# COMPARISON OF FUNDAMENTAL ANALYSIS OF THE AUTOMOTIVE SUB SECTOR BEFORE AND DURING THE COVID-19 PANDEMIC

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# **ABSTRACT**

This research aims to determine the differences in financial performance before and during the Covid-19 pandemic in the automotive and components sub-sector in 2018-2022 by conducting a different test analysis on financial ratios. The financial ratios studied are: current assets (CR), return on equity (ROE), debt to asset ratio (DAR), and working capital turnover (WCTO). The population in this research are automotive and component sub-sector companies listed on the Indonesia Stock Exchange (BEI) in 2018-2022.

The sample in this study consisted of 12 companies obtained using purposive sampling technique. The financial ratios used are calculated using the average period before and during the Covid-19 pandemic. The data analysis technique was carried out using a paired sample t-test which was previously carried out by a normality test. The results of this research show that there is no significant difference in financial ratios in the variables current assets (CR), return on equity (ROE), debt to asset ratio (DAR), and there is a significant difference in working capital turnover (WCTO) before and during the Covid-19 pandemic. 19. The output of the targeted research is publication in international journals. TKT 3 is the target proposed in this research.

**KEYWORDS:** Current Ratio, Return on Equity, Debt to Asset Ratio, and Working Capital Turnover

# INTRODUCTION

A. Research Background

Globalization and technological developments have changed all aspects of life, including the digital shift where economic and social activities with the help of technology have had an impact on the entire economy. Human dependence on technology can be used as a business opportunity to improve the economy. Some people have taken advantage of this opportunity to establish startups or start-up companies to provide high-tech digital platforms that can make human life easier. McCauley and Gruszka (2018: 22)[1] define startups as businesses that are young, small, high growth, and aim to use technology to gain wider market coverage. From the Forbes page written by Dane Stagler (2019) it is stated that the global startup economy since 2017 has generated more than US\$2.8 trillion in economic value. This value has increased by 20% when compared to the previous two year period. This kind of increase is also influenced by the rapid growth of a number of startups which have reached a valuation of more than US\$ 1 billion, or commonly referred to as unicorns (Lee, 2017) [2]. This phenomenon is very rare and difficult to capture, which is why these companies are nicknamed unicorns.

The growth of startups and the emergence of unicorns is influenced, among other things, by the ease of starting a business and the business ecosystem that exists in a country. Data from the Ease of Doing Business (EODB) Report which is elaborated with the World Bank (2021)[3] shows that in 2019, Australia was ranked 18th while Indonesia was ranked 73rd in the ease of starting a new business in every country. Country. Higher ratings indicate better and simpler regulations for businesses, and stronger property rights protection. The EODB score is derived from measuring the processes for merging businesses, obtaining building permits, obtaining electricity connections, obtaining property, gaining access to credit, protecting minority investors, paying taxes, engaging in international trade, enforcing contracts and resolving insolvency. From the measurements above, Australia's EODB value was 80.13, while Indonesia's was 67.96. This value makes Australia ranked in the top 20 at the level of "very easy" to start a business. Australia itself is also a member of the high-income OECD members which are considered to have the best economy in the world (World Bank, 2021)[3].

The easier it is to start a business in one country means the lower the barriers to starting. Lower entry costs encourage entrepreneurship, increase firm productivity, and reduce corruption. These humble beginnings can then turn into bigger job opportunities. On the other hand, Indonesia's ranking of 73rd should make it difficult for its citizens to start new businesses, including building startups.

Wholesale Retail Trade, Car and Motorcycle Repair

Description	Growth		Share thd Total PDB	
	QtQ	YoY	(%)	
GDP Wholesale and Retail Trade, Car and Motorcycle Repair	5,7	-5,0	12,8	
Trade in Cars, Motorcycles and Their Repair	21,8	-18,1	2,2	
Wholesale And Retail Trade Not Of Cars And Motorcycles	3,0	-2,0	10,6	
Gross Domestic Product	-5,1	-3,5	100,0	

Source: Central Bureau of Statistics, 2021.

As a result of the Covid-19 pandemic, policies restricting the movement of people and the economy put pressure on the economy including the wholesale and retail trade, car and motorcycle repair sectors which account for 12.9 percent of the economy. The wholesale andretail trade, car and motorcycle repair sectors increased by 5.7 percent (QtQ) and decreased by 5.0 percent when compared to the previous year (YoY). Automotive and component factories even temporarily closed as well as car shows which were canceled due to social restrictions to avoid spreading the plague. Thus, car sales throughout 2020 continued to fall.

