

Investment Rating for Replanting Palm Oil Plantation Companies in Sumatera, Indonesia

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ABSTRACT: Palm oil plantation investment activities, spreads throughout the province, with the largest being in Sumatera and Kalimantan. It is known that palm oil plantations in Sumatera are the oldest plantations in Indonesia. The main problem in palm oil plantations is the decreased productivity of plants that are more than 22 years old. One of the reasons for attractive investment in agribusiness is the contribution of the agricultural sector, which is one of the second largest contributors to GDP after the manufacturing industry. The agricultural sector is dominated by the plantation sub-sector, where the largest plantation production in Indonesia is palm oil, and Indonesia is the world's largest exporter of palm oil. The purpose of this research is to find out whether the investment in palm oil plantations which is currently entering the replanting stage in the Sumatera region is included in the "investment grade" category in the Moody's rating and to find out how to make investment in replanting palm oil plantations in the Sumatera region is included in the "investment grade" category and/or can increase the rating through Moody's. This research is a quantitative research with a descriptive approach. Participants in this study used a purposive sampling technique, where the data collected was obtained from secondary data. Analysis of the data used in this study is Moody's rating analysis. After all input and analysis is carried out, the results are obtained in the form of an investment feasibility rating "Ba3" with the risk category "Medium Risk". Thus, a plantation company (replanting) in Sumatera is classified as investment grade or eligible for investment. Improvements need to be made so that investment grade can reach the "Low Risk" category or at least get better so that it can attract investors.

KEYWORDS -Investment Grade, Moody's Rating, Palm Oil Plantation, Sustainable Finance

I. INTRODUCTION

According to Purba and Sipayung (2017), in the Indonesian economy, the palm oil industry has a strategic role, the largest foreign exchange earner, the locomotive of the national economy, energy sovereignty, driving the populist economic sector, and employment. Plantation investment activities, one of which is palm oil, spreads throughout the province, with the largest being in Sumatera and Kalimantan. The spread of investment throughout Indonesia shows the role of the plantation sub-sector for development expansion (Rachmat et. Al., 1995).

The two main islands of palm oil plantation centers in Indonesia are Sumatera and Kalimantan. About 90% of palm oil plantations in Indonesia are located on these two palm oil islands. He said, investment in palm oil plantations in Sumatera is expected to boost the regional economy, without forgetting environmental preservation and the value of local wisdom. According to Saratian and Arief (2018), environmental and social issues are also an equally important concern in business activities as the triple bottom line concept. Abdullah et. al (2017) said that increasing green economy priority by companies increases their sustainability in the economy.

Based on data from the Ministry of Environment and Forestry (2018), Indonesia's forest area in April 2018 was 125.9 million hectares or 63.7% of the land area. Based on data from the Ministry of Industry (2018), the contribution of the agricultural sector to Gross Domestic Product (GDP) is around 13.96% in the third quarter of 2017, so that the agricultural sector is one of the second largest contributors to GDP after the processing industry. The largest plantation production in Indonesia is palm oil, and Indonesia is the world's largest exporter of palm oil. Based on GAPKI data (2018), the production of Crude Palm Oil (CPO) in 2017 reached 38.17 million tonnes and Palm Kernel Oil (PKO) 3.05 million tonnes, so that the total total of Indonesian palm oil in 2017 was 41.98 million tonnes. According to tuk.or.id (2017), palm oil derivatives provide a sizeable export contribution and become one of the largest contributors to the country's income.

It is known that palm oil plantations in Sumatera are the oldest gardens in Indonesia, which originated from palm oil kernels from the Bogor Botanical Gardens and brought to Sumatera in 1875. This means that palm oil plantations on the island of Sumatera are one of the oldest in Indonesia. According to the news quoted from Pertanian.go.id (2020), many palm oil trees in Sumatera have reached the age of 20-25 years, so they require rejuvenation and a replanting program. There are quite a lot of problems in palm oil plantations that are entering the age of replanting, including the use of careless seeds which lowers productivity, lack of partnerships

between companies and farmers and late replanting (Bisnis.com, 2019). In Kompas.com (2009), the productivity of smallholder palm oil plantations in Sumatera in recent years has begun to decline. This condition occurs due to the age of the aging plants.

