

Earnings persistence determinants in Indonesia's consumer goods companies

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ABSTRACT

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This study aims to investigate the effect of various financial factors that affect the consumer product sectors in the Indonesia Stock Exchange earnings persistence. The study employed purposive sampling, the data were collected from the 2011-2020 annual financial statements, and analyzed by utilizing panel data regression. In the consumer cyclical industry, firm size and accrual amount negatively influence earnings persistence. In contrast, the impact of fluctuating cash flow, volatile sales, and debt levels was negligible. In the non-cyclical consumer sector, cash flow volatility positively influenced earnings persistence. However, debt levels and accrual amounts had a negative influence, while sales volatility and firm size had no effect. These findings suggest that the determinants of earnings persistence vary by industry and that different financial factors may affect earnings persistence differently. The results may help Indonesian stakeholders in comprehending the factors that affect the sustainability of revenues in the consumer products industry.

Introduction

The food and beverage, textile and apparel, pharmaceutical, electronics, and automotive industries are among the corporate sectors considered capable of sustaining national economies. It is estimated that these industries contribute substantially more than 60% of the economy's gross domestic product, export value, and employment (Kemenperin, 2019). Meanwhile, four of the five industries represent the consumer goods sector. IDX-IC categorizes the consumer goods industry into the consumer cyclical sector (non-primary consumer goods) and the consumer non-cyclical sector (primary consumer goods). The consumer cyclical sector's demand for products and services is directly proportional to economic growth. On the other hand, the non-cyclical consumer sector is unaffected by economic growth.

The industry sector of consumer products is inextricably linked to the phenomenon of fluctuating earnings. Several consumer goods companies, both cyclical and non-cyclical, posted highly volatile earnings in 2020 due to the economic disruption caused by the pandemic. Zara Inditex is a corporation whose earnings fluctuate in the consumer cyclical industry. Throughout the 2020 pandemic, this Spanish rapid fashion retailer reported a \$1.31 billion profit, down 70% from the pre-pandemic period in 2019 (CNBC, 2021). In addition, Adidas, a manufacturer of sports equipment, reported that its revenue in 2020 fell by 16% year-over-year to 19.8 billion euros (USD 23.6 billion) due to a decline in sales. Adidas' operating profit in 2020 also fell significantly by 72%, to EUR 751 million (Xinhua, 2021).

PT. Astra Otoparts Tbk (AUTO), a consumer products industry company in the automotive sector, has reported a profit attributable to the parent company of IDR 739.67 billion in 2019 and IDR 2.24 billion in 2020, representing a significant decrease of 99.7%. Due to a drop in revenue from IDR 15.44 trillion in 2019 to IDR 11.86 trillion in 2020, profits fell (Nurhaliza, 2021). PT Sepatu Bata Tbk (BATA) is also affected by the issue of fluctuating earnings. At the end of 2019, the company's annual earnings were IDR 23.44 billion, down by 65.49% from the end of 2018, compared to IDR 67.94 billion (Aziz, 2020).

In contrast, in the non-cyclical consumer sector, Colgate-Palmolive Company's net income increased in 2020. The company that manufactures consumer products for daily use in the United States increased its profit by 7.5% compared to the previous year (Culliney, 2021). Ambev (Companhia de Bebidas das Americas), a Brazilian company that manufactures soft drinks and beer, also experienced a substantial drop in profits. The company's net profit was down by 26.04% in 2020 compared to 2019, when it was USD 2.208 billion (Macrotrends, 2022).

The domestic non-cyclical consumer sector also experienced a substantial decline in earnings. In the first semester of 2020, PT. Garudafood Putra Putri Jaya Tbk (GOOD) reported a net profit decrease of 49.78% to IDR

115.04 billion, compared to IDR 226.06 billion during the same period in 2019. According to its financial reports, the company's net profit sales decreased by 8.43% to IDR 3.91 trillion from IDR 4.27 trillion in the previous year (Sidik, 2020). PT. Buyung Poetra Sembada Tbk (HOKI), a rice processing and distribution corporation, reported a decline in net income in 2020. The company's net profit was IDR 38.04 billion, 63.82% lower than the previous year's IDR 103.72 billion. This is the result of a 29.02% decline in net sales, recorded at IDR 1.17 trillion compared to IDR 1.65 trillion previously (Pratama, 2021).

The high level of earnings casts doubt on the viability of the company's earnings because it demonstrates that the company cannot maintain its current profits and guarantee future profits (Nuraeni et al., 2018). Moreover, profits reported in financial statements are often used by management to attract investors, so profits are often designed to influence investors' decisions (Kasiono & Fachrurizie, 2016). To avoid profit by design by a company, investors need to consider several factors relating to indicators that may impact earnings persistence (Mahendra & Suardikha, 2020).