Wholesale Gaikindo Sales Data

Wholesale Galkhido Sales Data						
Month	Year					
	2019	2020				
January	82,155	80,435				
February	81,809	79,644				
March	90,368	76,811				
April	84,056	7,868				
May	84,109	3,551				
June	59,600	12,623				
July	89,254	25,285				
August	90,568	37,277				
September	93,175	48,554				
October	96,128	49,018				
November	91,240	53,834				
December	87,664	57,507				
Total	1,030,126	532,407				

Source: Indonesian Automotive Industry Association, 2021

Based on data from the Association of Indonesian Automotive Industries, wholesale car sales (distribution from factories to dealers) throughout 2020 were only 532,027 units. In fact, in 2019 car sales were 1,030,126 units. On average, automotive manufacturers registered as Gaikindo members can sell 80 thousand to 90 thousand units per month. But the 2020 situation is very different. Compared to 2019 data, car sales in 2020 fell by 48.35 percent. Car sales in Indonesia in 2020 also started to drop drastically in April 2020. At that time, the automotive industry was only able to send 7,868 new cars. The lowest sales also occurred in May 2020 with only 3,551 units.

December 2020 became the peak of car sales during the pandemic with 57,507 units and closed 2020 with total sales of 532,407 units. At the start of the pandemic, GAIKINDO revised its car sales target down 40 percent from 1.1 million units to 600 thousand units. Towards the end of the year, GAIKINDO again revised its car sales target to only 525 thousand. Now, this target has been realized at 532,407 units. Meanwhile, car sales in 2020 were dominated by passenger vehicles, with 388,886 units or 73.1 percent. The remaining 26.9 percent or 143,141 units of commercial (commercial) cars. Such sales conditions for automotive vehicles certainly affect the financial performance of companies engaged in the automotive and component industries. This was proven at the beginning of the Covid-19 pandemic, many companies reduced employees, by laying off workers with 50 percent wages and terminating work relations (PHK). The policy takenby the company due to the Covid-19 pandemic aims to suppress activity and reduce the company's burden so that it does not experience worse conditions such as company liquidation.

### **Automotive Sub Sector Sales Data for 2018-2020**

NO	CODE	% Change				
		2018 - 2019	2019 - 2020			
1	ASII	-1%	-26%			
2	AUTO	1%	-23%			
3	BOLT	2%	-35%			
4	BRAM	-7%	-31%			
5	GDYR	-13%	-22%			
6	GJTL	4%	-16%			
7	IMAS	4%	-18%			
8	INDS	-13%	-22%			
9	LPIN	-7%	17%			
10	MASA	7%	-9%			
11	PRAS	-41%	-12%			
12	SMSM	0,1%	-18%			

Source: Indonesia Stock Exchange, 2021.

Table 1.3 is sales data for the automotive sub-sector for 2018 - 2020. Where ASII salesfell more in the 2020 period by 26% compared to the 2019 period which decreased by 1%. The decline in sales also occurred in AUTO companies which fell by 23% where the previous period experienced an increase of 1%, BOLT decreased by 35% while the previous period experienced an increase of 2%, BRAM decreased by 31% which added to a decrease in sales from theprevious year by 7%., GDYR decreased by 22% where the previous period decreased by 13%, GJTL decreased by 16% while the previous period experienced an increase of 4%, IMAS decreased by 18% and the previous period experienced an increase of 4%, INDS decreased by 22% even though in previously experienced a decrease of 13%, MASA decreased by 9% and increased by 7% in the previous period, PRAS decreased by 12% which reduced the previous period's decline by 41%, SMSM decreased by 18% while the previous period experienced an increase of 0.1%, in this sub-sector there was only one company that experienced an increase of 17% company.

Not only sales have decreased, production numbers have also decreased. This was stated by the Central Statistics Agency (BPS) which recorded that production and sales in the Indonesian automotive sector experienced a decline of 38.09%. When compared with the third quarter of 2020, there was an increase of 82.21%. However, when compared on an annual basis (yoy), the production of this car experienced a quite deep decline, namely 38.09%. Meanwhile, motorbike sales also experienced a sharp decline on an annual basis. This is closely related to the consumption of lower class people. Wholesale motorbike sales in the fourth quarter of 2020 amounted to 786,502 units. On a Q to Q basis, it fell 20.56%. When compared with the position in the fourth quarter of 2019, the decline was very sharp at 49.83%. (Suhariyanto, 2021)

Based on this phenomenon, the financial sector is a very important part of a company in assessing company performance as a basis for making decisions if a pandemic condition like the current one occurs. Many large or small scale companies pay great attention to this area. Therefore, in order for a company to survive, grow and continue to develop, the company must pay close attention to the company's financial condition and performance. Financial performance can be determined by calculating financial ratios obtained from financial reports prepared by company management.

To find out the difference between the Covid-19 pandemic and the company's financial performance in this research, the author used ratio analysis consisting of liquidity ratios, profitability ratios, activity ratios, and solvency ratios. Several previous studies have examined financial performance comparisons using ratio analysis with different conditions, including research conducted by Rekha Officiallia, Arief Tri Hardiyanto, Agung Fajar Ilmiyono from the Accounting Study Program, Faculty of Economics, Pakuan University, Bogor regarding "The Effect of Mergers and Acquisitions on Financial Performance of Go Public Manufacturing Companies Registered on BEI for the 2012-2014 Period" with the results of research using a different paired sample t test which shows that there is no significant difference except there is a difference in the Return On Asset (ROA) ratio for the 2 year test period, 1 the year before and 1 year after. However, these results are not strong enough to prove the influence of mergers and acquisitions on the financial performance of manufacturing companies going public.