According to Lubis and Lubis (2018), the main problem in palm oil plantations is the decline in plant productivity on plants that are more than 22 years old because the age of these plants is already above the maximum average productivity age of palm oil. However, in the news cncindonesia.com (2020), replanting palm oil, according to the Coordinating Minister, Airlangga, it is important to encourage Indonesia's energy fulfillment through B30 or B40 or Green Refinery. The B30 program will be completed until the end of 2020 and 2021, and the B40 distillation program is expected to run in 2022. Meanwhile, the development of Green Refinery (D100 or green diesel) can be encouraged to be carried out in 2026.

Apart from that, the Sumatera region is still the prima donna for attracting investors, especially in agriculture and plantations. From medcom.id (2016), the Investment Coordinating Board (BKPM) assessed that the Sumatera region has the potential to attract investors to invest in the island of Andalas. One thing that can be exploited is the potential of natural resources that are abundant in the region. Deputy for Control and Implementation of Investment at BKPM, Azhar Lubis, explained that the equitable distribution of investment development was pushed outside of Java, especially natural resource-based processing industries such as downstreaming of agriculture and plantations such as downstreaming palm oil into drugs (pharmaceuticals) or cosmetics. As an area rich in natural resources and in a strategic location in the Indian Ocean, these two industries are investment opportunities that are encouraged for the Sumatera region. Quoted from Liputan6.com (2016), Sumatera is one location in Indonesia that the government continues to promote to investors in order to improve its economy. Currently, there are still many investment potentials in Sumatera that have not been maximized.

Palm oil production is seen as a means to promote economic improvement, poverty reduction and livelihood improvement through related jobs and wages, but without good planning and integrated with policies, the biggest beneficiaries will still be obtained by the key players in this industry. According to Saratian and Arief (2018), palm oil plantation expansion cannot be separated from palm oil investment financed by banks and investors. Even though there is a large investment potential in the palm oil industry in Sumatera, investors and / or the government still need an initial assessment to ensure that palm oil plantations are included in investment grade through rating assessments, especially in land conditions that are currently in the replanting stage, where productivity and the fertility of the land is considered to have decreased.

According to Afrizawati (2011), by including Indonesia as part of investment grade, it is hoped that it can contribute to the progress of overall economic growth, both domestic and foreign investment. Companies and investors must remain cautious about rating changes so that decisions can be made appropriately (Darmesti, 2014). According to Azanil et al. (2015), the higher the rating, the company is considered capable of fulfilling its obligations on time. Conversely, the lower the rating of a company, the higher the risk of default and / or return on investment. Ratings are usually issued by rating agencies. In investment, rating is one of the most important things because it determines whether a company can get funding from the issuance of bonds or credit from the bank. A change in rating can be one of the factors affecting the direction of investment. A high rating turns out to be influential for many things. For example, it can encourage an increase in direct investment from abroad (Foreign Direct Investment) and indirect investment. For example, indirect investment in the capital market or money market. According to Mardaconsita and Soelton (2018), the profitability ratio will affect the rating level of a company.

In general, investors will seek information before making investment decisions in certain countries and specifically on certain investment instruments. This is done to find out how high the risk to be borne and how high the investment return is expected to compensate them for the risks they have to bear. Saratian et al. (2020), previously conducted research on palm oil plantations in Papua, where the results of the investment feasibility rating were "B2" with the risk category "Medium Risk". Thus, the company is classified as "investment grade" or feasible for investment, but the B2 score is included in the lowest investment grade category, so improvements are needed so that grading increases and attracts investors. From the previous research above, it is known that there is no research that specifically discusses Moody's rating on the palm oil plantation industry (replanting), especially in the Sumatera Region. As the researchers' milestone, future research is planned to be carried out in palm oil plantations that are spread across the islands of Indonesia, given that palm oil plantations are a leading sector so that an investment grading assessment is practically required to attract and maintain investor confidence, especially in palm oil plantations replanting. In addition, it is hoped that the results of this research can add to the scientific knowledge in the financial sector, especially regarding Moody's Rating and Investment Grade.

