# FINANCIAL PERFORMANCE ANALYSIS AND COMPANY VALUE ESTIMATION OF PT ASTRA AGRO LESTARI

# Ajianto Puspoyo and Subiakto Sukarno School of Business and Management Institute of Technology Bandung, Indonesia ajianto.puspoyo@sbm-itb.ac.id

Abstract - Palm oil is the world's most consumed and produced vegetable oil. Southeast Asia region supplies 89.97% of global Crude Palm Oil (CPO) demand. Indonesia is the world's leader of CPO supplier that own about 53.7% global market. The CPO production and export is also became one of the most influencing commodity in Indonesian trading balance. The financial performance of PT Astra Agro Lestari as Indonesian leading palm oil company will be compared with the palm oil companies with the highest market capitalization in Southeast Asia region. The company valuation also performed to estimate the value of PT Astra Agro Lestari. The method that is used to perform those analyses is the financial ratios comparison with trend analysis, cross-section analysis, common size financial statement, DuPont analysis, and the compound annual growth rate comparison. Then, the valuation method used to value the company is the discounted cash flow (DCF) model, market approach, and asset-based approach. The result of this research, addressed to elevate the company performance of PT Astra Agro Lestari in order to improve the competitiveness in global palm oil competition. The overall financial performance of PT Astra Agro Lestari actually left behind Univanich Palm Oil regardless the business scale difference. PT Astra Agro Lestari continuously lost its business efficiency from 2009 to 2013. The result itself shows that PT Astra Agro Lestari would perform better in the future if the company looking back to export opportunity in increasing global CPO price in upcoming years. PT Astra Agro Lestari also should make its operational more efficient and increase the productivity to make the financial performance better. Two out of three company valuation methods indicates that the share price of PT Astra Agro Lestari is underpriced in the market, thus, PT Astra Agro Lestari shares are prospective in the future.

Keywords: Financial performance comparison, Crude Palm Oil (CPO), financial ratios, DuPont analysis, company valuation, discounted cash flow valuation.

#### Introduction

The growth of global demand of palm oil has driven the major exporter countries which most located in Southeast Asia to compete each other to win global market. Global demand on palm oil products predicted to be increased with significant demand growth as well as population growth, and the land crop expanding to Africa continent with high availability of land and labors. With ASEAN Economics Community 2015 that agreed to open more space for trading, palm oil industry as Indonesian main export product will be the vital industry to support the trading balance of Indonesia in facing ASEAN Economic Community 2015. The selected companies to be compared with PT Astra Agro Lestari selected from South East Asia region who controlled the most of CPO demand in the world, the companies selected are the public listed companies that have the highest market capitalization in plantation sector and also most of the business supported by CPO plantation. In this research the researcher tries to analyze the comparison of financial performance Southeast Asia Palm Plantation Companies with the highest market capitalization like: Wilmar International Limited (Singapore), Kuala Lumpur Kepong Berhad (Malaysia), and Univanich Palm Oil Limited (Thailand). To see the future prospect of PT Astra Agro Lestari's stock, the researcher also makes the company valuation.

# Literature Review

To answer the research question identified in this research, the researcher has to assess the financial performance of PT Astra Agro Lestari and its comparison with Wilmar International, Kuala Lumpur Kepong, and Univanich palm Oil and also the perform the company valuation of PT Astra Agro Lestari. The financial performance assessment method itself is based on established literature (Gitman & Zutter, 2012; Ross, Westerfield, & Jaffe, 2010; Bodie, Kane, & Marcus, 2011). The performance analysis assessment is divided into 4 parts: Time Series Financial Analysis (Financial Ratios and Compound Annual Growth Rate), Cross Section Analysis, DuPont Analysis, and Common Financial Statement Analysis. Then, the company valuation is adopted from Damodaran (2008), involving Discounted Cash Flow Valuation, Relative Valuation (Market Approach), and Asses Based Method. The specific formulas and methods to perform the financial performance assessment and company valuation will be elaborated in this chapter.

# **Time Series Analysis**

Time series analysis summarizes the historical financial ratios that have been calculated for 2009 until 2013 period. The time series analysis is analyzing the financial performance of a company in observation periods and compares it with another comparable company. This analysis is useful to get conclusion of which company performed better in which point and which period. (Gitman & Zutter, 2012)

# **Financial Ratios**

Financial ratios are used to evaluate overall financial condition of a company in a standardized measurement, standardized measurement is important to perform a financial performance comparison in various companies (Groplelli, A, & Nikhbat, 2000). Financial ratios are concentrating on several key areas of responsibility to view a company's performance comprehensively to find the strength and weakness points of a company's performance. Based on (Gitman & Zutter, 2012) ratio analysis involves measurement and interpretation of financial ratios to analyze the overall performance of a company. Financial ratio analysis is also used in avoiding problems of comparing financial performance different size of companies in a standardized measurement (Ross, Westerfield, & Jaffe, 2010). The researcher used the financial ratio analysis calculation based on Gitman's Principle of Managerial Finance, Gitman's view of investigating financial performance has five ratio categories to be magnified, there are: liquidity ratios, activity ratios, debt ratios, profitability ratios, and market ratios.

# Liquidity Ratios

Liquidity ratios are reflecting the overall liquidity of a company. The liquidity is needed to satisfy a company's short-term debt obligations. The higher liquidity ratio indicating the company is in good financial condition and has a higher margin of safety to satisfy its current liabilities.

# **Current Ratio**

The current ratio reflects a company's ability to pay its short-term obligations. It indicates a firm's ability to pay its debt for upcoming period and also shows the company's efficiency in generating cash from their products. The formula to find current ratio is: (Gitman & Zutter, 2012)

# Quick Ratio

The quick ratio measures a company's ability to pay its short-term obligations using its most liquid assets. This ratio reflects a company's financial durability in term of meeting its short-term debts and gives information about company's short-term liquidity (Gitman & Zutter, 2012). The formula to find this ratio is:

#### Activity Ratios

Activity ratios are indicating the management capability of a company in generating revenue from assets utilization, turning inventory into sales, and the ability to manage the payables and receivables in its activity.