In this research the author will consider aspects before and after COVID-19. In previous journals, this aspect was not used but was based on conditions of uncertainty so that it would affect the stability of the company, then this research will be measured by several financial ratios including the liquidity ratio which is proxied by the CR and

QR variables, the profitability ratio which is represented by the ROA and ROE variables, the ratio activities using FAT and TATO variables, solvency ratios measured by DAR and DER variables.

The contribution contained in this research lies in the research object where this research was carried out in automotive sector companies. The author chose the research object of automotive companies because the automotive sector is one of the sectors affected by the COVID-19 pandemic, seen from the decline in public demand for vehicle purchases, which makes people tend to buy basic commodities rather than luxury goods, as well as the implementation of large-scale social restrictions (PSBB). Due to this phenomenon, the automotive sector is one of the sectors with potential losers. Considering the phenomena and facts above, this research attracted the attention of the author to take the title "Comparison of Fundamental Analysis of the Automotive Sub-Sector Before and During the Covid-19 Pandemic"

# Formulation of the problem

Based on the limitations of the problem described above, the formulation of the problem isobtained as follows:

- 1. What was the difference in the Current Ratio in the automotive and component sub-sectorcompanies before and during the Covid-19 Pandemic?
- 2. What was the difference in Return on Equity in the automotive and component sub-sectorcompanies before and during the Covid-19 Pandemic?
- 3. What was the difference between Debt to Assets in the automotive and component sub-sectorcompanies before and during the Covid-19 Pandemic?
- 4. What was the difference in Working Capital Turnover in the automotive and component sub-sector companies before and during the Covid-19 Pandemic?

# LITERATURE REVIEW

## **Signalling Theory**

Signal theory underlies this research, signaling theory originated from the writings of George Akerlof in his 1970 work "The Market for Lemons", which introduced the term asymmetric information (assymetri information). Akerlof (1970) studied the phenomenon of imbalanced information about product quality between buyers and sellers by conducting tests on the used car market. Signal theory is used to explain that financial reports are used to give positive signals (good news) and negative signals (bad news) to the wearer.

Signalling theory states that investment spending gives a positive signal about the company's growth in the future, thereby increasing stock prices as an indicator of company value (Brigham and Houston, 2011). An increase in debt can also be interpreted by outsiders about the company's ability to pay its obligations in the future or low business risk, so that the addition of debt will give a positive signal. This is because companies that increase debt can be seen as companies that are confident about the company's prospects in the future (Brigham and Houston, 2011). The main assumption of this signal theory provides space for investors to find out how the decisions they will take are related to market reactions from announcements or events. These events or announcements contain information that can affect the value of the company and its impact on all companies in the capital market.

# Likuidity Ratio

According to (Tamam & Wibowo, 2017), liquidity is a company's ability to meet its short-term obligations when they are due. Meanwhile, according to (Kazemian, 2017), liquidity is a measure of the extent to which an organization has cash to meet short-term obligations, or other assets that can replace cash. Liquidity has certain functions and benefits for a company, namely as a medium in carrying out daily company activities and as a tool to anticipate urgent or sudden funding needs. Within a company, this ratio is used to measure a company's ability to meet short-term financial obligations in the form of short-term debt. This ratio is shown by the size of current assets. Where is how quickly the company fulfills its financial performance, generally short-term obligations or obligations of less than one year (V.W. Sujarweni, 2017). The liquidity ratio used in this study is the Current Ratio (CR). The Current Ratio can show the company's ability to use ts current assets to pay off its current debts.

 $Current \ ratio = \frac{Current \ Assets}{Current \ Liabilities}$ 

# **Profitability Ratio**

According to (Mafiroh et al., 2016), profitability shows how efficient and effective a company is in utilizing and using company equity in generating profits. The better the profitability ratio, the better it describes the company's ability to achieve high profits. The use of profitability ratios can be done by using comparisons between the various components in financial reports, especially financial reports, balance sheets and income statements which can be done for several operating periods with the aim of seeing the development of the company in a certain timeframe, both decreasing and increasing and looking for the causes of the increase or decrease. The profitability ratio used

in this study is Return on Equity (ROE). Return on Equity is used to measure a company's ability to use its total equity to provide benefits.

$$Return\ on\ Equity = \frac{Net\ Income}{Total\ Equity}$$

# **Solvency Ratio**

According to (Lestari & Dewi, 2013), solvency is the result of costs in using assetfinancing or to prosper and improve the welfare of shareholders. Too high use of a company's debt can worsen the economy of a company. This ratio is used to measure how much thecompany's total assets come from debt or capital, so this ratio can determine the company's position and its fixed obligations to other parties as well as the balance of the value of fixed assets with existing capital. The solvency ratio used in this study is the debt to asset ratio (DAR). Debtto asset ratio is a comparison that measures the percentage of funds originating from debt, both short-term debt and long-term debt.

