual

Source: Research Data (reprocessed)

Based on the results of the table above, the 102 data are the results of the normality test using the Kolomogronov-Smirnov Z technique which was carried out with the help of SPSS 26 for Windows. The output above shows the significance value with the Asymp probability value. Sig. (2-tailed) which is 0,102 > 0,050. If the probability value is more than 0,050, then it can be said that the data values for this research are all normally distributed. Conversely, if the probability value is < 0,050, then it is said that the data is not normally distributed. Normality test results are > 0,050, so it can be stated that the composition of this research datais all normally distributed (Priyastama, 2017).

Analysis of the Coefficient of Determination (R²)

The results of processing the coefficient of determination (R²) data using the SPSSprogram are fully explained in the table below:

Table 7: Coefficient of Determination (R²)

| Model Summary | | | | |
|----------------------|---|----------|------------|-------------------|
| Model | R | R Square | Adjusted R | Std. Error of the |

| | | | Square | Estimate |
|---|-------------------|------|--------|----------|
| 1 | ,922 ^a | ,849 | ,842 | 1758,891 |
| | | | | 51 |

a. Predictors: (Constant), COVID-19, Inflation, Financing, Palm Oil Commodities, Exchange Rates

Source: Research Data (reprocessed)

The R-Square value is 0,842 or coefficient of determination which means 84,2% of the share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI) before, during and after the Covid-19 pandemic can be explained by the variables Sharia Banking Financing, Inflation, Exchange Rates, and World Palm Oil Commodity Prices while the rest is explained by other variables. R-Square is in the range of 0 to 1 which is very close to 1. The larger the R-Square, the stronger the relationship between the two variables (Priyastama, 2017).

Analysis of F Test

Results

Table 8: Anova F Test Results

ANOVA^a

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|-----|---------------|---------|-------------------|
| 1 Regression | 1674658586,063 | 5 | 334931717,213 | 108,263 | ,000 ^b |
| Residual | 296995137,217 | 96 | 3093699,346 | | |
| Total | 1971653723,280 | 101 | | | |

a. Dependent Variable: Stock Price

b. Predictors: (Constant), COVID-19, Inflation, Financing, Palm Oil

Commodities, Exchange Rates

Source: Research Data (reprocessed)

The calculated F was obtained at $108,263 > F$ Table at 2,309 (df = 5; 96) with a probability of 0,000 which is smaller than 0,050 so that the regression model can be used to predict the share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI). Because the probability of 0,000 is smaller than 0,050, the regression model can be used to predict the share price of plantation companies listed on the Indonesia Sharia Stock Index (ISSI) or it can be concluded that Sharia Banking Financing, Inflation, Exchange Rates and World Palm Oil Commodity Prices together. the same or simultaneously has a positive and significant effect on the share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI).

Model Estimation Coefficients

Table 9: Regression Coefficient Estimation Results

| Model | | Unstandardized Coefficients | | Standardized Coefficient | t | Sig. |
|-------|------------|-----------------------------|------------|--------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 37503,724 | 6246,333 | | 6,004 | ,000 |
| | Financing | -,609 | ,085 | -,536 | -7,17 | ,000 |

| | | | | | |
|----------------------|------------|-----------|-------|--------|------|
| | | | | 7 | |
| Inflation | 128982,364 | 12902,327 | ,449 | 9,997 | ,000 |
| Exchange rate | -1,696 | ,453 | -,277 | -3,747 | ,000 |
| Palm Oil Commodities | 5,137 | 1,067 | ,308 | 4,814 | ,000 |
| COVID-19 | -1305,335 | 617,495 | -,140 | -2,114 | ,037 |

a. Dependent Variable: Stock Price

Source: Research Data (reprocessed)

It can be seen which Y_i is *Share Prices of Plantation Companies listed on the Indonesia Sharia Stock Index (ISSI)* where X is the constant value along with the four independent variables, namely *Sharia Banking Financing*, Inflation, Exchange Rates, and World Palm Oil Commodity Prices along with D_i are dummy variables, namely Covid-19 Pandemic Conditions.