#### Inventory Turnover

Inventory tumover ratio is used to measure the liquidity or activity of inventory that a company owns, it calculates the number of time the company's inventory sold in a certain period. This ratio indicates the liquidity of products that company sold (Gitman & Zutter, 2012). The formula to find the inventory tumover is:

#### Average Collection Period

The average collection period used to measure a company's ability to collect the accounts receivable, this ratio measures the amount of time needed to collect the receivables of a company. The formula to find the average collection period is:

Average collection period =  $\frac{\text{Accounts receivable}}{\text{Annual sales/365}}$  (eq 2.4)

### Average Payment Period

The average payment period shows a company's ability to pay accounts receivable, this ratio measures the amount of time needed to pay company's accounts payable. The researcher follows the principle of annual purchase assumed to be 70 percent of cost of goods sold in a year, as written on (Gitman & Zutter, 2012). The formula to find the average payment period is:

### Total Asset Turnover

Total asset turnover measures a company's efficiency of using assets in order to generate sales. The ratio reflects the productivity of assets that are managed by a company. The formula to find total asset turnover is:

#### Leverage Ratios

The debt ratios or can be called leverage ratios are measuring a company's ability of satisfying its financial obligations. These ratios also reflecting the proportion of debt and equity a company is using, comparing debt to its total assets composition. These ratios used to identify the financial healthiness of a company in term of solvency.

#### Debt Ratio

The debt ratio used to measure a company's debt to its total assets, or the proportion of total assets that financed by the company's creditors. The higher ratio of debt indicating higher proportion of debt in a company's balance sheet compared with its assets (Gitman & Zutter, 2012). The formula to find debt ratio is shown below.

Debt ratio = Total liabilities Total assets

Interest Coverage Ratio

The interest coverage ratio measures a company's ability to meet its interest payment obligations. This ratio is reflecting flexibility of a company on paying number of times of interest payments on its debt with its EBIT (Gitman & Zutter, 2012). The formula used to find the interest coverage ratio is:

Interest coverage ratio = Interest expenses (eq 2.8)

# **Profitability Ratios**

Profitability ratios are measuring company's performance in earning profit related to sales, assets, and equity. These ratios give measurement about profitability, resources usage effectively, and efficiency of a company in generating profit.

# Gross Profit Margin

The gross profit margin gives a measurement of how much a company gained gross profit in total sales. This ratio is used to evaluate company's ability to control the cost of generating profit, lower costs will imply to higher gross profit margin a company earned in every sales (Gitman & Zutter, 2012). The formula to find the gross profit margin is:

Gross profit margin = 
$$\frac{Sales-COGS}{Sales}$$
.....(eq 2.9)

# Operating Profit Margin

The operating profit margin shows the proportion of profit that a company earned after reduced by cost of sales and operating expenses compared with the net sales (Gitman & Zutter, 2012). The formula to find operating profit margin is:

Net Profit Margin

The net profit margin is used to measure the net profit in the proportion of the total sales. The net profit margin ratio is useful to compare the performance of similar industry companies. The higher number of net profit margin indicates that the company performed better than the other companies on its industry (Gitman & Zutter, 2012). The formula to find the net profit margin is:

Earnings Per Share (EPS)

Earnings per share measurement gives an exact amount of earning that the shareholder get from investing in a company's stocks. The amount can be found by identifying the profit attributable for common shareholders divided by the number of shares outstanding. The formula to find the EPS is:

# Return on Asset (ROA)

Return on assets shows the percentage of net income that a company made in a period compared with its total assets. ROA gives a measurement about how well a company manages its assets and resources in generating profit. It also indicates the efficiency of company's operational activities in maximizing the usage of assets to generate profit. The formula to find the ROA is:

Return on Equity (ROE)

Return on equity measures the percentage of the profit that company made in comparison with the total amount of shareholder equity in balance sheet. This ratio gives important information about the profitability of a company for the investors. The formula to find ROE is:

Market Ratios

The market ratios are giving the rational comparison of the share price of a company in stock market with its return. These ratios give information about the price rationality of a stock relative to its return, the information are important to make decision of investment in a company's share.

#### PE Ratio (PER)

The price earnings ratio is used to identify the ratio of company's current price per share compared to its earnings per share. This ratio gives insight about the price of share to be invested compared to its earnings return. The formula to find the PER is:

# Market to Book Ratio

The market to book ratio gives an insight about the share price of a company relative to its book value, where book value itself can be described as the amount of company's assets value per share outstanding. To find market to book ratio, book value per share of common stock has to be found firstly, and the formula is:

Then, the value of book value per price of common stock is used to find the market to book ratio, the formula is shown below.

Market to book ratio = 
$$\frac{Market price per share of common stock}{Book value per share of common stock}$$
.........(eq 2.17)

#### Compound Annual Growthrate (CAGR)

The compound annual growth rate provides a constant rate of return calculation of a company in an interval years, it assumes that every element on business grows at a constant rate compounded over a period of time. It also used to compare multi elements on business between companies within an industry (Anson, Fabozzi, & Jones, 2010; Chan, 2009). The formula to find the CAGR is:

$$CAGR = \left(\frac{\text{Ending value}}{\text{Beginning value}}\right) \xrightarrow{t} - 1 \dots (eq 2.18)$$

**Cross Section Analysis** 

The cross section analysis is used to compare the financial ratios of companies in the latest observation period in comparison with average ratios of sector or industry performance within a period. This analysis gives a measurement of financial performance of a company compared with industry or sector performance as the benchmark in a period. (Gitman & Zutter, 2012)

# DuPont Analysis

The DuPont analysis is used to examine and assess a company's financial condition by decomposing ROE into its component parts. The decomposition analysis of ROE is a systematic way to assess financial statement of a company. It tells what part is unsatisfying if the ROE of the company is not good enough. The DuPont analysis serves a focus analysis of every single point of performance influencing indicators in this analysis, including: profit margin, total asset turnover, and equity multiplier (Gitman & Zutter, 2012; Bodie, Kane, & Marcus, 2011; Ross, Westerfield, & Jaffe, 2010). The formula to perform the DuPont analysis is:

# Common Financial Statement Analysis

The common financial statement analysis shows a percentage analysis of common size income stamen and common size balance sheet, every point of those analyses is proportioned as percentage of sales in income statement, then for common size balance sheet, every point will be proportioned with total assets and total liabilities and equities.