$$Debt \ to \ Assets \ Ratio = \frac{Total \ Debts}{Total \ Assets}$$

# **Activity Ratio**

The activity ratio is the ratio that describes the extent to which a company uses its resources to support company activities (Fahmi, 2012). The activity ratio is the ratio used to measure the level of efficiency in the utilization of the company's resources, or to assess the company's ability to carry out its daily activities. The activity ratio used in this study is the working capital turnover ratio. The working capital turnover ratio is a ratio to calculate the effectiveness of using acompany's working capital.

$$Working\ Capital\ Turn\ Over = \frac{Net\ Sales}{Working\ Capital}$$

### **Previous Research**

Riska Nurul Fitriani and Sasi Agustin (2016). Research Title of Financial Performance Analysis Before and After Going Public. Research Results The financial performance of the banking company PT Bank Tabungan Negara, Tbk after going public shows that financial conditions are getting better. The results of the financial ratio analysis show that the ratios of ROE, PR, CAR, CR, CRR, and DRR show significant differences, while the ratios of QR, BR, LDR, NPM, and ROA do not. showed a significant difference.

Hendry Andres Maith (2013). Research Title Financial Statement Analysis in Measuring Financial Performance at PT. Hanjaya Mandala Sampoerna, Tbk. Research Results The liquidity ratio has increased every year so that the state of the company is categorized as in good condition (liquid). The solvency ratio shows that the company's capital is insufficient to guarantee debts provided by creditors so that the company's condition is said to be insolvable. The activity ratio shows an increase every year so that the company is said to be in good condition. The profitabilityratio shows an increase from year to year so that it can be said that the company is in a good condition good position.

Rita Satria (2017). Research Title Analysis of Financial Statements to View Company Performance at PT. Darma Henwa, Tbk. Research Results Liquidity and profitability ratios are considered good when viewed from the industry average. The solvency ratio and activity ratio are considered poor because they are below the industry average.

Wilna Feronika Rabuisa, Treesje Runtu and Heince Wokas. Research Title FinancialStatement Analysis in Assessing Company Financial Performance at Rural Banks (BPR) and Raya Manado. The results of the Liquidity Ratio Research show that the company is still able to pay its financial obligations through its liquid assets. The Solvency Ratio is said to be a company that still has sufficient capital to finance its activities It is said that the Profitability Ratio of the company is still fluctuating, but the company's profit is still increasing.

Yunita Irenne Manitik (2013). Research Title Comparative Analysis of Financial Performance at PT. XL Axiata, Tbk and PT. Indosat, Tbk Different test results Independent sample t-test of 11 variables found no significant difference in financial performance between PT XL Axiata Tbk and PT Indosat Tbk. The significance value of XL Axiata and Indosat is higher than 0.05, which means that the variances are more or less equal or the two variances are not significantly different and are the same as the alternative hypothesis.

Rifany Angelia Queen (2016). Title of Research Comparative Analysis of Financial Performance at PT. Kimia Farma Tbk and PT. Kalbe Farma Tbk Period 2011-2014. Research Results Kalbe Farma's Current Ratio is more liquid than Kimia Farma because its current asset value is higher. Kalbe Farma's Debt to Asset Ratio is better than Kimia Farma because of its low debt value in financing the company's assets Kalbe Farma's return on assets is higher than Kimia Farma because of its income value and profit level Kalbe Farma's Price Earning Ratio is better than Kimia Farma due to a higher share price. Putu Yulia Kumalasari and Ni Putu Santi

Suryantini (2018). Title of Research Comparative Analysis of Company Financial Performance Before and After Acquisition. Research Results Five financial ratios namely CR, ROA, DER, TATO, PER no significantly different after the acquisition compared to before the acquisition. The acquisition strategy has not been fully achieved due to the post-acquisition financial performance that has not improved. The company's motive for making acquisitions is not economic but non-economic Michael.

Agyarana Barus, Nengah Sudjana and Sri Sulasmiyati (2017). Title of Research Using Financial Ratios to Measure Company Financial Performance (Studies on PT. Astra Otoparts, Tbkand PT. Goodyer Indonesia, Tbk which Go Public on the Indonesia Stock Exchange). Theresearch results of financial ratio analysis consisting of liquidity ratios, activity ratios, solvency ratios and profitability ratios for the period 2013-2015 show the financial performance of PT. Astra Otoparts, Tbk is better than PT. Goodyear Indonesia, Tbk.