DISCUSSION

Sharia Banking Financing Influences The Share Prices Of Plantation Companies Listed On ISSI

Sharia banking financing has a significant effect on the share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI). Where the influence is negative with a value of -0,609. So it can be illustrated that if sharia banking financing (X_1) increases by 1 unit, the share price of plantation companies listed on ISSI will decrease

by 0,609.

With these results, H1 is rejected, and these results are different from research Cao et al. (2017) which states that companies that use more financing, have a much lower risk of future share price falls. However, this could happen due to recent conditions, especially during the COVID-19 pandemic, the performance and capacity of recipients of financing products in carrying out their payment obligations has been disrupted by the spread of COVID-19, and has the potential to disrupt banking performance in managing financing. And this picture is in line with the results of research conducted by Khan (2022) who found that financing constraints are more likely to hinder a firm's ability to adjust business operations in response to exogenous shocks. This is also supported by the discovery that the trend in share price data for plantation companies listed on ISSI tends to decline.

The government through the Financial Services Authority (OJK) has issued several policies to overcome several problems that have arisen. Based on provisions Otoritas Jasa Keuangan Republik Indonesia (2020) in article 2 POJK No. 11/POJK.03/2020 classifies the criteria for debtors who receive special treatment to obtain credit stimulus policies, namely customers or debtors who are affected by the spread of COVID-19. The meaning of debtors here are those who have difficulty fulfilling their obligations to banks, because the debtor or the debtor's business has been affected by the spread of COVID-19, either directly or indirectly.

These various schemes are handed over entirely to the bank and are very dependent on the results of the bank's identification of the debtor's financial performance or assessment of the business prospects and ability to pay debtors affected by COVID-19. It is also important for the public to understand that the Financial Services Authority emphasizes to all banks that restructuring policies be carried out

responsibly and so that “moral hazard” does not occur. Don't let this be exploited by irresponsible parties (freeriders). This is related to debtors who were previously running smoothly but then had their business performance clearly decline due to COVID-19, the Financial Services Authority actually asked banks to be proactive in helping their debtors by offering appropriate restructuring schemes, both in terms of time period, number of installments or interest relaxation. Dishonorable actions must be avoided by banks (Disemadi & Shaleh, 2020).

Inflation Affects The Share Prices Of Plantation Companies Listed On ISSI

Inflation has a significant effect on the share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI). Where the influence is positive with a value of 128.982,364. So it can be illustrated that if inflation (X_2) increases by 1 unit, the share price of plantation companies listed on ISSI will increase by 128.982,364.

With these results, H2 is accepted. And these results are in line with research Nkoro & Uko (2016) which explains that there is a relationship between stock market prices and inflation. These results have important implications for investors and regulators in the stock market. The same thing was also tried to be conveyed by Agustina et al. (2019), that inflation has a significant effect on stock prices.

Basically, inflation can be used as a benchmark for the economy in general, because inflation figures reflect the condition of a country's economic stability (Himmati & Sari, 2021). A high inflation rate indicates that an economy is experiencing disruption, whether in the form of declining exports due to decreased competitiveness, decreased savings and investment, or other disruptions such as what occurred some time ago, namely the presence of the COVID-19 pandemic. In conditions like this, the government must be responsive in determining policies that will bring the inflation rate back to a reasonable level.

Highly fluctuating inflation rates reflect the great uncertainty in

the value of money, production levels, distribution and direction of economic development, which can give rise to false expectations and manipulation which can endanger the economy as a whole. On the other hand, low inflation also does not benefit the economy, because it reflects low purchasing power and demand for goods and services, which in turn slows down economic growth (Badan Pusat Statistik Kepulauan Riau, 2021).

In general, inflation figures which reflect price developments and changes in value can be used as basic information for decision making at both macro and micro economic levels, including fiscal and monetary. At the micro level, households and communities can use inflation figures as a reference to adjust daily expenses to their relatively fixed income. Additionally, at the corporate level, inflation figures can be used in spending planning and business contracts. At the macro level, inflation figures reflect monetary and economic conditions or stability (Badan Pusat Statistik Kepulauan Riau, 2021).

