

# THE EFFECT OF CASH FLOW VOLATILITY, SALES VOLATILITY, LEVERAGE, OPERATING CYCLE, AND FIRM SIZE ON EARNINGS PERSISTENCE IN MANUFACTURED COMPANIES LISTED ON THE INDONESIAN STOCK EXCHANGE

Tandy Sevendy,<sup>1</sup> Suyono<sup>2</sup>, Fitri Yani<sup>3</sup>

<sup>1,2,3</sup> Institut Bisnis dan Teknologi Pelita Indonesia, Pekanbaru, Indonesia

Corresponding Author: [tandysevendy2@gmail.com](mailto:tandysevendy2@gmail.com)

**Abstract:** This study aims to determine the effect of cash flow volatility, sales volatility, leverage, operating cycle and firm size on earnings persistence in manufacturing companies listed on the Indonesia Stock Exchange in 2016-2020. The sample in this study were 102 companies using purposive sampling technique. This type of research is quantitative using secondary data contained in the company's financial statements. The method of analysis in this research is multiple linear regression analysis using SmartPLS 3 application and IBM SPSS Statistics 21. Based on the results of hypothesis testing conducted, namely that cash flow volatility, debt level, and firm size have a significant effect on earnings persistence in manufacturing companies on the Indonesia Stock Exchange. Meanwhile, sales volatility and operating cycle have no significant effect

**Keywords:** Cash Flow Volatility, Sales Volatility, Leverage, Operating Cycle, Firm Size, Earnings Persistence

## 1. Introduction

Financial report is a form of management responsibility by managing company resources to important parties as a basis in making decision such as evaluating company performance, dividend distribution to shareholders, etc. Financial report users usually pay attention to amount of profit which company can make. Profit is one of essential factors in company building. The profit quality has a tight correlation with profit persistency. Profit persistency is profit which is expected in the future based on current year profit. Investors will look at profit persistency. If the current year profit is going well, then the profit can be used for the future, thus the profit is a persistent profit (Kusuma & Sadjarto, 2014).

According to Dewi & Putri (2015), persistent profit is a fluctuating and sustainable profit in the future for a long and continuous period. Persistent profits are stable every year. If the company's profits fluctuate significantly each period, it will cause the profit persistency to be doubted by financial report users. The phenomenon related to profit persistency recently occurred at PT. Gudang Garam (GGRM). In 2017, it managed to record a net profit of 7.75T, and in 2018 there was an increase in net profit of 7.79T. Then in 2019 the net profit grew by 40% to reach 10.80T, but in 2020 the net profit fell 25% to 7.64T. Where the drop in net

profit was due to an increase in excise expenses, and decrease in sales levels, besides people's purchasing power also decreased due to the Covid-19 pandemic.

Unlike the case with PT. Jaya Konstruksi Manggala Pratama Tbk (JKON) which experienced a decrease in net profit in 2020, which was 50.83 billion. This profit decreased compared to net profit in 2019 which reached 202.28 billion. This drop was caused by the spread of the corona virus which disrupted the company's entry. As a result of this pandemic, JKON has also terminated employment with 80 employees. And from the cases above, it can be concluded that the companies have not been able to generate persistent or sustainable profits for the future.

Cash flow volatility can affect profit persistency. Cash flow volatility is defined as fluctuations that vary from period to period (Sulastri, 2014). The high volatility of cash flows can be indicated by the presence of high uncertainty also in the operating environment. The higher the volatility of cash flows, the higher the uncertainty in predicting future cash flows and ultimately the lower the persistent level of profit generated. The research results by Lasrya & Ningsih (2020), and Nadya, Namira & Zutilisna (2018), prove that cash flow volatility affects profit persistency. However, this research contradicts the research of Hastutiningtyas, Dewi & Wuryani (2019) which proves that cash flow volatility has no effect on profit persistency.

According to Rahmadhani (2014) sales volatility is the degree of sales distribution or a spread index of the company's sales distribution. If sales volatility is high, it will lead to low profit persistence because profits tend to be judged to have errors. The results of research on sales volatility were conducted by (Kusuma & Sadjiarto, 2014), and Khasana & Jasman (2019) which showed that sales volatility had an effect on profit persistency. Meanwhile, research conducted by Lasrya & Ningsih (2020) shows that sales volatility has no effect on profit persistency.