# Common Size Income Statement

The common size income statement is used to evaluate the profitability of a company related to its sales. In the common size income statement, every element will be converted to percentage of the total sales. This analysis is helpful to analyze the performance of a company across the observed period, and give an insight if some categories were rose or declined in the proportion of total company's transactions. (Gitman & Zutter, 2012; Ross, Westerfield, & Jaffe, 2010)

# Common Size Balance Sheet

The common size balance sheet is used to evaluate the company balance sheet of a company across the observed periods. The common size balance sheet magnifies the proportion of each element in assets and its percentage of total assets and liabilities and equities and its percentage of total liabilities and equities (Ross, Westerfield, & Jaffe, 2010).

Then, the formula can be elaborated to:

$$ROE = \frac{\text{Net income}}{\text{Net sales}} x \frac{\text{Net sales}}{\text{Assets}} x \frac{\text{Assets}}{\text{Total equity}} \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots (\text{eq 2.20})$$

# Pro Forma Financial Statement

The pro forma statements are used to forecast income statement and balance sheet of a company based on current and past performance of a company itself. There are two main inputs to make the pro forma statements, financial statement in previous years and sales forecast for upcoming years (Gitman & Zutter, 2012).

# Pro Forma Income Statement

The pro forma income statement is expressing the projected profitability of a company related to its sales projection. Every point on income statement is forecasted and then converted to the projected the forecasted sales (Gitman & Zutter, 2012).

# Pro Forma Balance Sheet

The pro forma balance sheet is used to forecast the upcoming years balance sheet of a company based on current and previous years performance. The forecasted assets will be proportioned to its forecasted total assets, the equities and liabilities also proportioned to the forecasted total equity and liability (Gitman & Zutter, 2012).

#### **Company Valuation**

The valuation of a company is a practice of estimating the economic value of investors' interest in a company. Company valuation is useful to investors to estimate the economic value of a company when a company is about to be sold. The valuation also important for investment decision to measure the price fairness of the sold shares in stock market with the real value of a company itself. According to (Damodaran, 2008), there are three basic approaches to valuation: The discounted cash flow model, the relative valuation, and contingent claim approach. According to (Damodaran, 2008), there is the fourth approach to valuation, the asset based valuation. In this research, the researcher does not use the contingent claim approach because it can only be applied to value options. The methods used in this research to value the company here are: Discounted Cash Flow Model, Relative Valuation (market approach), and Asset Based Method (Damodaran, 2008; Kwok, 2008).

# **Discounted Cash Flow Valuation**

According to Investment Valuation by (Damodaran, 2008) the discounted cash flow model values a company by making expected future cash flow that generated by assets in present value. The discounted cash flow valuation model is the foundation of all valuation approach estimates the intrinsic value of a company fundamentally. The company value with this valuation method firstly found by weighting the proportion and the cost of capital of the company, then calculating the present value of estimated future cash flow of the company.

#### Weighted Average Cost of Capital (WACC)

According to (Gitman & Zutter, 2012), weighted average cost of capital used to measure the average cost of capital of a company by weighting the cost of every source of capital. The formula that used to find the WACC in this research is:

# Beta Coefficient

Beta coefficient is the degree of movement of a company's stock return in response of average stock market return (Gitman & Zutter, 2012). Beta coefficient will be used to calculate the cost of equity, and the cost of equity itself is used to find the WACC. The beta coefficient value reflects the movement of a stock's return related to the movement of capital market price index's return.

# **Terminal Value**

Terminal value is the a value at one time of the expected future cash flow that grows in a constant growth rate until infinite period of time. The researcher uses the terminal value based on the Gordon model based on the fact that the palm oil plantation has a lifecycle and it has an end, but the company can reinvest to begin the cycle of palm oil plantation. Thus, the cash flow of plantation companies is estimated to last forever. Based on (Gordon, Dividends, Earnings and Stock Prices, 1959) the Gordon growth model values the cash flow that estimated to grow forever, to calculate the terminal value based on the Gordon growth model, the cost of capital and annual growth rate have to be known first. The formula applied in this research came from the derivation of Gordon model:

$$P = \frac{D_{s} \times (s+g)}{(r+g)} \dots (eg \ 2 \ 22)$$

Then, the formula adapted to discounted cash flow valuation model to be:

# Asset Based Valuation

The asset based valuation model in the principle argues that no rational investors will pay higher than the business' assets. Asset based valuation used by analysts to estimate value. The asset-based valuation itself has two approaches, option pricing model and liquidation model. The researcher considered using the liquidation approach because the liquidated business' total assets is the main concern of the investors to put their money in with this approach of company valuation (Damodaran, 2008).

# Market Approach Valuation

Market approach valuation is a part of relative valuation approach, where the value of an asset came from the pricing of comparable assets and standardized common variables. The variable used in this research to perform the market approach valuation is the PE Ratio of the company. The relative valuation is the most used valuation method in the world (Damodaran, 2008).

# **Research Methodology**

Research methodology describes sequential steps that are used to solve the problem in this research. The methodology of this research also applied in identifying problem, finding objectives, gathering data, and conclusion section where the research questions can be answered by performing the steps. The graph below shows the sequential research methodology that applied in this research.



Problem Identification

Explain the problem identification and research scope and limitation based on the case background Research Objective

Explain the theories used to reach the main purpose of this research

Data Collection The data gathering process that related with the main research topic Literature Review The basic of thinking and benchmark to perform the analysis Data Analysis The analyzed and calculated data as the core of this research

#### Conclusion and Recommendation

Shows the result of this research objective and conclude it to answer the entire research problem

# Data Analysis

PT Astra Agro Lestari is well known as Indonesian palm based plantation company with biggest market capitalization in Indonesian Stock Exchange, PT Astra Agro Lestari also considered as one of 45 companies that categorized as the most liquid stock traded in Indonesia. In this chapter, the researcher compared the financial performance of PT Astra Agro Lestari with Southeast Asia regional palm based plantation companies with biggest market capitalization across Indonesia, Wilmar International Limited (Singapore), Kuala Lumpur Kepong Berhad (Malaysia), and Univanich Palm Oil Limited (Thailand), those countries hold 89,97% of world palm oil supply. The researcher analyzed the financial performance of those companies five years backward, started from 2009 after worldwide financial crisis in 2008 until the previous year of 2013.