II. LITERATURE REVIEW

2.1. Ratio

According to Warren et. al. (2017), an element of financial statements is useful in interpreting the results of company operations. Then by making comparisons with the same items from the previous period, we can get even greater benefits, namely by means of horizontal analysis. The magnitude of the increase or decrease of the various accounts in the financial statements and their causes should be investigated further to find out whether the company's operations can increase its efficiency. According to Fahmi (2014), the ratio is the ratio of the amount, from one number to another, then the comparison is seen in the hope that later answers will be obtained and used as study material to be analyzed and made decisions. Arief et. al. (2020), explains that financial ratios provide an indication of the financial strength of a company.

2.2. Balance Sheet

Financial reports are several pieces of paper with numbers written on them, but it is no less important to think about the real assets that underlie the numbers (Brigham and Houston, 2018). According to Warren et. al. (2017), the balance sheet is a list of assets, liabilities and owner's equity as of a certain date. Assets are arranged in order of their liquidity, or the amount of time it takes to convert them into cash (Brigham and Houston, 2018). All financial statements must be identified by the name of the company, the type of report, and the reporting period. The data contained in the income statement, cash flow statement and owner's equity statement are used for a certain period, while the balance sheet is for a certain date.

2.3. Industry/Market

According to Madura (2011), the success of a business generally depends on the business environment. Likewise, for existing businesses, stakeholders must always monitor the environment so that they can anticipate how demand for their products or production costs changes. The industrial environment reflects the changing conditions within the industry to which the company is exposed. Conditions in each industry vary according to business models, demand and competition. According to Zaharuddin (2006), market analysis describes the magnitude of market opportunities in the product-market segment by considering the strength of competitors, both in the trading business, downstream and upstream industries. The company gets business benefits because it is in an industry that experiences high customer demand for its products. Corporate customers, namely individuals or other companies who buy goods or services in exchange for money or other goods of value (Warren et. al., 2017).

2.4. Company

According to Warren et. al. (2017), a company is an organization in which basic resources, namely raw materials and labor, are processed and managed to produce goods or services (output) for customers. The goal of the majority of companies is to maximize profits. Profit is the difference between the amount received from customers for goods and services produced, compared with the amount spent on purchasing resources to produce these goods and services. There are three types of companies that operate to generate profits from a business process point of view, namely manufacturing companies, trading companies and service companies.

2.5. Management

According to Hasibuan (2013), management is the science and art of regulating the process of using human resources and other sources effectively and efficiently to achieve certain goals. Company management is closely related to human resources. According to Madura (2011), human resources are people who are capable of doing work for a business. Management can contribute to production by using their physical abilities, such as working in a factory to produce a product. Management should ideally be able to make contributions, such as proposing changes in the production process or motivating other workers. According to Zaharuddin (2006), basically there are several types of management, but in the context of exploring a business, there are only two types of management, namely small business scale management or large business scale management.

2.6. Moody's Rating

This research is supported by previous studies on Moody's Rating from different industries to support and strengthen the study and results of this research. The following table describes the results of a study of several previous studies that have been conducted regarding Moody's Rating.

Genc and Basar (2019) said that the comparison of the results obtained by rating countries on various macroeconomic variables uses the credit score given by the three main credit rating agencies and uses the MOORA method. The second is the determination of how optimistic or pessimistic the three main CRA outcomes are according to their estimates by macroeconomic variables. The results of Fererhofer (2017) research show that family companies achieve better scores in profitability, leverage structure and liquidity

development based on credit rating scores. Only company size represents no significant difference between family and NFF.

According to Krichene and Khoufi (2016), companies with small boards and large blockholders tend to target lower rankings. We also find that firms tend to make choices that compensate for deviations from their target rating levels. In the experiments of Tang, et. al (2018), found that the participant's credit rating is significantly influenced by the client's position, and this effect does not depend on the sophistication of the investor base of the company being rated or on the risk profile of the company being rated. We also found that the client's position influenced the participants' briefing goals, and these briefings were a significant predictor of the credit rating.

White (2010) says those involved in this public policy debate on credit rating agencies should ask themselves the following question: Is the regulatory system that delegates important safety assessments of bonds to a third regulatory system that delegates important safety assessments of bonds to third parties in the best interests of regulated financial institutions and financial parties in the best interests of regulated financial institutions and financial markets more generally? To what extent will the broader regulation of rating agencies succeed in pressuring rating agencies to make better judgments in order to make better judgments in the future? To what extent do these regulations limit flexibility, innovation, and entry into the bond information market? Can financial institutions instead be trusted to seek their own sources of information on the creditworthiness of bonds, as long as financial regulators oversee the security of the bond portfolio?