The level of debt is the company's capital to fulfill obligations to third parties. Debt has a positive impact because it can increase the company's capital. Investors will be more attracted to companies that have high debt levels but whose profits are always persistent in accordance with the circumstances and are sustainable. And to maintain good company performance in the eyes of investors, the company will increase profit persistence through the existing debt level. The results of research by Rahmadhani (2014), and Gusnita & Taqwa (2019), prove that the level of debt affects profit persistency. However, this study contradicts the research conducted by Barus & Rica (2014), and Hidayat & Fauziyah (2018) which showed the results that the level of debt had no effect on persistent profit.

The operating cycle is the period of time required between the purchase of inventory and cash income to be received from the transaction process. The operating cycle is closely related to profit, because in the operating cycle there are sales which later profits from these sales will be used to predict future cash flows. A longer operating cycle causes greater uncertainty, makes accruals more dependent and less helpful in predicting future cash flows (Fauzia & Sukarmanto, 2015). The results of research conducted by Fauzia & Sukarmanto (2015), and Amaliyah & Suwanti (2017) prove that the operating cycle affects profit persistency. However, this study contradicts research conducted by Sarah et al (2019) and Lasrya & Ningsih (2020) which state that the operating cycle has no effect on profit persistency.

Company size is a benchmark that describes the size of a company. Large companies tend to have high quality financial reports because the company is more stable and able to generate predictable profits in the future, so that the estimation error will be smaller. Stable companies usually have high profits, while small companies have the possibility that the profits earned are not stable because of the low level of profit certainty (Nurochman & Solikhah, 2015). The results of research conducted by Septavita (2018), and Gusnita & Taqwa, 2019) prove that company size has an influence on profit persistency. Meanwhile, according to Hidayat &

Fauziyah (2018), and Sarah et al (2019) prove that company size has no effect on profit persistency.

The purpose of this research is to determine and analyze the effect of cash flow volatility variable, sales volatility, debt level, operating cycle and company size on profit persistency in manufacturing companies listed on the Indonesia Stock Exchange for 2016-2020 period.

## 2. Literature Review

### Agency Theory

According to Nur Zaimah (2018) agency theory is the separation between owners and managers in a company. Agency theory states that the relationship between one or more owners (principals) who employ other people (agents) in providing services to manage a company. Where the principal is the shareholder, while the agent is the person who is given the power to run the company.

### Signaling Theory

Signals are actions taken by the management of a company by providing instructions to investors on how management assesses the prospects of the company (Gusnita & Taqwa, 2019). The signal given by the management is in the form of financial and non-financial information from year to year.

### Profit Persistency

Profit persistency is a measuring tool to see the quality of profit, where quality profits are always sustainable and repeated every year. Profit persistency can also be interpreted as a measure that explains the company's ability to maintain current and future profits (Amaliyah & Suwarti, 2017).

$$EPR = \frac{\text{Earnings } t + 1}{\text{Avg of Total Aset}}$$

Where:

EPR = Profit Persistency  
 Earnings t+1 = Company net profit next year  
 Avg of Total Aset = The average of total asset

### Cash Flow Volatility

Cash flow volatility is the spread degree of cash flows or an index of the company's cash flow distribution (Indra, 2014). To measure profit persistency, a stable cash flow volatility is needed, i.e. volatility that has a small value. If cash flows fluctuate sharply, it is difficult to determine future cash flows (Sulastri, 2014).

$$VOK = \frac{\sigma\text{CFO}}{\text{Total Aset}}$$

Where:

VOK = Cash Flow Volatility  
 $\sigma\text{CFO}$  = Standard deviation of operating cash flows of company i during the year of observation (2016-2020)  
 Total Asset = Total assets of company i year t Ownership

### Sales Volatility

According to Rahmadhani (2014) sales volatility is the distribution degree of sales or spread index of the company's sales distribution. Sales volatility indicates fluctuations in the

operating environment and a large trend in the use of forecasts and estimates, causing large estimation errors resulting in low profit persistence (Khasana & Jasman, 2019).

$$VP = \frac{\sigma_{Sales}}{Total\ Aset}$$

Where :

Sales = Sales of company j from 2016 to 2020

Total Asset = Total assets of company j year t

$\sigma$  Sales = Standard deviation of Sales

### Debt Level

The level of debt is the company's ability to pay its long-term obligations. The level of debt is a ratio of total debt compared to total assets and debt policy is the funding of companies that sell their shares in the capital market (equity capital) (Nuraini, 2014).