PT Astra Agro Lestari						
Financial Ratios   2009   2010   2011   2012						2013
Liquidity	Current Ratio	1.83	1.93	1.31	0.68	0.45
Ratio	Quick Ratio	1.18	1.34	0.78	0.20	0.24
	Inventory turnover	7.09	8.38	8.88	5.77	10.70
Activity	Average Collection Period	7.71	4.08	0.55	0.65	1.44
Ratio	Average Payment Period	28.71	34.75	39.79	40.91	43.67
	Total Asset Turnover	0.98	1.01	1.06	0.93	0.85
Dobt Datio	Debt Ratio	0.15	0.15	0.17	0.25	0.31
	Times Interest Earned Ratio	28.71   34.75   39.79   40.91     0.98   1.01   1.06   0.93     0.15   0.15   0.17   0.25     0   2893.81   ?   ?   143.48     0.42   0.41   0.37   0.38     0.35   0.33   0.30   0.30	53.35			
	Gross Profit Margin	0.42	0.41	0.37	0.38	0.32
	Operating Profit Margin	0.35	0.33	0.30	0.30	0.24
Profitability	Net Profit Margin	0.22	0.23	0.23	0.21	0.14
Ratio	EPS (Rp)	1,055	1,281	1,587	1,531	1,144
	ROA	21.93%	22.94%	24.48%	19.41%	12.04%
	ROE	26.67%	27.97%	29.65%	25.74%	17.54%
Market Datio	PEratio	21.57	20.46	13.68	12.87	21.94
	Market to Book	5.75	5.72	4.06	3.31	3.85

Wilmar International Limited							
Financial Ratios 2009 2010 2011 20							
Liquidity	Current Ratio	1.24	1.10	1.07	1.11	1.20	
Ratio	Quick Ratio	0.86	0.73	0.75	0.78	0.89	
	Inventory turnover	5.30	4.14	5.62	5.82	5.59	
Activity Datio	Average Collection Period	ck Ratio 0.86 0.73 0.75 0.78 0.8   entory turnover 5.30 4.14 5.62 5.82 5.5   rage Collection Period 30.41 37.47 28.60 31.74 33.8   rage Payment Period 20.47 27.08 21.83 19.81 18.1   al Asset Turnover 1.02 0.89 1.31 1.08 0.9   t Ratio 0.51 0.63 0.74 0.64 0.6   es Interest Earned Ratio 15.92 7.92 4.52 2.57 3.2   ss Profit Margin 0.13 0.08 0.09 0.09 0.0   Profit Margin 0.10 0.06 0.05 0.04 0.00	33.82				
ACTIVITY RATIO	Average Payment Period		19.81	18.13			
	Total Asset Tumover		0.95				
Dobt Patio	Debt Ratio	0.51	0.63	0.74	0.64	0.66	
	Times Interest Earned Ratio	5.30   4.14   5.62   5.82   5     riod   30.41   37.47   28.60   31.74   33     od   20.47   27.08   21.83   19.81   18     1.02   0.89   1.31   1.08   0.     0.51   0.63   0.74   0.64   0.     Ratio   15.92   7.92   4.52   2.57   3     0.13   0.08   0.09   0.09   0.     in   0.10   0.06   0.05   0.04   0.	3.27				
	Gross Profit Margin	0.13	0.08	0.09	0.09	0.08	
	Operating Profit Margin	0.10	0.06	0.05	0.04	0.04	
Profitability	Net Profit Margin	0.08	0.04	0.04	0.03	0.03	
Ratio	EPS (Rp)	3,453	2,426	2,931	2,298	2,416	
	ROA	8.03%	3.88%	4.70%	2.99%	2.83%	
	ROE	16.49%	10.50%	11.24%	8.26%	8.30%	

#### Puspoyo and Sukarno / Journal of Business and Management, Vol.3, No.3, 2014: 278-295

Market Patio	PEratio	21.82	27.18	8 19.98	3 17.03	16.59
	Market to Book	3.60	2.85	5 2.25	5 1.41	1.38
	Kuala Lumpur	Kepong B	erhad			
	Financial Ratios	2009	2010	2011	2012	2013
Liquidity	Current Ratio	2.53	2.67	1.91	3.05	2.52
Ratio	Quick Ratio	1.83	1.66	1.24	2.28	1.88
	Inventory turnover	5.34	4.12	4.63	6.48	6.78
Activity Patio	Average Collection Period	34.43	28.49	34.86	28.12	34.60
	Average Payment Period	31.16	26.14	25.91	23.12	26.28
	Total Asset Turnover	0.77	0.82	0.98	0.93	0.78
Dobt Datio	Debt Ratio	0.31	0.31	0.32	0.34	0.32
DEDITIATIO	Times Interest Earned Ratio	13.40	24.09	28.46	21.93	15.66
	Gross Profit Margin	0.29	0.29	0.28	0.25	0.21
	Operating Profit Margin	0.14	0.19	0.20	0.14	0.14
Profitability	Net Profit Margin	0.09	0.14	0.15	0.11	0.10
Ratio	EPS (Rp)	2,145	3,545	5,503	4,242	3,214
	ROA	7.12%	11.05%	14.32%	10.64%	7.81%
	ROE	10.31%	16.00%	21.05%	16.13%	11.54%
Markot Datio	PEratio	23.75	17.95	14.35	20.12	25.70
IVIALKET RATIO	Market to Book	2.45	2.87	3.02	3.25	2.97

Univanich Palm Oil Limited							
	Financial Ratios	2009	2010	2011	2012	2013	
Liquidity	Current Ratio	6.85	8.97	6.44	8.40	9.15	
Ratio	Quick Ratio	6.11	8.27	5.08	7.16	8.24	
	Inventory turnover	28.22	37.71	14.33	15.62	20.93	
Activity	Average Collection Period	15.34	13.05	5.83	20.99	23.36	
Ratio	Average Payment Period	6.05	5.10	4.57	7.76	13.38	
	Total Asset Turnover	1.78	1.85	2.48	1.85	1.60	
Dobt Datio	Debt Ratio	0.09	0.08	0.13	0.10	0.11	
	Times Interest Earned Ratio	?	?	10   2011   2012     1.97   6.44   8.40     3.27   5.08   7.16     7.71   14.33   15.62     3.05   5.83   20.99     5.10   4.57   7.76     .85   2.48   1.85     9.08   0.13   0.10     ?   341.89   224.71     9.19   0.20   0.18     9.12   0.17   0.15     9.02   0.18     9.12   0.17   0.15     9.75,012   383     18%   40.99%   28.46%     93%   47.30%   31.77%     1.59   0.61   9.15     9.40   0.29   2.91	162.45		
	Gross Profit Margin	0.21	0.19	0.23	0.19	0.18	
	Operating Profit Margin	0.17	0.15	0.20	0.18	0.14	
Profitability	Net Profit Margin	0.15	0.12	0.17	0.15	0.13	
Ratio	EPS (Rp)	2,269	2,097	5,012	383	287	
	ROA	26.10%	23.08%	40.99%	28.46%	20.55%	
	ROE	28.59%	25.03%	47.30%	31.77%	23.02%	
Markot Patio	PEratio	1.31	1.59	0.61	9.15	13.59	
	Market to Book	0.38	0.40	0.29	2.91	3.13	