Risca Fransiska Rumondor (2013). Title Research on Comparative Financial Performance of Bank Mandiri, BRI and BNI which are listed on the Indonesia Stock Exchange. The results of the discussion for PT Bank Mandiri (Persero) Tbk and PT Bank Rakyat Indonesia (Persero) Tbk in the 2008-2011 period were in a fairly healthy predicate with a PK-3 composite rating, and for the 2012 period they were in a healthy predicate with a PK-1 composite rating, while PT Bank Negara Indonesia (Persero) Tbk for the 2008-2012 period was in a fairly healthy predicate with a PK-3 composite rating.

Yolanda Supit (2013) Title of Comparative Research on Financial Performance of PT. Telkom Tbk and PT. Indosat Tbk. Research Results Independent sample different test analysis states that there is no difference between financial performance at PT. Telkom Tbk and PT. Indosat Tbk. From this research it appears that PT. Telkom Tbk and PT. Indosat Tbk has financial performance that is not significantly different, due to the ownership status of the two companies, where PT. Telkom Tbk is a government-owned company, while PT. Indosat Tbk was once a government-owned company but in 2002 Indosat became a company again foreign capital.

Florenz C. Assignment, CISA, CPA and Ramon V. del Rosario (2012). Research Title A Comparative Analysis of the Financial Ratios of Listed Firms Belonging to the Education Subsector in the Philippines for the Years 2009- 2011. The results of the analysis show that FEU has good liquidity and profitability followed by Malayan and CEU; in activity, FEU ranks first, followed by CEU and Malayan; in solvency, Malayan ranks first followed by CEU and FEU; the market value of CEU and FEU has the same rank first followed by Malayan. The results of the overall analysis of FEU ranked first with 44 points followed by Malayan with 40 points then CEUwith 36 points.

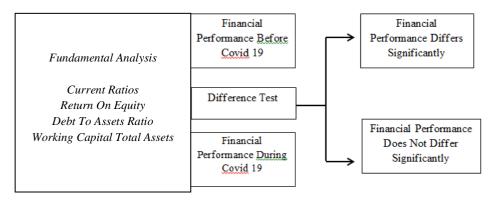
Hussain Muhammad, Prof. Dr. Bahadar Shah, Zia ul Islam, M. Waqas, Dawood Khan (2013). Research Title Comparative Evaluation of Financial Performance of Pakistan Tobacco Company (PTC) and Philip Morris Pakistan Limited (PMPKL) through Ratio. The results of the analysis of PMPKL's liquidity and solvency ratios are better than PTC, while PTC's activity, profitability and market value ratios are better than PMPKL. PTC is better with 26 points than PMPKL with 19 points.

- S. Vanitha and M. Selvan (2011) Financial Performance of Indian Manufacturing Companies during Pre and Post Merger Descriptive analysis method and different test t-test The results of the analysis show that companies in India that have merged are companies that have good financial management.
- D. Sandhya and Chaithra N (2020) Research Title Paired Comparison Analysis Of Financial Performance Of Certain Private Sector Banks In India For The FY 2018-2019. The results of the analysis show that HDFC Bank's financial performance has good financial performance followed by Federal Bank, Axis Bank, Yes Bank, ICICI Bank. The results of this study were also carried out by comparing private banks and PSB with two foreign banks from year to year.

Janice P. Bagsit and Adones B. Anuran (2016). Title of Research Financial Performanceof Sorosoro Ibaba

Development Cooperative- Feedmilling Operation. The results of the analysis show that SIDC's financial performance in Philippine currency (Peso) has decreased for gross profit even though sales and cost of goods sold have increased The higher the value of cooperation in operational activities, the higher the advantage that the company will get

### **Research Framework**



### Framework

# **Research Hypothesis**

H1: There was a difference in the Current Ratio before and during the Covid-19 PandemicH2: There were differences in ROA before and during the Covid-19 Pandemic

H3: There were differences in Debt to Assets before and during the Covid-19 PandemicH4: There were differences in TATTOOS before and during the Covid-19 Pandemic

### RESEARCH METHOD

### **Population and Research Sample**

The population in this study are automotive and component sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2018–2022, with 13 companies recorded. Sampling in this study using purposive sampling method. The criteria used in selecting the sample for this study were: automotive and component companies that have been listed on the Indonesia Stock Exchange during the 2018-2022 research period, the automotive and component companies haveissued and published financial reports during the observation period 2018 to 2022, data regardingthe variables studied are available in full.

# **Data Analysis Method**

This test was carried out on paired samples. The sample used is the same subject but subjected to two different measurements. Statistical tests using paired sample t-tests are used to explain whether or not there are significant differences in the company's financial performance before and after the Covid-19 pandemic through liquidity ratios, profitability ratios, activity ratios and solvency ratios which are the hypotheses in this study. The significance level used in this study is  $\alpha = 5\%$  (0.05). If the probability > 0.05 then H0 is accepted and Ha is rejected, meaning that there is no significant difference. Meanwhile, if the probability <0.05 then H0 is rejected and Ha is accepted, meaning that there is a significant difference.