$$DAR = \frac{Total\ Debt}{Total\ Aset}$$

### Operation Cycle

The operating cycle is the average period of cash obtained from the time of cash disbursements for the purchase of inventories to cash receipts from sales, the cash can be considered as cash profit in the current period which can reflect profits in future periods (Fauzia & Sukarmanto, 2015)

$$SO = \frac{(Piutang\ dagang\ it + piutang\ dagang\ it-1)/2}{Penjualan\ it/360} + \frac{(Persediaan\ it + persediaan\ it-1)/2}{harga\ pokok\ penjualan\ it/360}$$

Where :

Accounts receivable it = accounts receivable company i year t

Accounts receivable it-1 = Company i's previous year's accounts receivable

inventory it = inventory of company i year t

inventory it-1 = inventory of company i in previous year

Sales it = sales of company i year t

Cost of good sold it = Cost of goods sold company i year t

### Firm Size

Company size is a benchmark that describes the size of a company. company size is an indicator that can show the conditions or characteristics of the company where there are benchmarks that can be used to determine the size of the company (Amaliyah & Suwarti, 2017).

$$CS = \ln (Total\ Aset)$$

### The Effect of Cash Flow Volatility on Profit Persistency

To measure profit persistency, it is necessary to have stable cash flows, not sharply fluctuating and low volatility. Because the high volatility of cash flows illustrates the high uncertainty in the operating environment (Hastutiningtyas & Wuryani, 2019). If the volatility of a company's cash flows is low, it gives a signal that the company's profits are persistent. On the other hand, if the volatility of a company's cash flows is high, it indicates that the profit is not persistent to predict future earnings. Based on the results of previous studies, the hypotheses taken in this research are:

H1 : Cash flow volatility has a negative effect on profit persistency.

**The Effect of Sales Volatility on Profit Persistency**

Low sales volatility will affect company profits where low sales volatility will be able to show low profit ability in predicting cash flows generated from sales in the future so that the profits generated are more persistent (Amaliyah & Suwarti, 2017). Based on the results of previous studies, the hypotheses taken in this study are:

H2: Sales volatility has a negative effect on profit persistency.

**The Effect of Debt Level on Profit Persistency**

High debt levels spur companies to increase profit persistency with the aim of maintaining good performance and quality in the eyes of investors, auditors and creditors. With this good performance, it is expected that creditors will continue to have confidence in the company, it will be easy to disburse funds, and the company will get convenience in the payment process (Rahmadhani, 2014). Investors are more attracted to companies that have high debt levels but have persistent and sustainable profits. Based on the results of previous studies, the hypotheses taken in this study are:

H3: Debt level has a positive effect on profit persistency.

**The Effect of Operating Cycle on Profit Persistency**

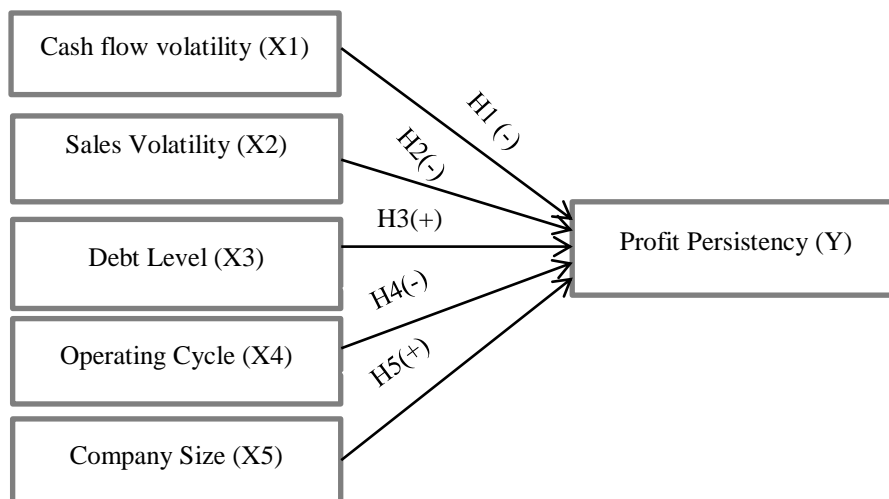
The operating cycle that has a long time can lead to greater uncertainty and estimation error which can lead to low profit persistency so that it is less helpful in predicting future earnings. Based on the results of previous studies, the hypotheses taken in this study are:

H4: The operating cycle has a negative effect on profit persistency.

**The Effect of Company Size on Profit Persistency**

The size of the company affects the persistence of profit, because the larger the size of the company, the company's ability to generate profits is also higher. High profit growth, in addition affecting profit persistence, also affects the company's sustainability in attracting potential investors who will be suspected of being a profit modification practice (Septavita, 2016). Based on the results of previous studies, the hypotheses taken in this study are:

H5: Company size has a positive effect on profit persistency.