The Exchange Rate Influences The Share Prices Of Plantation Companies Listed On ISSI

The exchange rate has a significant effect on the share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI). Where the influence is negative with a value of -1,696. So it can be illustrated that if the exchange rate (X3) increases by 1 unit, the share price of plantation companies listed on ISSI will decrease by 1,696.

With these results, H3 is rejected, basically the results of this study are in line with research Susanto (2015); And Ginting et al. (2016) which explains that there is a significant influence between the exchange rate and the company's share price. As well as Nkoro & Uko (2016) which states that there is a relationship between stock market prices and exchange rates. These results have important implications for investors and regulators in the stock market. More specific, Putri et al.

(2019) explains that the exchange rate has a significant influence on the share prices of palm oil issuers.

The results of the negative influence obtained can be described as if the Indonesian exchange rate against the US dollar increases, which can mean that the value of the Indonesian currency is weakening or depreciating. When a country's currency depreciates, the value of that country's currency becomes less valuable than other currencies. This causes imports to become more expensive, but on the other hand exports become more affordable (Rezandy & Yasin, 2021).

From this research, another fact was also discovered that the exchange rate will also influence the share prices of plantation companies listed on ISSI. The results obtained were that the share prices of plantation companies listed on ISSI decreased.

The World Price Of Palm Oil Commodities Influences The Share Prices Of Plantation Companies Listed On ISSI

World Palm Oil Commodity Prices have a significant influence on the Share Prices of Plantation Companies listed on the Indonesia Sharia Stock Index (ISSI). Where the influence is positive with a value of 5,137. So it can be illustrated that if the world price of palm oil commodity (X4) increases by 1 unit, then the share price of plantation companies listed on ISSI will increase by 5,137.

With these results, H4 is accepted, and this is in line with the results of research conducted by Agustina et al. (2019) which states that the price of palm oil (CPO) partially has a significant effect on stock prices. In other research Nordin et al. (2014) also found that there is a significant influence between palm oil prices on the stock market index.

On the other hand, if you look at conditions in Indonesia, it is known that Indonesia is the world's largest exporter of palm oil, the world's second largest producer of cocoa and rubber. This success occurred because of the excellent potential in planting plantation

products in Indonesia. Factors such as land area, skilled and available labor in sufficient numbers, as well as global demand for various plantation products such as palm oil, rubber and cocoa, are attractive for foreign investment in the plantation sector. This will have an impact on increasing the volume and selling price of plantation commodity exports (Palm Palm, Rubber and Cocoa)(Lubis et al., 2015).

In the Indonesian economy, the plantation sector has a very important role, and palm oil is one of the leading commodities from the plantation sector which has a large contribution to economic activity in Indonesia. Palm oil is needed in various sectors, including industry, households, and even as biodiesel fuel. According to the Central Statistics Agency (BPS), Indonesia is one of the main palm oil exporting countries throughout the world. Total palm oil production continues to grow every year, and it is known that palm oil plantations are spread across 26 provinces in Indonesia. Even though Indonesia routinely exports palm oil every year, there are several factors that cause export volumes to fluctuate, such as exchange rates, GDP and inflation rates. This is because these factors have an important influence on international trade. Where Indonesia's palm oil commodity exports have reached 5 continents, with Asian countries being Indonesia's main market share. These countries include Japan, Singapore, China, India, Malaysia and the Philippines (Pratomo & Saputra, 2022).

Apart from production levels, the price of palm oil on the international market is also known to have an influence on the volume of palm oil exports. When international palm oil prices increase, the volume of palm oil exports from Indonesia also tends to increase. Data on the development of plantation commodity exports has continued to increase over the last 10 years, with Indonesia's trade balance in the plantation sub-sector experiencing a significant surplus. Palm oil is the main commodity for Indonesian plantation exports, with its export

capacity continuing to increase and its export value being quite high. As one of the leading plantation commodities, oil palm makes an important contribution to Indonesia's foreign exchange, because it has quite high economic value, and is one of the vegetable oil producing plants that is considered important (Nurmalita & Wibowo, 2019).