If F is calculated with Equal variance assumed (it is assumed that both variances are the same) it has a sig value. >0.05 then it is stated that the two variants are the same. If the two variances are the same, then it is better to use the Equal variance assumed basis for t calculation. If t count sig. <0.05, it is said that there is a significant difference in financial performance beforeand after the Covid-19 pandemic, on the other hand if t count sig >0.05 it is stated that there is nosignificant difference in financial performance before and after the Covid-19 pandemic. If F is calculated with Equal variance assumed (it is assumed that both variances are the same) it has asig value. <0.05, then it is stated that the two variances are different. If the two variances are different, then to compare the two populations with the t-test it is better to use the Equal variance not assumed basis for t calculation. If t count with Equal variance not assumed has sig. >0.05, it can be said that there is no significant difference in financial performance before and after the Covid-19 pandemic, but if sig. <0.05, it can be stated that there is a significant difference in financial performance before and after the Covid-19 pandemic.

# (6)

# RESULTS AND DISCUSSION

# **Overview of Research Objects**

There are 12 automotive and component sub-sector companies listed on the Indonesia Stock Exchange and will be used as research objects. The companies that are the samples in this study are:

**Company Sample** 

NO	Issuer Code	Company name			
1	ASII	Astra International Tbk			
2	AUTO	Astra Otoparts Tbk			
3	BOLT	Garuda Metalindo Tbk			
4	BRAM	Indo Kordsa Tbk			
5	GDYR	Goodyear Indonesia Tbk			
6	GJTL	Gajah Tunggal Tbk			
7	IMAS	Indomobil Sukses Internasional Tbk			
8	INDS	Indospring Tbk			
9	LPIN	Multi Prima Sejahtera Tbk			
10	MASA	Multistrada Arah Sarana Tbk			
11	PRAS	Prima Alloy Steel Universal Tbk			
12	SMSM	Selamat Sempurna Tbk			

# Data Analysis ResultsDescriptive statistics.

Results of Descriptive Analysis of Research Variables.

	N	Minimum	Maximum	Mean	Std. Deviation
CR Before	24	0,60	13,04	2,7013	2,91384
CR After	24	0,66	9,05	2,6529	2,22993
ROA Before	24	-0,08	0,23	0,0454	0,06878
ROA After	24	-0,08	0,19	0,0338	0,06520
DAR Before	24	0,07	0,79	0,4192	0,22658
DAR After	24	0,08	0,75	0,4100	0,21784
TATO Before	24	0,21	1,40	0,7754	0,32932
TATO After	24	0,16	1,25	0,6850	0,28396

Source: secondary data obtained by SPSS in 2023

Based on the table above, the average, standard deviation, minimum and maximum values of each variable are as follows:

- a. The minimum value of the current ratio before the Covid-19 pandemic was 0.60, which was smaller than during the Covid-19 pandemic, which was 0.66. The maximum value of the current ratio before the Covid-19 pandemic was 13.04, which was greater than during the Covid-19 pandemic, which was 09.05. The average value of the current ratio before the Covid-19 pandemic was 2.7013, which was greater than during the Covid-19 pandemic, which was 2.6529. Dan Std. The deviation of the current ratio before the Covid-19 pandemic was 2.91384, this value is higher than during the Covid-19 pandemic, which was 2.22993.
- b. The minimum value of return on assets before the Covid-19 pandemic was -0.08, which wasthe same value as during the Covid-19 pandemic, which was -0.08. The maximum value of return on assets before the Covid-19 pandemic was 0.23, which was greater than during the pandemic, which was 0.19. The average value of return on assets was greater before the Covid-19 pandemic, which was 0.0454 compared to during the Covid-19 pandemic, which was 0.0338. Dan Std. The deviation before the Covid-19 pandemic was 0.06878, this value was greater than during the Covid-19 pandemic, which was 0.06520.
- c. The minimum value of the debt to asset ratio before the Covid-19 pandemic was 0.07, which was smaller than during the Covid-19 pandemic, which was 0.08. The maximum value of the debtto asset ratio before the Covid-19 pandemic was 0.79, which was higher than during the Covid-19pandemic, which was 0.75. The average debt-to-asset ratio before the COVID-19 pandemic was 0.4192, which was higher than during the COVID-19 pandemic, which was 0.4100. and Std. The deviation of the debt to asset ratio before the Covid-19 pandemic was 0.22658, this value was greater than during the Covid-19 pandemic which was 0.21784.
- d. The minimum value of total asset turnover before the Covid-19 pandemic was 0.21, which was greater than during the Covid-19 pandemic, which was 0.16. The maximum value of total asset turnover before the

Covid-19 pandemic was 1.40 greater than during the Covid-19 pandemic, which was 1.25. The average value of total asset turnover before the Covid-19 pandemic, which was 0.7754, was higher than during the Covid-19 pandemic, which was 0.6850. Dan Std. The deviation before the pandemic was 0.32932 while

Normality test Normality Test Results of One -Sample Kolmogorov-Smirnov Test Before Transformation.