According to Hirk, et. al. (2018), an empirical application consisting of an analysis of the credit ratings of companies from three major credit rating agencies (Standard & Poor, Moody's and Fitch). Company-level and share price data for publicly traded US companies as well as an unbalanced issuer's credit rating panel are collected and analyzed to illustrate the proposed framework. Joffe, et. al (2012) stated that the credit crisis in relatively high-income countries was a disaster. The rating development stage and future reform requirements of China's credit rating industry (Bian, 2015).

The country's credit rating drew substantial and justifiable criticism after the 2008 financial crisis (Ozturk, 2015). Gaillard (2009) finds that three variables (history of defaults of sovereign issuers, GDP per capita and ratio of net direct debt to local government operating income) explain 80% of the sub-government rankings. Saratian et. al, (2020), research found that the investment feasibility rating in Papua's palm oil plantations is "B2" with the risk category "Medium Risk". Thus, the company is classified as "investment grade" or feasible for investment, but the B2 score is included in the lowest investment grade category, so improvements are needed so that grading increases and attracts investors.

From the previous research above, it is known that there has been no research that specifically discusses moody's rating on the palm oil plantation industry (replanting), especially in the Sumatra Region, so it is hoped that the results of this study can add to the scientific knowledge in the financial sector, especially regarding moody's ratings and investment grade. This of course can be done with good cooperation between researchers, academics, practitioners, plantation and palm oil processing institutions, as well as the role of the community as stakeholders of the industry itself.

III. METHODOLOGY

This study uses a quantitative research approach. Abdurrahman and Muhidin (2011), quantitative research is research that reflects that the data to be analyzed comes from numerical data. In this case the researcher wants to know whether investment in palm oil plantation and processing in Sumatra falls into the investment grade or non-investment grade category at Moody's rating and knows how to make investment in palm oil plantation and processing in Sumatra fall into the investment grade and / or category. increase rating through moody's rating analysis.

This study uses a purposive sampling technique, in which the sample selection is based on the subjective considerations of the researcher because it is considered appropriate in providing the desired information (Ferdinand, 2014). The sample in this study is 1 palm oil plantation and processing company in Sumatra. The reasons for choosing the object of research were that the company had complete legality and permits, was already operating, and had a fairly large group garden landbank of +200,000 hectares and was equipped with processing plant facilities with a capacity of 60 tons / hour. The data collected in this study were obtained from secondary data. The data is obtained from the company's head office in Jakarta. Secondary data is obtained from financial reports, legality of production reports, sales reports, annual reports and other supporting data, both internal and external.

According to Haningsih et. al. (2014) requires strategic information, financial information and non-financial information for investors to make decisions. Data processing is carried out by assessing the company's financial statements for the last 3 years on mood rating analysis (MRA) to obtain values for historical ratio assessment variables and balance sheet factors, as well as by conducting an assessment of industry / market, company and management variables. The variables, dimensions and indicators in this study are as follows:

Table1. Variable, Dimension and Indicator

Variabel	Dimensi	Indikator
Historical Ratio Assessment	Operations	PBT / Total Assets
		PBT / Net Sales
		PBT / Tangible Net Worth
		Sales growth
		GPM
	Debt Service	NOP Margin
		Breakeven Sales Realization
		Earning Coverage
		Cash Flow Coverage
		Trade Payable Days
	Liquidity	Account Receivable Days
		Quick Ratio
	Capital Structure	Inventory Days
		Debt / Tangible Net Worth
		Borrowed Funds / EBITDA
		Borrowed Funds / Effective TNW
Variabel	Dimensi	Indikator
Balance Sheet Factors	Liquidity	Inventory Valuation
		Accounts Receivable Risk
	Capital Structure	Debt Repayment
		Owner Support
		Intrinsic Full Value of Intangibles
Industry / Market	Industry	Industry Type
	Market	Market Condition
		Customer Power
		Diversification of Products
		Competitive Position
Company		Years in Relationship
		Business Stage
		Quality Management
		Supplier Power
		Credit History
Management		Conduct of Account
		Experince in Industry
		Financial Reporting and Formal Planning
		Risk Management
		Openness
		Risk Appetite
		Management Style and Structure

The research stage began with secondary data collection in the form of secondary data obtained from financial reports, legality of production reports, sales reports, annual reports and other supporting data, both internal and external. Next, process the data through the assessment of the company's financial statements for the last 3 years on moody's rating analysis (MRA) to obtain values for historical ratio assessment variables and balance sheet factors, as well as by assessing industry / market, company and management variables. These variables will have their respective scores which in the end produce a rating that is classified as investment or non-investment grade.