However, on the other hand, the development of oil palm plantations has not been perfectly followed by a management system. The management of oil palm plantations in Indonesia is still far from ideal, causing damage to the surrounding environment. As a result, many negative accusations have been directed at the plantation sector, especially from foreign institutions (Syahza & Asmit, 2020). Large manufacturing companies that buy palm oil in large quantities from Indonesian farmers have also come under pressure from their consumers to source their palm oil more sustainably (Varkkey, Tyson, & Choiruzzad, 2018).

Large-scale plantations can be useful for biodiversity restoration if plantations are established on degraded land. However, in many cases, plantations are established in forest areas with high levels of biodiversity. In such cases, one of the main impacts on the environment is deforestation and loss of biodiversity (Obidzinski & Chaudhury, 2016). In addition, this results in polluted water, loss of land and their homes on that land, loss of existing plants, and cultural changes in society (Morgan, 2017), as well as forest fires (Obidzinski & Chaudhury, 2016). Therefore, real solutions and actions from all relevant stakeholders are needed to fix all these problems.

Conditions Of The COVID-19 Pandemic

The COVID-19 pandemic has had a significant impact on Share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI). Where the influence is negative with a value of -1.305,335. So it can be illustrated that when the COVID-19 pandemic occurs, the

share price of plantation companies listed on ISSI will decrease by 1.305,335.

These results are in line with research conducted by Huang & Liu (2021) which states that there is an influence from the risk of falling company share prices during the COVID-19 pandemic period. In other research conducted by Amar et al. (2021) It was also explained that the stock market was impacted during the COVID-19 conditions.

The heavy burden caused by the COVID-19 outbreak on the world economy is borne by all parties. In fact, the pandemic crisis has disrupted various economic relations. Companies affected by the shock have seen revenue decline. Shareholders of companies negatively impacted by the pandemic have lost most of their shares. In the short term, there is active debate for example about the magnitude of the pandemic crisis, the speed of the eventual recovery, and the effectiveness of various policies. Meanwhile, in the longer term, there is significant uncertainty about whether the pandemic will result in long-term changes in the nature of economic activity, prompting some industries to expand and others to shrink. In fact, the pandemic has accelerated some changes that were already underway. The COVID-19 crisis has also caused significant changes in consumer spending and investment patterns (Didier, Huneus, Larrain, & Schmukler, 2021).

CONCLUSION

This research tries to analyze the determinants of share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI) before, during and after the COVID-19 pandemic. Where the share price of plantation companies listed on ISSI is the dependent variable. Islamic banking financing, inflation, exchange rates, and world palm oil commodity prices as independent variables. This research took a period of research time January 2015 to June 2023.

Based on the results of the research analysis and discussion previously explained, it was concluded that sharia banking financing, inflation, exchange rates and world palm oil commodity prices influence on share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI). But financing Syariah banking and the exchange rate has a significant and negative influence, while inflation and world palm oil commodity prices have a significant and positive influence on share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI).

With influence Islamic banking financing, inflation, exchange rates and world palm oil commodity prices, as well as the conditions of the COVID-19 pandemic provide an explanation that share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI) is strongly influenced by the variables described in this research, namely Islamic banking financing, inflation, exchange rates and world palm oil commodity prices under the conditions of the COVID-19 pandemic.

If we discuss further, it is known that financing from large sharia banks to companies is still considered an additional liability, therefore shareholders will feel that the risk from the company is also increasing. This was also explained by Cao et al. (2017), where there is a strong relationship between the amount of financing and risk.

Therefore, by knowing that share prices are determined by demand and supply, shareholders will tend to sell their shares rather than buy them, because they are aware of the increased risk (considering *ceteris paribus* other factors), and this condition can cause the company's shares to fall.

On the other hand, if we discuss company share prices, it will be in line with Arbitrage Pricing Theory (APT), which explains that returns can be predicted using several macro factors (such as GDP, inflation, exchange rates, etc.) (Kisman & Shintabelle, 2015). Therefore,

maintaining exchange rate stability and inflation is important because it can reduce the performance of company shares.