### 3. Method

#### Place and Time of Research

This research was conducted by taking data from various sites, including the Indonesia Stock Exchange (IDX) known as [www.idx.co.id](http://www.idx.co.id), the Central Statistics Agency (BPS), and other relevant sources using data from manufacturing companies. The time used during this research took place from September 2021 to completion.

#### Population and Sample

Population is a generalization area consisting of objects or subjects that have certain quantities and characteristics determined by the researcher to be studied and then draw conclusions. The population in this study are manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2016-2020 period. Based on data obtained in 2021, there are 193 companies that make up the population.

The sample is the part that contains the number and characteristics contained by the population or a small part of the population taken using certain techniques and procedures so that it can represent the population. The sampling technique used in this study is purposive sampling, which is a technique in which data sampling is based on several considerations that have certain criteria that must meet the data samples needed in this research so that this research can be more representative. The sample in this study is a manufacturing company that consistently publishes financial reports, has not been delisted and has an IPO before the research period, and has never been suspended by the Indonesia Stock Exchange (IDX) during the research period, 2016-2020.

#### Data Analysis Technique

##### Descriptive Analysis

Descriptive statistics are statistics that provide an overview or description of a data seen from the average, standard deviation, maximum, and minimum (Ghozali, 2013). In this study, descriptive statistical tests were used to test whether the variables of cash flow volatility, sales volatility, debt level, operating cycle, and firm size had partial and simultaneous effect on earnings persistence in manufacturing companies.

##### Normality Test

The normality test aims to test whether in the regression model, the residual variables have a normal distribution. In this study, to detect whether the data is normally distributed or not, the normality test is carried out using graphical analysis (normal probability plot graph) and the Kolmogorov Smirnov test (Hasan et al., 2014)

##### Multicollinearity Test

Multicollinearity test aims to test whether the regression model found a correlation between independent variables. A good regression model should not have a correlation between independent variables (Ghozali, 2013).

##### Simultaneous Significance Test (F Test)

The F statistical test basically shows whether all the independent variables included in the model have a joint effect on the dependent variable (Amaliyah & Suwanti, 2017).

##### Coefficient of Determination Test ( $R^2$ )

The coefficient of determination is a measure used to assess the degree of relationship between the independent variable and the dependent variable. A value close to one means

that the independent variables provide almost all the information needed to predict the variation of the dependent variable (Ghozali, 2013).

### Path Analysis

Path analysis is an extension of multiple linear analysis or path analysis also called a use of regression analysis to estimate the quality relationship between variables that have been determined previously based on theory (Ghozali, 2013). Path analysis is used to determine the direct or indirect effect between the independent variables on the dependent variable. The following table results path coefficients.

### Hypothesis Test (t Test)

This partial test is used to see whether there is an influence of each independent variable individually on the dependent variable (Ghozali, 2013). The test criteria used are to compare the significance value obtained with the predetermined significance value of 0.05.

## 4. Result and Discussion

### Descriptive Test

**Table 1 Descriptive Analysis Test Results**

Variabel	Minimum	Maximum	Mean	Std. Deviation
Cash Flow Volatility	0.004	0.225	0.056	0.034
Sales Volatility	0.024	1.035	0.183	0.147
Debt Level	0.003	5.168	0.511	0.496
Operating Cycle	-358.785	390.550	-49.006	81.067
Company Size	25.216	33.495	28.758	1.563
Profit Persistency	-1.164	1.242	0.041	0.121

Sources: Processed Data, 2022

Based on the data in table 1, the conclusions that can be drawn are:

1. Cash Flow Volatility of 102 manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2016 – 2020 has a minimum value of 0.004 and a maximum value of 0.225. The average value of cash flow volatility is 0.056. While the standard deviation of 0.034 which means that cash flow volatility shows good results because the average value of cash flow volatility is greater than the standard deviation value.
2. Sales Volatility of 102 manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2016 – 2020 has a minimum value of 0.024 and a maximum value of 1,035. The average value of sales volatility is 0.183. While the standard deviation is 0.147, which means that sales volatility shows good results because the average value of sales volatility is greater than the standard deviation value.
3. Debt levels of 102 manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2016 – 2020 have a minimum value of 0.003 and a maximum value of 5,168. The average value of the debt level is 0.511. While the standard deviation of 0.496 which means the level of debt shows good results because the average value of cash flow volatility is greater than the standard deviation value.
4. The Operating Cycle of 102 manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2016 – 2020 has a minimum value of -358,785 and a maximum value of 390,550. The average value of the operating cycle is -49,006. While the standard deviation of 81.067 which means the operating cycle shows poor

results because the average value of the operating cycle is smaller than the standard deviation value.