The historical ratio assessment and balance sheet factors variables will be carried out spreading the financial statements for the last 3 years on the research object. After that, market checking will be carried out in industry / market variables by determining; industry type, market condition, customer power, diversification of products and competitive position. In the variable company an assessment will be carried out by determining; years in relationship (company with creditors / investors), business stage, quality management, supplier power, credit history and conduct of account. Then the management variable is carried out an assessment by determining; experience in industry, financial reporting and formal planning, risk management, openness, risk appetite, and management style and structure. After the overall analysis is carried out, the output that will be produced is the investment feasibility rating. The breakdown of investment feasibility based on Moody's standards is as follows:

Table 2. Moody’s Rating Grade

Moody's Rating Grade		Score Minimum	Average PD (%) in Master Scale	Kategori Risk Area
1	Aa1	--	0,01%	Low Risk Area
2	Aa2	--	0,03%	
3	Aa3	--	0,04%	
4	A1	--	0,06%	
5	A2	77,646	0,10%	
6	A3	76,581	0,14%	
7	Baa1	73,952	0,18%	
8	Baa2	70,233	0,21%	
9	Baa3	67,446	0,30%	
10	Ba1	64,193	0,41%	
11	Ba2	61,866	0,62%	
12	Ba3	58,545	1,00%	
13	B1	55,293	1,47%	
14	B2	51,137	2,62%	
15	B3	48,036	4,70%	High Risk Area
16	Caa1	41,399	7,90%	
17	Caa2	38,278	14,51%	
18	Caa3	37,557	24,66%	
19	Ca1	35,850	46,60%	
20	Ca2	0,000	81,49%	
Default	C	N.A	100.00%	

An investment that is considered feasible or is included in the investment grade category is a rating of Aa1 to B2. The green indicator is investment grade with low risk, while the yellow one is investment grade with moderate risk. The B3 to C ratings are classified as non-investment grade and have high risk. The output of this research is grade after data processing through Moody's Rating Analysis (MRA), so it is known that replanting palm oil plantation and processing companies in Sumatera are included in the investment grade or non-investment grade category.

IV. RESULT AND DISCUSSION

The stages begin with data processing through the assessment of the company's financial statements for the last 3 years on moody's rating analysis (MRA) to obtain values for historical ratio assessment variables and balance sheet factors, as well as by conducting an assessment of industry / market, company and management variables. These variables will have their respective scores which in turn produce a moody's rating. The historical ratio assessment and balance sheet factors variables will be carried out spreading the financial statements for the last 3 years on the research object.

In the "balance sheet factor" section, there are fields that must be filled in related to the spread of financial statements for the last three years, including: in the "inventory valuation" indicator, the researcher selects "auditor present", which means that the company's inventory data is taken from the company's audit financial report. presented by auditors classified as the Big Four. Furthermore, on the "Accounts Receivable Risk" indicator, the researcher chooses "Good Spread, Good Quality" on the grounds that the company's receivables consist of at least fifteen separate entities, spread over at least three separate industries or geographies, while a bad spread will consist of up to five. separate entities if in similar industries or geographies, then if classified as average, then the spread will be between good and bad. When determining the quality of the debtor, consider the opportunities for litigation (for example, disagreements about the agreement) and the reliability of the debtor. In the "Debt Repayment" indicator, the researcher chooses "Wide Spread" with the consideration that debt repayment refers to payments that are well-spread in the future and a concentration of contractual debt payments that can reduce the obligor's future cash flows that are also spread out. In the "Owner Support" section, "> 30%" is selected because owner support refers to the level of additional financial support that can be provided by the owner to the business, in this case it can be seen from the net worth when compared to the total assets of the company. This support can provide protection against bankruptcy when the company is experiencing difficulties, therefore it can reduce the possibility of default. In the indicator "Intrinsic Full Value of Intangibles", the researcher chooses "Negligible" with the consideration that this indicator refers to the value of intangible assets owned by the company, in this context the company does not have intangible assets. In addition, it is known that in calculating the company's leverage, the system removes intangibles from its capital calculation.