Highly fluctuating inflation rates reflect the great uncertainty in the value of money, production levels, distribution and direction of economic development, which can give rise to false expectations and manipulation which can endanger the economy as a whole. In addition, conditions where inflation and the exchange rate are factors that cause export volumes to fluctuate. This is because these factors have an important influence on international trade, including palm oil commodities.

From the test results it is also known that the condition before, during and after the COVID-19 pandemic has a negative and significant effect on share prices of plantation companies listed on the Indonesia Sharia Stock Index (ISSI). So it can be concluded that there are significant differences in influence on the share prices of plantation companies listed on ISSI, in conditions before, during and after the COVID-19 pandemic.

The heavy burden caused by the COVID-19 outbreak on the world economy is borne by all parties. The pandemic crisis has disrupted various economic relations. Companies affected by the shock have experienced a decline in revenues. Shareholders of companies negatively impacted by the pandemic have lost most of their shares. Therefore, the government must be careful in making policies without ignoring the negative impacts that will arise, in order to maintain stability and achieve the expected economic goals.

LIMITATION

The limitations of this research include the research variables used to look at the influence of share prices of plantation companies listed on ISSI, namely bank financing, inflation, exchange rates and world palm oil commodity prices. The value obtained from sharia

banking financing, inflation, exchange rates, and world palm oil commodity prices on share prices of plantation companies listed on ISSI is 84,2%, the remaining 15,8%, there are still other variables that can describe the influence plantation company share prices. This research only describes Indonesia's economic conditions, which cannot necessarily be used as a description of the economic conditions of other countries, or the world as a whole. The time period used in this research only focuses on January 2015 to June 2023, where there is the COVID-19 pandemic phenomenon.

REFERENCES

- Agustina, I., Herdiyana, & Simamora, P. (2019). Pengaruh Inflasi dan Harga Minyak KelapaSawit (CPO) terhadap Harga Saham pada Perusahaan Sub Sektor Perkebunan yang Terdaftar di Bursa Efek Indonesia Tahun 2014-2019, 1-15.
- Amar, A. Ben, Belaid, F., Youssef, A. Ben, Chiao, B., & Guesmi, K. (2021). The unprecedented reaction of equity and commodity markets to COVID-19. *Finance Research Letters*, 38, 1-7.
- Annisaa, A., Ismail, N., & Hidayat, I. N. (2019). Sejarah Hukum Perbankan Syariah di Indonesia. *Ijtihad Jurnal Hukum Dan Ekonomi Islam*, 13(2), 247-264.
- Apergis, E., & Apergis, N. (2021). Inflation expectations, volatility and Covid-19: evidence from the US inflation swap rates. *Applied Economics Letters*, 28(15), 1-5.
- Armantier, O., Koşar, G., Pomerantz, R., Skandalis, D., Smith, K., Topa, G., & Klaauw, W. Van Der. (2021). How economic crises affect inflation beliefs: Evidence from the Covid- 19 pandemic. *Journal of Economic Behavior and Organization*, 189, 443-469.
- Ascarya. (2006). *Akad dan Produk Bank Syariah: Konsep dan Praktek di Beberapa Negara*. Bank Indonesia.

- Ayudya, R., Suwandari, A., & Hartadi, R. (2017). The Impacts of Fundamental and Macroeconomic Factors on the Stock Price of Oil Palm Plantation Companies in Indonesia Stock Exchange (IDX). *Journal of Economics, Business & Accountancy Ventura*, 20(2), 141–148.
- Badan Pusat Statistik. (2022). Jumlah Perusahaan Perkebunan Besar Menurut Jenis Tanaman (Unit), 2021.
- Badan Pusat Statistik Kepulauan Riau. (2021). *Inflasi Provinsi Kepulauan Riau 2021*. BPS Provinsi Kepulauan Riau.
- Bahmani-Oskooee, M., & Saha, S. (2015). On the relation between stock prices and exchange rates: a review article. *Journal of Economic Studies*, 42(4), 707–732.
- Bergh, D. D., Connelly, B. L., Ketchen, D. J., & Shannon, L. M. (2014). Signalling theory and equilibrium in strategic management research: An assessment and a research agenda. *Journal of Management Studies*, 51(8), 1334–1360.
- Bursa Efek Indonesia. (2019). Saham Syariah. Retrieved from <https://idxislamic.idx.co.id/edukasi-pasar-modal-syariah/saham-syariah/>
- Bursa Efek Indonesia. (2023). Pengertian Indeks Saham Syariah Indonesia. Retrieved from <https://www.idx.co.id/id/idx-syariah/indeks-saham-syariah>
- Candra, E. W. (2012). Analisis Peranan Pengeluaran Pemerintah, Tenaga Kerja dan Penanaman Modal Dalam Negeri Terhadap Pertumbuhan Ekonomi Provinsi Jawa Timur 2001-2010.
- Cao, F., Ye, K., Zhang, N., & Li, S. (2017). Trade credit financing and stock price crash risk. *Journal of International Financial Management and Accounting*, 29(1), 1–27.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39–67.