# Liquidity

According to the tables above, the liquidity of PT Astra Agro Lestari tend to decline each year although experienced a higher ratio in 2010 but the trend goes down until 2013. The declining of liquidity ratios did not happen to Wilmar International and Kuala Lumpur Kepong, both companies recorded a slightly decline in current ratio and slightly incline in quick ratio. The opposite movement of liquidity ratio happened to Univanich, this Thai company recorded increasing trend of liquidity ratio. The same trend happened to all companies is the increasing ratios from 2009 to 2010 then turning back down in 2011, this major trend caused by the external factor from global CPO price that

reached its peak during the end of 2010 and early 2011 that affected the company's sales and liquidity during the peak of CPO price that time.

# Activity

PT Astra Agro Lestari in overall activity ratios recorded inclining trend 2010 then turned back down in 2011 as well as liquidity ratios trend, and then some ratios getting back higher on the years later. PT Astra Agro Lestari's inventory tumover kept growing until 2011 and declined in 2012, but then reached its peak in 2013. It reflects the increasing tumover rate of the company's CPO products during that period. PT Astra Agro Lestari seems to have improved its receivables management, and scored the best overall average collection period each year. The company succeeded to improve the average collection period from 7.71 in 2009 to 1.44 in 2013. An outstanding inventory tumover rate record has made by Univanich Palm Oil Limited, the company scored highest among the compared companies, with the overall ratio each year above twenty, Univanich have the best management of turning over the inventories into the sales.

# Leverage

The leverage ratios of PT Astra Agro Lestari divided into two considerations, the debt ratio and the interest coverage ratio. The debt ratio trend of PT Astra Agro Lestari was gradually increasing each year. It means the proportion of capital funded by the creditors is increasing each year, from 15% debt ratio in 2009, the company made it into 31% in 2013. Meanwhile, the interest coverage ratio reached its peak in 2010, but different with liquidity ratios pattern that reached the peak in 2010 then declined in 2011 and then getting higher in the next year. The interest coverage ratio of PT Astra Agro Lestari declined after reaching its peak and not getting back higher.

The trend of increasing proportion of debt in the capital structure also experienced by all companies that observed in this research, although the increasing is not as significant as PT Astra Agro Lestari experienced. Kuala Lumpur Kepong and Univanich recorded the low increasing of debt ratio and not that significant, but Wilmar International recorded the increasing of debt proportion in capital structure by 15% since 2009, the company also recorded the highest value of debt ratio in 2011. The interest coverage ratio of all companies observed as a downtrend from 2009 to 2013, it reflects that all companies experienced a lower capability of paying interest to creditor. As reported in the financial statement, both PT Astra Agro Lestari and Univanich have two periods where both companies did not make any loan because the cash flow of the company was strong enough to support the business, PT Astra Agro Lestrari did not make any loan in 2010 and 2011, Univanich Palm Oil did not make any loan in 2009 and 2010. Those periods without loan tells the researcher that the companies were strong enough to finance themselves without make any loan agreement, it shows that the market condition was great at that time.

# Profitability

According to the tables above, there are three companies who have the same profitability ratios pattem. They are: PT Astra Agro Lestari, Kuala Lumpur Kepong Berhad, and Univanich Palm Oil. Those three companies recorded uptrend ratios from 2009 to 2011, and reached its peak in 2011 but then recorded downtrend to 2013. And between those three companies, Univanich Palm Oil scored the highest ratios during the peak in 2011 and another years. During the 2011 peak, Univanich succeeded to make return on assets to be 40.99% and return on equity to be 47.30% with EPS equal to Rp 5,012 per share. Even until the declining year in 2013, the company still recorded a 20.55% ROA and 23.02% ROE that still a big profitability ratios and the best among the compared companies. Wilmar International seems to have a different profitability ratios pattern. The pattern shows a downtrend experienced by Wilmar International since 2009 period to 2013. It indicates that company became less profitable over the time since 2009.

# Market

Based on market ratios comparison, PT Astra Agro Lestari maintained the Price Earnings Ratio (PER) in the ratio of 21, from 21.57 in 2009 to 21.94 in 2013. It indicates that the market apprised PT Astra Agro Lestari share price in almost the same way they did it five years ago based on the company's share earnings. And for the market price to book value, PT Astra Agro Lestari ratios has been declined since the book value of the company has grew almost double from the book value in 2009 but the market price of the share only increased about 10% from 2009, it indicates that one share of PT Astra Agro Lestari now contains more book value compared with five years ago. Kuala Lumpur Kepong Berhad also maintained the stable ratio of PER and market to book ratio as well as PT Astra Agro Lestari, the company's market price adapted with the financial condition and the market appraised Kuala Lumpur Kepong's share price almost the same as they did it before.

Univanich Palm Oil Limited dramatically recorded a huge increasing of PE ratio and market to book ratio from 2009 to 2013. The PE ratio of Univanich in 2013 is more than ten times than the PE ratio in 2009, from 1.31 to 13.59 in 2013. It indicates that the market in Thailand appraised Univanich ten times bigger in 2013, although its earnings per share (EPS) was not ten times bigger than in 2009, it also indicates that the market trusted more in Univanich's share rather than five years ago. Not only the PE ratio of Univanich that grew ten times, the market to book ratio of Univanich also grew more than eight times from 2009. Wilmar International in the opposite recorded a downtrend of its market ratios. Both of PE ratio and market to book ratio of Wilmar International shown a downtrend since 2010, it indicates that the market has been less appreciate to Wilmar's stock rather that in 2009.