Research on the factors that influence earnings persistence has been carried out previously, namely by Kasiono & Fachrurizie (2016), Rahmadhani et al. (2016), Amaliyah & Suwarti (2017), Abbas & Hidayat (2020), Mahendra & Suardikha (2020), and Sabila et al. (2021). Rahmadhani et al. (2016) stated that cash flow volatility had a significant impact on earnings persistence. These results are in line with the results of research from Lasrya & Ningsih (2020), Nahak et al. (2021), Maharani & Majidah (2020), and Pratikto et al. (2021). However, unlike the results obtained by Amaliyah & Suwarti (2017) and Ariyanti et al. (2021), cash flow volatility had a significant positive effect on earnings persistence. While in the research of Kasiono & Fachrurizie (2016), Oktavia & Susanto (2022), Jannah et al. (2020), and Sukaesi (2016) found that cash flow volatility did not affect earnings persistence.

Kasiono & Fachrurizie (2016) demonstrated that sales volatility had a significant adverse effect on earnings persistence. It is also similar to the research of Amaliyah & Suwarti (2017) and Maharani & Majidah (2020) but different from the research of Jannah et al. (2020), which stated that sales volatility had a significant positive effect on earnings persistence. Meanwhile, the research by Lasrya & Ningsih (2020), Oktavia & Susanto (2022), and Pratikto et al. (2021) concluded that there was no effect of sales volatility on earnings persistence.

Research by Rahmadhani et al., (2016) showed that debt levels had a significant positive effect on earnings persistence, which results are similar to the results of research from Amaliyah & Suwarti (2017), Nuraeni et al. (2018), Lasrya & Ningsih (2020), and Nahak et al. (2021). However, this is contradicted by the research by Marnilin et al. (2015), Kasiono & Fachrurizie (2016), and Arisandi & Astika (2019), which proved that debt levels had a significant adverse effect on earnings persistence. Moreover, it also differs from the research conducted by Jannah et al. (2020) and Sabila et al. (2021) that the debt level did not affect earnings persistence.

Research on the effect of firm size on earnings persistence has been conducted by Susilo and Anggraeni (2016), stating that firm size had a significant positive effect on earnings persistence. Furthermore, it is consistent with the research findings by Arisandi & Astika (2019), Nurmalasari et al. (2020), Sabila et al. (2021), and Prasetyo et al. (2021), however, in contrast to the results of research by Nuraeni et al. (2018), which proved that firm size had a significant adverse effect on earnings persistence. Meanwhile, research by Amaliyah & Suwarti (2017), Abbas & Hidayat (2020), Nahak et al. (2021), and Pratikto et al. (2021) demonstrated that firm size does not affect earnings persistence.

The research on the effect of accrual amount on earnings persistence has been carried out by Sukaesi (2016), which indicates that this variable has a significant adverse effect on earnings persistence and is similar to the research by Rahmadhani et al. (2016), Pernamasari (2018), Adiati et al. (2018), and Widyaningsih & Handayani (2020). However, these results are contradictory to the research conducted by Kasiono & Fachrurizie (2016) and Amaliyah & Suwarti (2017), who claimed that accrual amount had a positive effect on earnings persistence. Meanwhile, Pratikto et al. (2021) proved that there was no effect of accrual amount on earnings persistence.

Prior to this, the operating cash flow variable was studied by Marnilin et al. (2015), who proved that operating cash flows had a significant positive effect on earnings persistence. It is also consistent with the results of research by Abbas and Hidayat (2020) and Sabila et al. (2021), which stated that the more cash flow operation, the more persistent the profit. Moreover, research conducted by Nuraeni et al. (2018) observed the variables of audit fees and market concentration. This research showed that audit fees and market concentration have a positive and significant effect on earnings persistence. The results of this study also conform to the research conducted by Mahendra and Suardikha (2020).

As these studies show, research results must be consistent regarding the variables of cash flow volatility, sales volatility, debt levels, company size, and accrual amount on earnings persistence. Therefore, the effect of these variables on earnings persistence is observed again in this study. This study is also driven by the importance of earnings stability in Indonesia, particularly in the consumer products sector. The first novelty of this study was to compare and contrast the effect of these variables on two sectors of the consumer goods listed on the Indonesia Stock Exchange for which little prior research exists: consumer cyclical (non-primary consumer goods) and consumer non-cyclical (primary consumer goods). Furthermore, this study utilized and compared two different measures of earnings persistence. In addition, the surveillance period is more extended than in previous studies,

from 2011 to 2020. The findings can be helpful for investors, analysts, and policymakers interested in understanding the factors that influence earnings persistence in the consumer goods sector in Indonesia.