- Creti, A., Joëts, M., & Mignon, V. (2013). On the links between stock and commodity markets' volatility. *Energy Economics*, 37, 16–28.
- Dempsey, M. (2013). The Capital Asset Pricing Model (CAPM): The History of a Failed Revolutionary Idea in Finance? *Abacus*, 49, 7–23.
- Didier, T., Huneus, F., Larrain, M., & Schmukler, S. L. (2021). Financing firms in hibernation during the COVID-19 pandemic. *Journal of Financial Stability*, 53, 1–14.
- Disemadi, H. S., & Shaleh, A. I. (2020). Banking credit restructuring policy on the impact of COVID-19 spread in indonesia. *Jurnal Inovasi Ekonomi*, 05(02), hal.63-70.
- Ditjen P2P Kementerian Kesehatan. (2021). Penguatan Sistem Kesehatan dalam Pengendalian COVID-19. Retrieved from <http://p2p.kemkes.go.id/penguatan-sistem-kesehatan-dalam-pengendalian-covid-19/>
- Fama, E. F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *The Journal of Finance*, 25(2), 383–417.
- Fama, E. F. (1991). Efficient Capital Markets: II. *The Journal of Finance*, 46(5), 1575–1617.
- Feng, G. F., Yang, H. C., Gong, Q., & Chang, C. P. (2021). What is the exchange rate volatility response to COVID-19 and government interventions? *Economic Analysis and Policy*, 69, 705–719.
- Ghozali, I. (2011). Aplikasi Analisis Multivariate dengan Program IBM SPSS 25 Edisi 9. Semarang: Badan Penerbit Universitas Diponegoro. *Variabel Pemoderasi. E-Jurnal Akuntansi Universitas Udayana*.
- Ginting, M. R. M., Topowijono, & Sulasmiyati, S. (2016). Pengaruh Tingkat Suku Bunga, Nilai Tukar dan Inflasi terhadap Harga Saham (Studi Pada Sub-Sektor Perbankan Di Bursa Efek Indonesia Periode 2011-2015). *Jurnal Adminisrasi Bisnis*, 35(2), 77–85.
- Hassan, M. K., Aliyu, S., Saiti, B., & Halim, Z. A. (2020). A review of Islamic stock market, growth and real-estate finance literature.

International Journal of Emerging Markets, 16(7), 1259–1290.

Himmati, R., & Sari, C. M. (2021). *Ekonomi Moneter (teori dan soal)*.

Huang, S., & Liu, H. (2021). Impact of COVID-19 on stock price crash risk: Evidence from Chinese energy firms. *Energy Economics*, 101, 1–10.

Hutauruk, M. R., Mintarti, H. S., & Paminto, H. A. (2014). Influence of fundamental ratio, market ratio and business performance to the systematic risk and their impacts to the return on shares at the agricultural sector companies at the Indonesia Stock Exchange for the period of 2010-2013. *Academic Research International*, 5(5), 149–168.

Ismail, N., & Aisyah, S. (2022). Islamic Social Finance: A Bibliometric Analysis. *Global Review of Islamic Economics and Business*, 9(2), 019.

Ismail, N., & Muqorobin, A. (2017). Implementation of Corporate Social Responsibility (CSR) On Islamic Banking: Maqasid Sy ariah' s Approach. *Islamic Economics Journal*, 3(1), 75–91.