5. Company size of 102 manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2016 – 2020 has a minimum value of 25,216 and a maximum value of 33,495. The average value of the debt level is 28,758. While the standard deviation of 1.563 which means that the size of the company shows good results because the average value of the company size is greater than the value of the standard deviation.
6. The Operating Cycle of 102 manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2016 – 2020 has a minimum value of -1.164 and a maximum value of 1.242. The average value of the operating cycle is 0.041. While the standard deviation of 0.121 which means earnings persistence shows poor results because the average value of earnings persistence is smaller than the standard deviation value.

### Normality Test

**Table 2 Normality Test Results**

One-Sample Kolmogorov-Smirnov Test		
	Unstandardized Residual	
N	510	
Normal Parameters <sup>a,b</sup>	Mean	,0000000
	Std. Deviation	,11274531
Most Extreme Differences	Absolute	,170
	Positive	,170
	Negative	-,144
Kolmogorov-Smirnov Z	3,843	
Asymp. Sig. (2-tailed)	,000	

a. Test distribution is Normal.

b. Calculated from data.

Sources: Processed Data, 2022

### Multicollinearity Test

**Table 3 Multicollinearity Test Result**

Variabel	Colinearity Statistics		Notes
	Tolerance	VIF	
Cash Flow Volatility	0.806	1.241	Unmulticollinearity
Sales Volatility	0.727	1.376	Unmulticollinearity
Debt Level	0.938	1.066	Unmulticollinearity
Operating Cycle	0.951	1.052	Unmulticollinearity
Firm Size	0.870	1.149	Unmulticollinearity

Sources: Processed Data, 2022

Based on the multicollinearity test in table 3 with profit persistence as the dependent variable and the independent variable consisting of cash flow volatility, sales volatility, debt level, operating cycle, and company size, it can be concluded that the data is free from multicollinearity symptoms because it has a VIF value. < 10 and Tolerance value > 0.1.

### Simultaneous Significance Test (F Test)

**Table 4 F Test Result**

Variabel	F Square
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Cash Flow Volatility	0.070
Sales Volatility	0.005
Debt Level	0.027
Operating Cycle	0.002
Firm Size	0.036

Sources: Processed Data, 2022

Based on the table above, it can be concluded that sales volatility and operating cycle have a weak influence on profit persistency. Meanwhile, the level of debt has a considerable influence on profit persistency and cash flow volatility and company size has a strong influence on profit persistency.

### Coefficient of Determination Regression Test ( $R^2$ )

**Table 5 Model Feasibility Test Results (R Square)**

No	Variable	R Square	R Square Adjusted
1	Profit persistency	0.127	0.119

Sources: Processed Data, 2022

Based on the test results above, the Adjusted R Square value is 0.119 (11.9%). This means that 11.9% of the Profit Persistence variable is influenced by the variables of cash flow volatility, sales volatility, debt level, operating cycle and company size. While the remaining 88.1% is influenced by variables outside the study such as the composition of the board of commissioners, cash flow accruals, tax concentration and the difference between accounting profit and fiscal profit.

### Path Analysis

**Table 6 Path Analysis Test Results**

Variable	Original Sample (O)	P Values	conclusion
VOK→PB	0.275	0.000***	significant
VP→PB	-0.079	0.112*	not significant
TH→PB	-0.160	0.000***	significant
SO→PB	0.041	0.400*	not significant
UP→PB	0.190	0.000***	significant

\*\*\* significant 0.01, significant 0,05\*\*, significant 0,10\*

Sources: Processed Data, 2022

Based on the data in table 6, the research analysis model can be obtained as follows:

$$Y = 0.275X_1 - 0.079X_2 - 0.160X_3 + 0.041X_4 + 0.190X_5$$

Y = Profit Persistence

X1 = Cash Flow Volatility

X2 = Sales Volatility

X3 = Debt Level

X4 = Operating Cycle

X5 = Company Size

### Hypothesis Test (t Test)

#### Effect of Cash Flow Volatility on Earnings Persistence

Based on the data in table 6, it is known that the cash flow volatility variable has a P Value of 0.000 or smaller than alpha. This can be interpreted that the volatility of cash flows is significantly positive on the persistence of company profits. So it can be concluded that  $H_0$  is accepted,  $H_a$  is rejected. This shows that high cash flow volatility can increase the high persistence of company profits.