	Asymp. Sig. (2-tailed)	Description
CR Before	0,000	Abnormal
CR After	0,000	AbNormal
ROA Before	0,200	Normal
ROA After	0,200	Normal
DAR Before	0,176	Normal
DAR After	0,200	Normal
TATO Before	0,200	Normal
TATO After	0,200	Normal

Source: secondary data obtained by SPSS in 2023

The table above shows that the residual probability value (asymp.sig. 2-tailed) in the Current Ratio before and during the Covid-19 pandemic was 0.000 which is smaller than sig- $\alpha$  (0.05), so it can be concluded that the research data is not normally distributed. So that from the results of the normality test with the Kolmogorov-Smirnov (K-S) it shows that the data is not normally distributed. There are several ways to change the regression model to normal according to Erlina (2017: 106), namely:

- 1) Performing data transformation, for example converting data into square root (SORT), logarithmic (LOG), or natural (Ln) form.
- 2) Perform trimming, namely removing outlier data.

during the Covid-19 pandemic it was 0.28396.

3) Do winsoring, which changes the outlier data values to a certain value. To change the residual values so that they are normally distributed, the authors transform the data into the natural model (Ln). Then the data is retested based on the assumption of normality. Following are the results of the Kolmogorov-Sminorv (K-S) test after being transformed in table 4.3 below:

Normality Test Results One -Sample Kolmogorov-Smirnov Test After Transformation.

	Asymp. Sig. (2-tailed)	Description
CR Before	0,200	Normal
CR After	0,051	Normal
ROA Before	0,200	Normal
ROA After	0,200	Normal
DAR Before	0,176	Normal
DAR After	0,200	Normal
TATO Before	0,200	Normal
TATO After	0,200	Normal

Source: secondary data obtained by SPSS in 2023

Based on the table above, the results of the normality test for the financial performance ratio of the automotive sub-sector industry and components listed on the Indonesia Stock Exchange (IDX) before and during the Covid-19 Pandemic after the data were transformedresulted in all research variables being greater than the Sig value. <0.05 so that it can be concluded that the data is normally distributed and meets the data assumptions so that the hypothesis testing for this study will use the Paired Sample t-test.

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# **Hypothesis Test**

### Paired Samples t-test results.

				ed Different					
			Std.	Std.	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
		Mean	Deviation	Error Mean	Lower	Upper			
Pair 1	CR Before CR After	-,10429	,040381	,08243	-,27480	,06623	-1,265	23	,218
Pair 2	ROA Before ROA After	,01167	,06418	,01310	-,01543	,03877	,891	23	,382
Pair 3	DAR Before DAR After	,00917	,06143	,01254	,01677	,03510	,731	23	,472
Pair 4	TATO Before TA After	,09042	,16303	,03328	,02158	,15926	2,717	23	,012

Source: secondary data obtained by SPSS in 2023

Based on the table above, the variable significance results are obtained:

- a. Results Sig. 2-tailed for a current ratio of 0.218 with a toount of -1.265 and a ttable of 2.064. Based on the results of Sig. The 2-tailed current ratio is greater than the significance level of 5%, namely 0.218>0.05 and toount is smaller than ttable, namely -1.265<2.064. It can be concluded that H1 was rejected, which means that there was no difference in the current ratio before and during the Covid-19 Pandemic in the Automotive and Components sub-sector which were listed on the Indonesia Feel Exchange (IDX).
- b. Results Sig. 2-tailed for return on assets of 0.382 with a tcount of 0.891 and a ttable of 2.064. Based on the results of Sig. The 2-tailed return on assets is greater than the significance levelof 5%, namely 0.382 > 0.05 and tcount is smaller than ttable, namely 0.891 < 2.064. It can be concluded that H2 is rejected, which means there is no difference in return on assets before andafter the Covid-19 Pandemic in the Automotive and Components sub-sectors listed on the Indonesia Feel Exchange (IDX).
- c. Results Sig. 2-tailed for debt to assets of 0.472 with a tcount of 0.731 and a ttable of 2.064. Based on the results of Sig. 2-tailed debt to assets is greater than the significance level of 5%, namely 0.472 > 0.05 and tcount is smaller than ttable, namely 0.731 <2.064. It can be concluded that H3 is rejected, which means there is no difference in debt to assets before and after the Covid-19 Pandemic in the Automotive and Components sub-sectors listed on the Indonesia Feel Exchange (IDX).
- d. Results Sig. 2-tailed for total asset turnover of 0.012 with a tcount of 2.717 and a ttable of 2.064. Based on the results of Sig. 2-tailed total asset turnover is smaller than the significance level of 5%, namely 0.012 <0.05 and tcount is greater than ttable, namely 2.717 <2.064. It can be concluded that H4 is accepted, which means there are differences in total asset turnover before and after the Covid-19 Pandemic in the Automotive and Components sub-sectors listed on the Indonesia Feel Exchange (IDX).