Kabir, S. H., Masih, A. M. M., & Bacha, O. I. (2017). Risk–Return Profiles of Islamic Equities and Commodity Portfolios in Different Market Conditions. *Emerging Markets Finance and Trade*, 53(7), 1477–1500.

Khan, S. U. (2022). Financing constraints and firm-level responses to the COVID-19 pandemic: International evidence. *Research in International Business and Finance*, 59, 1–15.

Kharouf, H., Lund, D. J., Krallman, A., & Pullig, C. (2020). A signaling theory approach to relationship recovery. *European Journal of Marketing*, 54(9).

Kisman, Z., & Shintabelle, R. M. (2015). The Validity of Capital Asset Pricing Model (CAPM) and Arbitrage Pricing Theory (APT) in Predicting the Return of Stocks in Indonesia Stock Exchange. *American Journal of Economics*, 1(3), 184–189.

- Lintner, J. (1965). The Valuation of Risk Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets. *Review Literature And Arts Of The Americas*, 47(1),13-37.
- Lubis, R. P., Firdaus, M., & Sasongko, H. (2015). Faktor Faktor yang Mempengaruhi Investasi Asing Langsung pada Sektor Perkebunan di Indonesia. *Jurnal Bisnis Dan Manajemen*, 16(2), 80-89.
- Ma, Q., Zhang, M., Ali, S., Kirikkaleli, D., & Khan, Z. (2021). Natural resources commodity prices volatility and economic performance: Evidence from China pre and post COVID-19. *Resources Policy*, 74, 1-11.
- Morgan, M. (2017). Women, gender and protest: contesting oil palm plantation expansion in Indonesia. *Journal of Peasant Studies*, 44(6), 1-20.
- Nkoro, E., & Uko, A. K. (2016). Exchange Rate and Inflation Volatility and Stock Prices Volatility: Evidence from Nigeria, 1986-2012. *Journal of Applied Finance & Banking*, 6(6), 1792-6599.
- Nordin, N., Nordin, S., & Ismail, R. (2014). The Impact of Commodity Prices, Interest Rate and Exchange Rate on Stock Market Performance: An Empirical Analysis From Malaysia. *Malaysian Management Journal*, 18, 39-52.
- Nurmalita, V., & Wibowo, P. A. (2019). Analisis Faktor-Faktor yang Mempengaruhi Ekspor Minyak Kelapa Sawit Indonesia ke India. *Economic Education Analysis Journal.*, 8(2), 605-619.
- Obidzinski, K., & Chaudhury, M. (2016). Transition to timber plantation based forestry in Indonesia: towards a feasible new policy POLICIES. *International Forestry Review*, 11(1), 79-87.
- Otoritas Jasa Keuangan Republik Indonesia. (2020). *Peraturan OJK Nomor 11/Pojk.03/2020 Tentang Stimulus Perekonomian Nasional Sebagai Kebijakan Countercyclical Dampak Penyebaran Corona Virus*

Disease 2019.