	CAGR			
Year 2009-2013	AALI	WLIL	KLKK	UVAN
Net Sales	14.31%	16.56%	8.26%	9.53%
Cost of Goods Sold	18.74%	17.91%	11.19%	10.48%
Gross Profit	7.11%	5.53%	0.01%	5.66%
Total Operating expense	21.16%	77.50%	-7.54%	7.75%
Operating income/profit	3.58%	-6.03%	8.29%	5.94%
Other Income/expense	-	52.57%	18.50%	25.68%
Profit before income tax	1.03%	-6.21%	7.83%	5.93%
Income (expense) tax	-2.31%	4.38%	1.26%	5.76%
Net income	2.42%	-8.34%	10.76%	6.00%

# Compound Annual Growth Rate

PT Astra Agro Lestari has the second higher sales growth, supported by the stronger demand in domestic market, PT Astra Agro Lestari has moved its sales proportion to fulfill domestic market due to declining price of international CPO price. Wilmar International still ranked the first although the CPO price was declining. The demand volume supported the sales of Wilmar International. The overall of global CPO production is increased 4% in 2013. As well as the growth of sales, the cost of goods sold (COGS) percentage is also getting higher in all companies. The plantation site of those companies like: Indonesia, Malaysia, and Thailand were faced with inflation rate that caused higher cost of production. PT Astra Agro Lestari recorded the highest COGS growth from 2009, beside the inflation rate in Indonesia, the most influencing factor that made PT Astra Agro Lestari experienced highest growth of COGS is the increasing price of gasoline fuel in Indonesia. In the middle of 2013, the government of Indonesia decided to increase the gasoline price for almost 50%. The increasing price of gasoline fuel affected the overall costs in the company's business.

PT Astra Agro Lestari ranked the first as the highest CAGR of gross profit, although Wilmar International and Univanich also recorded a significant growth of gross profit. A different pattern experienced by Kuala Lumpur Kepong who almost did not make any growth in gross profit, this situation happened as the impact of declining CPO price trend in the world. PT Astra Agro Lestari has taken the different strategy, since 2009 the company gradually moved its market to fulfill domestic demand. In 2009 PT Astra Agro Lestari reported the 86.1% sales to domestic market and the rest for export market and it became 99.1% for domestic market in 2013. Thus, the impact of declining palm oil price for export market does not significantly affect the gross profit of PT Astra Agro Lestari.

PT Astra Agro Lestari scored a total operating expense growth for 21.16%, the increasing expense in Indonesia happened due to increasing minimum wages for Indonesian Labor. Wilmar International Limited scored the highest growth in total operating expense. The growth reached 77.50 % and indicates that the company has lost its efficiency mainly caused because of the matured plantations needed to be replanted and cannot give revenue to the company, and in the other hand the company has to maintain the plantation while not receiving any return until the plantations are mature.

Kuala Lumpur Kepong scored the highest growth rate of operating income from 2009 to 2013, the company grew 8.29% its operating income. PT Astra Agro Lestari and Univanich Palm Oil score a medium growth but still in positive value of growth by 3.58% and 5.94%. In the opposite, Wilmar International managed to have minus score of operating income by -6.03%, the bubbling operating cost of Wilmar International by 77.50% has a significant impact on company's operating income growth that went negatively.

Cross Section Analysis							
F	inancial Ratios	Sector	AALI	WLIL	KLK	UVAN	
Liquidity	Current Ratio	1.3	0.45	1.20	2.52	9.15	
Ratio	Quick Ratio	0.66	Analysis     AALI   WLIL   KLK     .3   0.45   1.20   2.52     .6   0.24   0.89   1.88     .6   10.70   5.59   6.78     ./a   1.44   33.82   34.60     ./a   43.67   18.13   26.28     ./a   0.31   0.66   0.32     .5   53.35   3.27   15.66     %   32.20%   8.45%   21.31%     %   14.00%   3.00%   10.00%     %   12.04%   2.83%   7.81%     %   17.54%   8.30%   11.54%     22   21.94   16.59   25.70     /a   3.85   1.38   2.97	8.24			
	Inventory turnover	5.96	10.70	5.59	6.78	20.93	
A at is site s	Average Collection						
ACTIVITY	Period	n/a	1.44	33.82	34.60	23.36	
Ratio	Average Payment Period	n/a	43.67	18.13	26.28	13.38	
	Total Asset Turnover	2.04	0.85	0.95	0.78	1.60	
Debt ratio	Debt Ratio	n/a	0.31	0.66	0.32	0.11	
Deptratio	Interest Coverage Ratio	122.5	53.35	3.27	15.66	162.45	
	Gross Profit Margin	38.16%	32.20%	8.45%	21.31%	17.88%	
	Operating Profit Margin	19.36%	23.71%	4.14%	13.85%	13.73%	
Ratio	Net Profit Margin	13.48%	14.00%	3.00%	10.00%	13.00%	
Natio	ROA	29.92%	12.04%	2.83%	7.81%	20.55%	
	ROE	66.99%	17.54%	8.30%	11.54%	23.02%	
Market	PEratio	34.22	21.94	16.59	25.70	13.59	
Ratio	Market to Book	n/a	3.85	1.38	2.97	3.13	

# Cross Section Analysis

Based on the table above, the researcher could compare the overall performance of PT Astra Agro Lestari, Wilmar International Limited, Kuala Lumpur Kepong Berhad, and Univanich Palm Oil Limited with the palm plantation sector average ratios. The average financial ratios or cross section ratios data were taken from (www.reuters.com, 2014) the data were taken on Friday, August 15<sup>th</sup>

2014. With this analysis, the researcher could determine the best performer between those companies on 2013 and its performance compared to average sector performance within the same period. In term of activity ratios, PT Astra Agro Lestari scored the best ratio for average collection period. In the other side, Univanich scored the best ratio for Inventory tumover and average payment period, and scored highest ratio among the companies but lower than sector ratio in the total asset turnover ratio. This composition reflects that PT Astra Agro Lestari has had a good policy and management related to the receivables, but the company has the worst payment policy among the companies being compared.