### **The Effect of Sales Volatility on Profit Persistence**

Based on the data contained in table 6, it is known that the sales volatility variable has a P Value of 0.112 or greater than alpha. This can be interpreted that sales volatility is not significant to the persistence of company profits. So it can be concluded that  $H_a$  is accepted,  $H_o$  is rejected. This shows that high sales volatility can reduce the level of persistence of company profits. This means that low sales volatility can indicate a persistent profit in predicting future cash flows.

### **The Effect of Debt Level on Profit Persistence**

Based on the data in table 6, it is known that the debt level variable has a P Value of 0.000 or smaller than alpha. This can be interpreted that the level of debt is significantly positive on the persistence of company profits. So it can be concluded that  $H_a$  is accepted,  $H_o$  is rejected. This shows that a high level of debt can increase the high persistence of company profits. This is because high debt levels can spur companies to increase profit persistence in order to maintain good performance and quality in the eyes of investors and creditors.

### **The Effect of the Operating Cycle on Profit Persistence**

Based on the data in table 6, it is known that the operating cycle variable has a P Value of 0.400 or greater than alpha. This can be interpreted that the operating cycle is not significant to the persistence of company profits. So it can be concluded that  $H_a$  is accepted,  $H_o$  is rejected. This shows that a high operating cycle can reduce the level of persistence of company profits. This is due to the long operating cycle causing greater uncertainty so that profit persistence is low and difficult to predict in the future.

### **The Effect of Firm Size on Profit Persistence**

Based on the data in table 6, it is known that the company size variable has a P Value of 0.000 or smaller than alpha. This can be interpreted that the size of the company is significantly positive on the persistence of company profits. So it can be concluded that  $H_a$  is accepted,  $H_o$  is rejected. This shows that high company size can increase the high persistence of company profits. This is in line with the theory because large companies have more stable finances so that the estimation of errors or disturbances is smaller and earnings persistence is getting better.

## **Discussion**

### **The Effect of Cash Flow Volatility on Profit Persistency**

Cash flow volatility is the spread distribution of cash flows that can vary up and down that occurs from one period to another. Cash flow volatility has an effect on profit persistency. Cash flow volatility which has a small value provides information that the company's cash flow is stable so that the profits generated are persistent. If the volatility is high or fluctuates sharply, it will cause uncertainty in profit that will be predicted in the future.

The results of the descriptive analysis prove that cash flow volatility does not always have a negative effect on profit persistency. This can be seen in 2018-2020 cash flow volatility has a positive influence. Where when cash flow volatility in 2018 and 2019 decreased, profit persistence also decreased. Likewise, in 2020 when cash flow volatility increases, profit persistence will also increase.

Likewise with the t test which proves that the cash flow volatility variable is significantly positive on profit persistence. The significance of this cash flow volatility can be interpreted that the company's cash flow volatility has a role in profit persistence which can be seen when the company has high cash flow volatility, the higher the profit persistence generated will also be higher. Based on signal theory, companies describe cash flow volatility through financial statements in the operating cash flow statement section. The existence of a positive influence explains that the higher the cash flow, the higher the persistence generated. This

means that if the total cash flow in operating activities is high, the company does not need to finance from outside, such as issuing bonds or shares so that the company's capital structure becomes stable.

Based on the results of the multiple regression test, the cash flow volatility variable has a positive direction on profit persistence. This shows that cash flow volatility has the same direction as profit persistence. So that if the volatility of a company's cash flows is high, the persistence of profits generated is also high, and this is in line with the hypothesis test.

This is in accordance with research conducted by (Lasrya & Ningsih, 2020), (Nadya, Namira & Zultilisna, 2018), (Khasana & Jasman, 2019), (Fanani, 2010), (Zaimah & Hermanto, 2018), (Kusuma & Sadjiarto, 2014), (Amaliyah & Suwarti, 2017), (Saptiani & Fakhroni, 2014), and (Rahmadhani, 2014) prove that cash flow volatility affects profit persistence. However, this study contradicts research (Hastutiningtyas & Wuryani, 2019) which proves that cash flow volatility has no effect on profit persistence.

### **The Effect of Sales Volatility on Profit Persistence**

The main activity of a company in generating profits is to make sales. Sales volatility is the distribution degree of sales or an index of sales distribution of a company. The effect of sales volatility on profit persistence is that the higher the sales volatility, the lower the profit persistence will be. Because volatility is considered a standard deviation, the greater the sales volatility, the larger the deviation will be, thus creating a large risk of estimation error which causes low profit persistence.