- Paminto, A., Setyadi, D., & Sinaga, J. (2016). The Effect of Capital Structure, Firm Growth and Dividend Policy on Profitability and Firm Value of the Oil Palm Plantation Companies in Indonesia. *European Journal of Business and Management*, 8(33), 123– 134. Retrieved from www.idx.co.id,
- Pratitis, F. A., & Setiyono, T. A. (2021). Komparasi Indeks Saham Syariah Indonesia (ISSI) Sebelum dan Saat Pandemi Covid-19. *JIEF: Journal of Islamic Economics and Finance*, 1(1), 68–79.
- Pratomo, G., & Saputra, O. C. C. (2022). Analisis Determinan Ekspor Minyak Kelapa Sawit Indonesia Pada Negara Asia-6 Tahun 2011-2020. *Economie: Jurnal Ilmu Ekonomi*, 04(1), 14–24.
- Priyastama, R. (2017). *Buku Sakti Kuasai SPSS: Pengolahan Data & Analisis Data*. Yogyakarta: Start Up.
- Putri, P. Y., Achsani, N. A., & Pranowo, K. (2019). The Effects of Macroeconomic Variables and Corporate Financial Performance on Stock Prices of Palm Oil Companies in Indonesia. *Jurnal Manajemen Dan Agribisnis*, 16(1), 12–22.
- Rahmayani, D., Oktavilia, S., & Putri, P. I. (2021). The Impact of Covid-19 Pandemic on Inflation in Indonesia. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi Dan Pembangunan*, 22(2), 117–128.
- Refianti, S., Weningsih, D., Rahmadani, N. A., Vutezah, R., & Christine, D. (2020). The Effects of Financial Ratios on Share Prices (An Empirical Study of Agricultural Sector Companies Plantation Subsector Listed on The Indonesia Stock Exchange (IDX) for The 2013-2019 Period). *Journal Of Archaeology Of Egypt/Egyptology*.
- Rezandy, A., & Yasin, A. (2021). Pengaruh Nilai Tukar, Inflasi, dan Pendapatan Nasional terhadap Ekspor Nonmigas Indonesia. *Journal Of Economics*, 1(3), 95–110.
- Riani, R., & Wulandari, R. (2022). Assessing the Islamic Bank Financing

- During Economic Recession: The Role of Stimulus Regulation POJK Number 11/POJK.03/2020. *Al- Muzara'Ah*, (11), 57-75.
- Ross, S. A. (1976). The arbitrage theory of capital asset pricing. *Journal of Economic Theory*,13(3), 341-360.
- Sekretariat Presiden. (2022). Pemerintah Putuskan Cabut PPKM Mulai Hari Ini. Retrieved from <https://www.presidentri.go.id/siaran-pers/pemerintah-resmi-cabut-kebijakan-ppkm-mulai-hari-ini/>
- Sharpe, W. F. (1964). Capital Asset Prices: A Theory of Market Equilibrium Under Conditions Of Risk. *The Journal of Finance*, 19(3), 425-442.
- Silalahi, U. (2006). Metode Penelitian Sosial. *Metode Penelitian Kualitatif*.
- Soufian, N. (2001). Empirical Content of Capital Asset Pricing Model (CAPM) and ArbitragePricing Theory (APT) Across Time, 1-30.
- Stiglitz, J. E. (2002). Information and The Change in The Paradigm in Economics, 472-540.
- Suciningtias, S. A., & Khoiroh, R. (2015). Analisis Dampak Variabel Makro Ekonomi Terhadap Indeks Saham Syariah Indonesia. *Conference In Business, Accounting, And Management (CBAM)*, 2(1), 378-412.
- Sukendar, A. (2000). Pengujian Dan Pemilihan Model Inflasi Dengan Non Nested Test Studi Kasus Perekonomian Indonesia Periode 1969-1997. *Jurnal I-Lib UGM*, 15(2), 164-178.
- Susanti, A., & Maryudi, A. (2016). Development narratives, notions of forest crisis, and boom of oil palm plantations in Indonesia. *Forest Policy and Economics*, 73, 130-139.
- Susanto, B. (2015). Pengaruh Inflasi, Bunga Dan Nilai Tukar Terhadap Harga Saham (Studi Pada : Perusahaan Sektor Properti Dan Real Estate Tercatat Bei). *Jurnal ASET (AkuntansiRiset)*, 7(1), 29-38.
- Suseno, & Simorangkir, I. (2004). *Sistem dan Kebijakan Nilai Tukar. Seri Kebanksentralan*.

- Sutawijaya, A., & Zulfahmi. (2012). Pengaruh Faktor-Faktor Ekonomi Terhadap Inflasi di Indonesia. *Jurnal Organisasi Dan Manajemen*, 8(2), 85-101.
- Syahza, A., & Asmit, B. (2020). Development of palm oil sector and future challenge in Riau Province, Indonesia. *Journal of Science and Technology Policy Management*, 11(2), 149-170.
- Varkkey, H., Tyson, A., & Choiruzzad, S. A. B. (2018). Palm oil intensification and expansion in Indonesia and Malaysia: Environmental and socio-political factors influencing policy. *Forest Policy and Economics*, 92, 148-159.