Du Pont Analysis								
	2009							
	AALI	WLIL	KLK	UVAN				
Net Profit Margin	0.23	0.08	0.10	0.15				
Total Asset Turnover	0.98	1.02	0.77	1.78				
Equity Multiplier	1.18	2.05	1.45	1.10				
ROA	22.84%	8.40%	7.47%	26.10%				
ROE	26.91%	17.27%	10.81%	28.59%				
2010								
	AALI	WLIL	KLK	UVAN				
Net Profit Margin	0.24	0.05	0.14	0.12				
Total Asset Turnover	1.01	0.89	0.82	1.85				
Equity Multiplier	1.18	2.70	1.45	1.08				
ROA	23.93%	4.27%	11.65%	23.08%				
ROE	28.21%	11.54%	16.87%	25.03%				
	2011							
	AALI	WLIL	KLK	UVAN				
Net Profit Margin	0.23	0.04	0.15	0.17				
Total Asset Turnover	1.06	1.31	0.98	2.48				
Equity Multiplier	1.21	2.78	1.47	1.15				
ROA	24.48%	4.99%	15.00%	40.99%				
ROE	29.65%	13.87%	22.04%	47.30%				
	2012							
	AALI	WLIL	KLK	UVAN				
Net Profit Margin	0.22	0.03	0.12	0.15				
Total Asset Turnover	0.93	1.08	0.93	1.85				
Equity Multiplier	1.33	2.76	1.52	1.12				
ROA	20.29%	3.15%	11.07%	28.68%				
ROE	26.91%	8.69%	16.78%	32.02%				
	2013							
	AALI	WLIL	KLK	UVAN				
Net Profit Margin	0.15	0.03	0.11	0.13				
Total Asset Turnover	0.85	0.95	0.78	1.60				
Equity Multiplier	1.47	2.94	1.48	1.12				
ROA	12.72%	2.98%	8.23%	20.54%				
ROE	18.64%	8.75%	12.16%	23.01%				

# DuPont Analysis

The conclusion for DuPont analysis is, AALI has made its ROE grew from 2009 to 2011, the growth itself supported by the inclining profit margin and asset usage efficiency. Then, the declining ROE in 2013 also caused by declining of profit margin of AALI. UVAN actually scored better performance of ROE from 2009 to 2013 overall period, UVAN only left behind AALI's ROE in 2010 and that is not significant. Efficiency usage of assets is the key of UVAN to scored best ROE from 2009 to 2013 except 2010.

#### **Common Financial Statement Analysis**

Common financial statement analysis shows a percentage of common size income statement and balance sheet with its benchmark, total sales for income statement and total asset and total liabilities for balance sheet. The common size balance sheet and income statement of PT Astra Agro Lestari, Wilmar International Kuala Lumpur Kepong, and Univanich Palm Oil are attached in the APPENDIX.

In the common size income statement of PT Astra Agro Lestari, the company shows a trend of increasing COGS percentage, from 58.2% in 2009 then risen up to 67.8% in 2013. The gross profit proportion automatically affected by the higher proportion of COGS percentage, the gross profit percentage to the sales declined from 41.8% in 2009, then gradually getting lower to 32.2% in 2013. The declining of gross profit percentage continuous to other aspects of income statement, like net income and total comprehensive income for the year. Thus, PT Astra Agro Lestari over the time loosing its efficiency in the palm plantation business with the significant increasing percentage of COGS. The similar pattern as PT Astra Agro Lestari income statement found in Wilmar International common size income statement, the company recorded a growth trend in COGS and affected to the lower percentage of gross profit and operating profit. Kuala Lumpur Kepong in particular also experienced the significant growth of COGS percentage, but the company succeeded to manage the operating income stable at 13% level because the percentage of operating expense has been pushed by Kuala Lumpur Kepong management from 16.4% in 2009 to 8.7% in 2013, that is a great corporate survival struggle during the period of increasing COGS. Another one company, Univanich also seems to have a trend of increasing COGS percentage but not significant.

In the common size balance sheet of PT Astra Agro Lestari, there is a trend in the proportion of total liabilities and equities. The company at the beginning managed to have 15% liabilities and 85% equity in its total equity and liability, the proportion gradually changed over the time, in 2012 the total liability reached 25% and the total equity become 75%. The proportion changed until in 2013 the total liability is 31% and the total equity is 69%. The total liability of PT Astra Agro Lestari has grown more than four times bigger than in 2009. One company that has a similar pattern like PT Astra Agro Lestari is Wilmar International. The company currently has 51% proportion of total liabilities in 2009 and become 66% in 2013, and the total equities become just 43%. The relatively consistent proportion held by Kuala Lumpur Kepong and Univanich that did not make any significant proportion change in common size balance sheet.

# **Discounted Cash Flow Valuation**

Based on the discounted cash flow valuation calculation on the appendix, the company value of PT Astra Agro Lestari could be estimated for Rp48,538,885,000,000. Then, with shares outstanding of 1,575 million, and non-current liabilities owned by the company for Rp936,066,000,000 the price per share of PT Astra Agro Lestari stock can be estimated for IDR 30,224 per share. With the current market price on August, 22<sup>nd</sup> 2014 of AALI for Rp 26,150 per share. The market price of AALI stock can be determined as undervalued.

# Asset Based Valuation

Based on the asset based valuation on the appendix, the company value estimation by asset based method valuation can be determined as the adjusted value of total assets as

Rp14,771,963,000,000. Then, with the non-current liability of Rp936,066 million, the price per share Lestari is far below the market price on August 22<sup>rd</sup> 2014 by Rp26,150 per share, the estimated share price of PT Astra Agro Lestari with asset based valuation is just only Rp8,785 per share and the market price is extremely overpriced.

# Market Approach

Based on the market approach company valuation table on the appendix, the company value of PT Astra Agro Lestari can be estimated as Rp42,152,349,000,000. With the shares outstanding of 1,575 million shares and the non-current liabilities of Rp936,066,000,000 the price per share of PT Astra Agro Lestari can be estimated for Rp 26,173 per share. And with the current market price on August 22<sup>nd</sup> 2014 of AALI for Rp 26,150 per share, the current market price can be determined as slightly undervalued.

# Conclusion and Recommendation

In general, Univanich Palm Oil Limited has better financial performance over five years in liquidity ratios, activity ratios, and seems more attractive in the market ratios. In liquidity ratios, Univanich Palm Oil Limited scored much higher than PT Astra Agro Lestari and other companies. In the activity ratios, Univanich also performed as the best among the companies. In term of market ratios, actually Univanich palm Oil scored the lowest ratios between the companies, but it is indicating that the Univanich's shares are more economical with the higher EPS than PT Astra Agro Lestari, but the way more economical compared by the lower PE Ratio of Univanich Palm Oil Limited. PT Astra Agro Lestari has better performance on profitability ratios, the best profitability ratios indicates that the strategy ran by the company to satisfy domestic demand rather than export market made the profitability of the company more attractive rather than the other companies that depend more on the global demand and price.