After that, market checking will be carried out in industry / market variables by determining; industry type, market condition, customer power, diversification of products and competitive position. In the indicator "Industry Type", it is filled with the palm oil plantation and processing industry. In the "Market Condition" section, "Neutral" is chosen because Market Condition refers to the impact of local market conditions that affect the obligor's performance. In this case, local market conditions are largely similar to the industry as a whole. In the "Customer Power" indicator, the researcher chooses "Some" with the consideration that customer strength refers to the influence the customer can have on the company. When answering this question, the researcher considers the number of customers, the size of the company, and the typical size of each transaction. The more customers and the smaller their purchases, the less influence they have. In this case, the relationship between each customer and the obligor tends to be quite equal. This can occur in situations where there are few customers and few suppliers. Each has an interest in maintaining good relationships and working to resolve any difficulties. In the indicator "Diversification of Products", the researcher chooses "Few Products, Broad Market" with the consideration that product diversification refers to the variety of products produced by the obligor and the market in which the product is sold. In this case, the company sells products in the form of Crude Palm Oil (CPO) and Palm Kernel (PK), so it can be said that the types of products that are sold are few, but have a wide market because of the many derivative products of palm oil. In the "Competitive Position" indicator, the researcher chooses "Neutral" with the consideration that this business follows industry trends, even though a business that is among the big names will be considered an industry leader, where the company has a large enough plantation in the area and the number of Palm Oil Mills. Palm oil with a capacity of 60 tons / hour.

In the variable company an assessment will be carried out by determining; years in relationship (company with creditors / investors), business stage, quality management, supplier power, credit history and conduct of account. In the indicator "Years in Relationship", the researcher chooses "> 2 years" with the consideration that this point illustrates the length of time the organization has a relationship with creditors, in this case the company has had banking facilities for > 2 years, meaning that the company has had experience with banking. New borrowers will often have a much greater risk than debtors who have been known for years. This is due to the increased availability of information available and its reliability. In the "Business Stage" indicator, the researcher selects "Stable - Mature" with the consideration that the business operates in a relatively stable environment, in which case the plant has entered the age of replanting. In addition, the firm's structure and controls are as well established as its market. Businesses are likely still looking for new markets and products, but the investment is currently small compared to the business as a whole. In the "Quality Management" indicator, the researcher chooses "Meets Industry Standards" with a consideration that refers to how quality is handled throughout the business whether in production or sales. Consider all aspects of the business whether it is order processing, production errors or customer feedback. In this case, the company has ISPO certification in its business process. In the "Supplier Power" indicator, the researcher chooses "Some" with the consideration that the relationship between each supplier and obligor tends to be balanced. This can occur in situations where there are few suppliers and few customers. Each of them has a significant interest in maintaining the relationship and working together to solve any problem. In this case, the company also requires supply in the form of Fresh Fruit Bunches (FFB) from external suppliers to be processed at the company's Palm Oil Mill, considering that most of the land is in the replanting process. In the "Credit History" indicator, the researcher selects "Clear" considering a credit record is available, and no problems are noted on any external source to check the smoothness of the company's credit payments. In the "Conduct of Account" indicator, the researcher chooses "No Experience" with the consideration that the company does not violate the credit requirements.

Management variables are assessed by determining; experience in industry, financial reporting and formal planning, risk management, openness, risk appetite, and management style and structure. In the indicator "Experience in Industry", the researcher chooses "11 - 20 Years" considering the length of time the company has operated in this range. In the "Financial Reporting and Formal Planning" indicator, the researcher chooses "Some Planning and Reporting" with the consideration that this question refers to the number and quality of financial planning and reporting carried out by the company. Planning refers to the creation of a strategic and business plan with a budget that accompanies the business plan. Financial reporting refers to gathering financial information to determine whether (and how) the obligor is performing against previous plans and budgets. In this case, the company has a good standard of planning and reporting levels. In the indicator "Risk Management", the researcher chooses "Proactive", where Risk Management refers to the way of managing risk in business. In this sense, management takes a comprehensive and strategic view of risk, actively looks for potential sources and implements effective management controls and mitigations. In the indicator "Openness", the researcher chose "Meets Expectations" with the explanation that openness refers to the willingness of management to provide accurate and timely information. In this case, management provides all requested information in a timely manner and also provides warnings about changing circumstances, such as in account or financial downturns, before this becomes clear. In the "Risk Appetite" indicator, the researcher chooses