Based on the results of descriptive analysis proves that sales volatility does not always have a negative effect on profit persistence. This can be seen in 2018-2020 sales volatility has a positive influence. Where when cash flow volatility in 2018 and 2019 decreased, profit persistence also decreased. Likewise, in 2020 when cash flow volatility increases, profit persistence will also increase.

However, in hypothesis testing, sales volatility has no significant effect on profit persistence. This is in line with the hypothesis so that the hypothesis is accepted. The non-significance of this sales volatility means that if a company's sales are high, it will not have an effect on profit persistence. This shows that when sales volatility in the current year of a company is high, it is difficult to predict future profits because sales do not affect persistent profits. In fact, investors assume that if sales are high, the dividends generated by the company are also high, so investors are more daring to invest to take risks.

Based on the results of multiple regression tests, sales volatility has a negative directional influence on profit persistence. This shows that sales volatility is opposite to profit persistence. Where if the sales volatility is higher, the persistence of the profit generated will be lower and this is in accordance with the results of hypothesis testing.

This is in line with research conducted by (Lasrya & Ningsih, 2020) which results that sales volatility has no effect on profit persistence. However, contrary to the research that has been done by (Kusuma & Sadjiarto, 2014), (Nadya, Namira & Zultilisna, 2018), (Khasana & Jasman, 2019), (Amaliyah & Suwarti, 2017), (Saptiani & Fakhroni, 2014), and (Zaimah & Hermanto, 2018) show the results that sales volatility has an effect on profit persistence.

### **The Effect of Debt Level on Profit Persistence**

The level of debt is a comparison between total debt and capital which can show the company's ability to pay obligations that have occurred in the past. The level of debt has an influence on the company in increasing profit persistence in order to maintain good performance for investors and creditors. That way, investors are more interested in investing in the company because they are able to account for their long-term debt.

Based on the results of the descriptive analysis test proves that the level of debt is in line with profit persistence. This can be seen where when the level of debt decreases, profit persistence also decreases. In 2016, 2018, and 2019, the level of debt decreased and profit persistence also decreased. On the other hand, in 2017 and 2020, when debt levels increased, profit persistence also increased.

The hypothesis test of the variable level of debt is significantly positive on profit persistence. This is in line with the hypothesis, and thus the hypothesis is accepted. The significance of the level of debt on profit persistence in accordance with the signal theory shows that the level of debt provides a positive signal for investors and creditors. If the level of debt is high, it indicates that the company is able to meet its long-term needs properly and smoothly so that the profits generated remain persistent and sustainable.

The test results state that the level of debt has a significant effect on profit persistence. High debt makes high profit persistence as well. So that the level of debt has a positive effect on profit persistence. Debt affects profits and also provides a fairly large influence in decision making by investors.

However, based on the results of multiple regression tests, the level of debt has a negative directional influence on profit persistence. This shows that the level of debt is in the opposite direction to profit persistence. This means that if the level of debt of a company is high, the persistence of profits generated will be low, and the results of this test are not in line with the hypothesis test. This is in accordance with research conducted by (Rahmadhani, 2014), (Gusnita & Taqwa, 2019), (Sarah et al., 2019), (Nadya, Namira & Zultilisa, 2018), (Khasana & Jasman, 2019), (Zaimah & Hermanto, 2018), (Amaliyah & Suwarti, 2017) and (Lasrya & Ningsih, 2020) prove that the level of debt affects profit persistence. However, this research contradicts the research conducted by (Barus & Rica, 2014), (Hidayat & Fauziyah, 2018), and (Kusuma & Sadjiarto, 2014) which showed that the level of debt had no effect on profit persistence.

### **The Effect of Operating Cycle on Profit Persistence**

The operating cycle is the average time period between the purchase of inventory and the cash income to be received from the seller. The operating cycle has a relationship with profit persistence. Long operating cycles can lead to uncertainty that can lead to low profit persistence so that it is less helpful in predicting future earnings.

Based on the results of the descriptive analysis test proves that the operating cycle does not always have a negative effect on profit persistence. It can be seen that in 2018 and 2019 the operating cycle had a positive impact. Where when the operating cycle in 2018 and 2019 decreased, profit persistence also decreased and this is in accordance with the hypothesis test carried out.

Testing the hypothesis, the operating cycle variable has no significant effect on profit persistence. This is in accordance with the signal theory which explains that the longer the company's operating cycle, the longer the cash acquisition, so that the persistence of profit will be low.