Despite the overall performance of PT Astra Agro Lestari, which is behind Univanich palm Oil Limited, there is a huge difference in the operational scale of both companies. PT Astra Agro Lestari has a market capitalization of 41,179,580,000,000 IDR and Univanich Limited just has the market capitalization equal to 3,715,632,000,000 IDR (IDR currency 1 THB=366.5 IDR, Aug 25 2014). This shows that PT Astra Agro Lestari has a different business scale with the value more than eleven times higher. If we take into account the market capitalization of both companies, according to (Standard & Poor's, 2014), the reason for the more aggressive movement of Univanich Palm Oil Limited is because Univanich is categorized as a small company with less than three billion US Dollar market capitalization with limited resources and susceptibility to business or market condition. But the small market capitalization companies also have the potential to grow higher than large companies in favorable market conditions. On the other hand, PT Astra Agro Lestari is categorized as a medium company with 3 to 10 billion US Dollars market capitalization, which typically has lower risks than small companies but are more volatile than large companies. Wilmar International and Kuala Lumpur Kepong are categorized as large companies with more than 10 billion US Dollars market capitalization and have low risks and steady growth that were experienced by both companies (Standard & Poor's, 2014).

PT Astra Agro Lestari has made a great decision in moving the market to domestic, but according to Bursa Malaysia Berhad (BMD), the crude palm oil future (FCPO) price will rise up by about 10% from 2014 price until 2016. The researcher recommends that PT Astra Agro Lestari diversify its market by considering the opport unity of higher price in export market until 2016.

PT Astra Agro Lestari also has to manage the rising trend of COGS and operating expenses to be more competitive in global CPO competition. The high cost of goods sold and operating expenses affects the net income and in the end makes the earnings available for common shareholders decrease. In general, the business operation of PT Astra Agro Lestari has to be more efficient. Even

though it sounds normative, according to the annual report of PT Astra Agro Lestari in 2013 titled Sustaining Growth through Efficiency, it seems that the company does really need some improvement in efficiency by making the cost of sales more efficient. The future alternative strategy of efficiency in plantation industry may like:

- 1. Automation of plantation activities with new investment of more efficient machinery to replace labor workforce that is getting more expensive each year.
- 2. Intensification of current planted areas of palm oil to improve the productivity of current crops.
- 3. Re-plantation of post-matured palm oil crops to make the plantation productivity back to its optimum level.
- 4. Integration and optimization of Crude Palm Oil production from upstream plantation to the downstream in marketplace to make the supply chain more efficient.

#### References

Anson, M. J., Fabozzi, F., & Jones, F. J. (2010). Investement Characteristics and Strategies.

Antara News. (2014, February 4). Antara News. (Maryati, Editor) Retrieved June 26, 2014, from http://www.antaranews.com/berita/417175/realisasi-ekspor-tahun-2013-lampaui-target

- Astra Agro Lestari. (2014). Anual Report. Retrieved June 26, 2014, from www.astra-agro.co.id
- Bank Indonesia. (2014). BI Rate. Retrieved August 15, 2014, from www.bi.go.id

Bank Indonesia. (2014). Inflation Rate. Retrieved August 15, 2014, from www.bi.go.id

- Bodie, Z., Kane, A., & Marcus, A. J. (2011). Investment and Portfolio Management.
- Bursa Malaysia Berhad. (2014). Future Crude Palm Oil Price. Retrieved June 27, 2014, from http://www.mpoc.org.my/Palm\_Oil\_BMD\_Price.aspx
- Chan, E. (2009). Harvard Business School Confidential: Secrets of Success.
- Damodaran, A. (2008). Investment Valuation.
- Gitman, L. J., & Zutter, C. J. (2012). Principles of Managerial Finance.
- Gordon, M. J. (1959). Dividends, Earnings and Stock Prices.
- Groplelli, A, A., & Nikhbat, E. (2000). Finance.
- Index Mundi. (2014). CPO Commodity Price Monthly. Retrieved August 21, 2014, from http://www.indexmundi.com/commodities/?commodity=palm-oil&months=60
- Indonesia Investments. (2014). Indonesia Investments. Retrieved June 26, 2014, from http://www.indonesia-investments.com/doing-business/commodities/palm-oil/item166

lowa State University. (2006). Office of Social Economic Trend Analysis (SETA).

Kuala Lumpur Kepong. (2014). Annual Report. Retrieved June 26, 2014, from www.klk.com Kwok, B. K. (2008). Forensic Accountancy.

Reuters. (2014). CPO Industry Sector Average ratios. Retrieved July 16, 2014, from www.reuters.com Ross, S. A., Westerfield, R. W., & Jaffe, J. (2010). Corporate Finance.

Standard & Poor's. (2014). Financial Matters. (Wells Fargo) Retrieved September 15, 2014, from Standard and Poor's: https://fc.standardandpoors.com/sites/client/wfs2/wfs/article.vm?topic=6066&siteContent=

8345

- Univanich Palm Oil. (2014). Annual Report. Retrieved June 26, 2014, from www.univanich.com
- Wilmar International. (2014). Annual Report. Retrieved June 26, 2014, from www.wilmarinternational.com
- Yahoo Finance. (2014). AALI Historical Share Price and Financial Ratios. Retrieved August 14, 2014, from

http://finance.yahoo.com/q/hp?s=%5EJKSE&a=00&b=1&c=2009&d=11&e=31&f=2013&g=m Yahoo Finance. (2014). Kuala Lumpur Kepong Historical Share Price and Financial Ratios. Retrieved

- August 14, 2014, from http://finance.yahoo.com/q?s=2445%40BN.KL&ql=1
- Yahoo Finance. (2014). Univanich Historical Share Price and Financial Ratios. Retrieved August 14, 2014, from http://finance.yahoo.com/q?s=UVPOF&ql=1

Yahoo Finance. (2014). Wilmar International Historical Share Price and Financial Ratios. Retrieved August 14, 2014, from https://sg.finance.yahoo.com/echarts?s=F34.SI