“Balanced” with the explanation that Risk Appetite refers to the management approach to making decisions and their willingness to take business and financial risks. In general, management needs to take these risks for their business to be successful. However, this risk must be understood and only taken when the possible payoff is worth the risk. In this case, management understands the risks taken, and ensures that the benefits offered compensate for the risks taken. In the "Management Style and Structure" indicator, the researcher chooses "Adequate", where this question refers to the style and structure used by management to run the business. To answer this question, consider the type of business, the size in terms of sales and employees, the complexity of the product and process, the amount of innovation required and the cost of errors. In this case, the company has a relatively flat hierarchy of organizational structure and allows for sufficient adaptation. In addition, the company also has a management style where decision making is well distributed.

After all the input and analysis were carried out, the output was obtained in the form of a Ba3 investment feasibility rating with the risk category “Medium Risk”. Thus, a plantation company (replanting) in Sumatra is classified as investment grade or eligible for investment. Improvements need to be made so that investment grade can reach the “Low Risk” category or at least get better so that it can attract investors.

Figure 1. Data Processed by Moody’s Rating

Section	Weighted Score
Historical Ratio Assessments	0.00 <input type="text" value="22,13"/> 40.00
Balance Sheet Factors	0.00 <input type="text" value="8,69"/> 15.00
Industry / Market	0.00 <input type="text" value="3,93"/> 10.00
Company	0.00 <input type="text" value="17,89"/> 20.00
Management	0.00 <input type="text" value="7,75"/> 15.00
Total	0.00 <input type="text" value="60,39"/> 100.00

Grade **Ba3**
 Equivalent PD (%) **1.00**
 1 Yr EDF (%)

V. CONCLUSION AND RECOMMENDATION

5.1 Conclusion

After all the input and analysis were carried out, the output was obtained in the form of a Ba3 investment feasibility rating with the risk category "Medium Risk". Thus, plantation companies (replanting) in Sumatra are classified as "investment grade" or feasible for investment, however improvements need to be made so that investment grade can reach the "Low Risk" category or at least get better so that it can attract investors.

Furthermore, there are ways that need to be done so that the company is maintained in the investment grade category or even to increase the company's grading to a better level, the company is advised to do the following: a) The value of the Historical Ratio Assessment and the Balance Sheet Factor will improve if the utilization of the company's CPO and PK processing plants is optimal. To achieve this, companies need to get support from the supply of FFB in line with the majority of the company's plants that are in the replanting stage, (b) In industry / market variables, companies must diversify their customers to other than groups to strengthen the company's bargaining position in the market (c) In the company variable, the company is advised to do replanting the plantation while maintaining the process in accordance with the principles of sustainable plantation development. The company is also known to have ISPO certification which must be maintained, (d) In the management variable, the company must be able to make proper work plans and reports. In addition, the company also has a covenant obligation in the form of reports that must be submitted to creditors.

5.2 Recommendation

From the results of this study, palm oil plantation companies (replanting) in Sumatra must make improvements in various aspects, including: a) The value of the Historical Ratio Assessment and Balance Sheet Factor is not optimal, and will improve if the utilization of the company's CPO and PK processing plants is optimal. To achieve this, companies need to get support from the supply of FFB in line with the majority of the company's plants that are in the replanting stage, (b) In industry / market variables, companies must diversify their customers to other than groups to strengthen the company's bargaining position in the market (c) In the company variable, the company is advised to do replanting the plantation while maintaining the process in accordance with the principles of sustainable plantation development. The company is also known to have ISPO certification which must be maintained, (d) In the management variable, the company must be able to make proper work plans and reports. In addition, companies must also fulfill covenant obligations to creditors in the form of company performance reports, including financial reports, sales reports and quarterly production

reports. For future researchers, it is advisable to conduct research on a wider sample coverage and emphasize the corporate actions that must be carried out.

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