# Discussion

### There is a difference in the Current Ratio before and after the Covid-19 Pandemic.

Based on hypothesis testing in the Current Ratio study, it was found that Asymp. Sig. (2- tailed) 0.218 which indicates that the result is greater than the alpha level of 5% or 0.05. It can be concluded that there is no difference in the current ratio in research before and during the Covid-19 Pandemic in the Automotive and Components sub-sector which are listed on the Indonesia Stock Exchange (IDX). The test results show that there is no difference in the comparison of financial performance before and during the Covid-19 pandemic, although it is known that the value of the current ratio during the pandemic is smaller than before the pandemic, this indicates that the automotive and component sub-sector companies are listed on the Stock Exchange. Indonesia (IDX) from 2018 to 2021 can complete short-term obligations and carry out short-term financial management properly.

### There are differences in the Return on Asset Ratio before and after the Covid-19 Pandemic.

Based on hypothesis testing in the Return on Assets study, it was found that Asymp. Sig. (2-tailed) 0.382 which indicates that the result is greater than the alpha level of 5% or 0.05. It can be concluded that there is no difference in the current

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ratio in research before and during the Covid-19 Pandemic in the Automotive and Components sub-sector which are listed on the Indonesia Stock Exchange (IDX). The test results show that there is no difference in the comparison of financial performance before and during the Covid-19 pandemic, although it is known that the value of return on assets after the pandemic is smaller than before the pandemic, this indicates that the automotive and component sub-sector companies are listed on the Stock Exchange. Indonesian Securities (IDX) from 2018 to 2021 can utilize its assets effectively and efficiently to generate profits and manage company profits properly.

# There are differences in the Debt to Asset Ratio before and after the Covid-19 Pandemic.

Based on hypothesis testing in the Debt to Asset research, Asymp is obtained. Sig. (2-tailed) 0.472 which indicates that the result is greater than the alpha level of 5% or 0.05. It can be concluded that even with the Covid-19 pandemic in the financial performance of the automotive and component sub-sectors, there is no difference in managing debt to assets. From the results of this test it can be seen that there is no difference in the comparison of financial performance before and after the covid-19 pandemic, the value of debt to assets during the covid-19 pandemic was also smaller when compared to before the covid-19 pandemic, this shows that sub-sector companies automotive and components listed on the Indonesia Stock Exchange (IDX) from 2018 to 2021 can manage financial performance in terms of debt well. Even though during the Covid- 19 pandemic people's interest in the need for vehicles decreased, this did not make companies in the automotive and component sub-sectors increase their debt.

### There are differences in Total Asset Turnover before and after the Covid-19 Pandemic.

Based on hypothesis testing in the Total Asset Turnover study, Asymp was obtained. Sig. (2-tailed) 0.012 which indicates that the result is smaller than the alpha level of 5% or 0.05, thus it can be said that H4 is accepted because there is a difference in Total Asset Turnover before and during the Covid-19 pandemic in automotive and automotive sub-sector companies. components listed on the Indonesia Stock Exchange (IDX) in this research year. From the test results, it was found that the comparison of financial performance before and during the Covid-19 pandemic found differences with the positive response seen from the tcount showing a value of 2.717 where there was a significant decrease in income when compared to before the Covid-19 pandemic. During the Covid-19 pandemic, public interest in the need for motorized vehicles decreased because people tended to buy staples rather than luxury goods and the implementation of large- scale social restrictions (PSBB) reduced the space for people to move their activities. This has further reduced revenue in the automotive and component industries listed on the Indonesia Stock Exchange (IDX) in 2018-2021.

# CONCLUSIONS AND SUGGESTIONS

### Conclusion

Based on the results of the analysis that has been carried out in this study, it can be concluded that:

- 1. There was no difference in the Current Ratio before and during the Covid-19 pandemic in the Automotive and Components sub-sector companies listed on the Indonesia Stock Exchange (IDX).
- 2. There was no difference in Return on Assets before and during the Covid-19 pandemic in the Automotive and Components sub-sector companies listed on the Indonesia Stock Exchange (IDX).
- 3. There was no difference in Debt to Assets before and during the Covid-19 pandemic in the Automotive and Components sub-sector companies listed on the Indonesia Stock Exchange (IDX).
- There were differences in Total Asset Turnover before and during the Covid-19 pandemic inthe Automotive and Components sub-sector companies listed on the Indonesia Stock Exchange(IDX).

### Suggestion

To improve the company's financial performance during the Covid-19 pandemic due to decreased income, companies should reduce business costs and carry out capital management carefully, effectively and efficiently, thus the company's ability to increase profitability in the future will be better. And investors should be more careful about investing their capital inautomotive and component sub-sector companies during the Covid-19 pandemic, given the unstable income in companies in this sector when compared to before the pandemic, so it wouldbe better to maintain capital and be more careful in seeing investment opportunities.

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