However, based on multiple regression test, the operating cycle has a positive effect on profit persistence. This shows that the operating cycle has the same direction as profit persistence. Where if the operating cycle that occurs is high, then the persistence of profits generated will also be higher and this is not in line with the theory and hypothesis testing carried out. This is in line with research conducted by (Sarah et al., 2019) and (Lasrya & Ningsih, 2020) which state that the operating cycle has no effect on profit persistence.

However, this study contradicts research conducted by (Fauzia & Sukarmanto, 2015), (Zaimah & Hermanto, 2018), and (Amaliyah & Suwarti, 2017) which prove that the operating cycle affects profit persistence.

### **The Effect of Company Size on Profit Persistence**

Company size is the ability of a company through management to control and generate profits during the current year which can influence investors in making decisions. Company size has an important role for profit persistence. If the size of the company gets bigger, the company will also be able to generate high profits so that it can attract investors to invest their capital.

Based on the results of the descriptive analysis test proves that company size is in line with profit persistence. This can be seen where when the size of the company decreases, the persistence of profit also decreases. In 2016 the size of the company decreased and profit persistence also decreased. On the other hand, in 2017 to 2020, when the size of the company increased, profit persistence also increased and this is in line with the results of the significant positive hypothesis test.

And based on the hypothesis test, the size of the company is significantly positive on profit persistence. This proves that the larger the size of a company, the ability to generate and control profits will also be higher which later on these profits can be a benchmark for future profits so that these profits are said to be persistent.

Based on the multiple regression test, company size has a positive directional effect on profit persistence. This shows that the size of the company has the same direction (one direction) to profit persistence. Where it can be interpreted that the higher the size of a company, the persistence of profits generated will also be higher. The larger the size of the company, the quality of its financial statements will be higher too, because large companies have stable finances and can control profits so that they can be predicted in the future with small estimation errors.

This is in line with research conducted by (Septavita, 2018), (Gusnita & Taqwa, 2019), (Khasana & Jasman, 2019), (Amaliyah & Suwarti, 2017), (Dewi & Putri, 2015), and (Nuraeni et al. al., 2018) proves that company size has an influence on profit persistence. However, contrary to research (Hidayat & Fauziyah, 2018), (Sarah et al., 2019) and (Nurochman & Solikhah, 2015) (Nurochman & Solikhah, 2015) (Nurochman & Solikhah, 2015) which proves that company size has no effect to profit persistence.

### **5. Conclusions**

By testing the results of the hypothesis, it can be concluded that (1) the cash flow volatility variable is significantly positive on profit persistence,  $H_0$  is accepted,  $H_a$  is rejected. This proves that the higher the volatility of cash flows, the higher the persistence of profits generated. (2) Sales volatility variable has no significant effect on profit persistence.  $H_0$  is rejected,  $H_a$  is accepted. This proves that high sales volatility will provide high uncertainty as well so that the resulting profit is not persistent. (3) The variable level of debt is significantly positive on profit persistence.  $H_0$  is rejected,  $H_a$  is accepted. This shows that a high level of debt can have a persistent profit impact. (4) The operating cycle variable has no significant effect on profit persistence.  $H_0$  is rejected,  $H_a$  is accepted. This shows that the length of the operating cycle can lead to estimation errors so that profit persistence is low. (5) Company size variable has a significant effect on profit persistence.  $H_0$  is rejected,  $H_a$  is accepted. This shows that a large company size can influence investors in making decisions so that the persistence of profits generated is higher.

The limitations of this study are: (1) Given the results of the study which show that only the variables of cash flow volatility, debt level, and company size have a significant influence on profit persistence, it is expected that further research can add other variables, in order to find out what factors only that can affect the persistence of profit. (2) The results of the coefficient of determination test ( $R^2$ ) show that the independent variables of the study are only able to give an effect of 11.9% on profit persistence. And the remaining 88.1% is influenced by other

variables not found in the study such as the composition of the board of commissioners, accrued cash flows, tax concentration and the difference between accounting profit and fiscal profit.

Based on the results of the research conducted, there are several suggestions to consider: (1) For academics if they want to research in the same sector, it is suggested that they can add external and internal variables from the company such as the composition of the board of commissioners, cash flow accruals, tax concentration and the difference between accounting profit and fiscal profit. (2) For companies, companies should pay more attention to cash flow volatility, debt levels and company size. This is based on the results of the study, these variables have a significant influence on the persistence of a company's profit. So that it can be used as input in the decision-making process in the future. (3) For further researchers, it is recommended to expand the population and sample because it can affect the results of the research model.

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