Literature Review

Earnings Persistence

The agency theory presupposes that each individual strives to maximize their objectives through diverse means and innovations (Schroeder et al., 2019). Conflict of interest is something inherent to agency theory between principal and agent. Agency disputes may give rise to opportunistic profits from the reporting company by management for personal gain. It is the management's responsibility to demonstrate compliance with the investor's requirements. Fraud in the recording of earnings may lower the quality of earnings or even the profits obtained to have low persistence (Winarsih & Krissie, 2019).

The signaling theory describes the company's considerations aimed at presenting financial information to external parties. This is the result of an informational asymmetry between external parties and management (Bergh et al., 2014). Companies are encouraged to signal good, bad, or neutral news (Lasrya & Ningsih, 2020). One of the relevant references in accounting that can be derived from several signals is prediction (Scott, 2015). Future earnings can be predicted through earnings persistence. Persistence of earnings can provide information about business continuity so that persistent earnings can entice investors. Several variables can influence earnings persistence, including cash flow volatility, sales volatility, debt level, company size, and accrual amount. If these variables indicate movements or values unwanted by investors, it signals a bad situation in the company. In contrast, if the value is in line with investor expectations, the company can give a good signal.

Positive accounting theory arises because the existing theory cannot fully explain the accounting practice (Schroeder et al., 2019). Positive accounting theories include earnings management, income smoothing, creative accounting, and big bath Fields (Bwarleling, 2017). Earnings management is a manager's option on accounting policies or measures that may affect profits reporting targets by a certain amount. Earnings management also allows managers to smooth their compensation over time (Scott, 2015). If it is carried out continuously, it will indicate that the effective acquisition of the company's profit may be less persistent and can lower the earnings quality.

A measure of earnings quality is the earnings persistence (Scott, 2015). Earnings persistence is a profit that can be applied as a parameter of earnings in the future and is obtained repeatedly and sustainably (Hui et al., 2016). Persistent earnings continue to remain relatively high. However, persistent earnings can only be calculated annually rather than quarterly (Sabila et al., 2021). The measurement of earnings persistence used by Jannah et al. (2020) and Nurdiniah et al. (2021) is to divide the difference between the changes in pre-tax earnings for the current year and pre-tax profit for the previous year by total assets. Meanwhile, other earnings persistence measurements were stated by Scott (2015) and also carried out by Oktavia & Susanto (2022) and Agustina et al. (2021) to use the regression coefficient of current earnings to future earnings.

Cash Flow Volatility

Cash flow volatility is an index of the spread or degree of spread of a company's cash flow distribution. Relatively stable or low volatility cashflow information is required to measure the earnings persistence (Kasiono & Fachrurizie, 2016). Based on agency theory, the management or agents always try to make the financial statements of the company look good in the eyes of users of financial statements, one of which is paying attention to the quality of earnings. One element that affects earnings quality is the earnings persistence (Scott, 2015). Cash flow volatility is a factor that can affect earnings persistence (Susilo & Anggraeni, 2016). Based on signaling theory, if the company can increase and maintain its operating cash flow, the company is considered to be able to provide a good signal and increase investor response. It indicates low cash flow volatility and high earnings persistence.

The research results by Rahmadhani et al. (2016) stated that cash flow volatility significantly adversely affected earnings persistence. It is also consistent with the results of research conducted by Susilo & Anggraeni (2016), Lasrya & Ningsih (2020), Maharani & Majidah (2020), Widyaningsih & Handayani, (2020), Nahak et al. (2021), and Pratikto et al. (2021). Based on the description, the hypothesis can be formulated as follows:

H_{1a}: Cash flow volatility has a negative effect on the persistence of earnings in consumer cyclical sector companies.

H_{1b}: Cash flow volatility has a negative effect on the persistence of earnings in consumer non-cyclical sector companies.

Sales Volatility

Sales volatility is an index of an entity's sales distribution. Sales volatility is also a parameter that indicates fluctuations in sales generated by the company over a period of time (Ariyanti et al., 2021). Based on the agency theory, the agent will try to maintain its financial performance to the expectations of the principal in order to reach the investors' estimates. A key point to consider is sales. High sales volatility will tend to present a higher risk of

prediction error on sales information in operating activities. According to signaling theory, this can cause a lousy signal indication to external parties. In positive accounting theory, to maximize compensation acquisition, managers will tend to maximize revenues or sales through the earnings management (Scott, 2015). Therefore, managers strive to increase and maintain their steady sales in order to attract more investors or principals (Ariyanti et al., 2021). Conversely, if sales volatility is low, this indicates a high-profit ability to predict cash flow from sales in the future (Rahmadhani et al., 2016).

The research conducted by Kasiono & Fachrurizie, (2016) revealed that sales volatility had a significant adverse effect on earnings persistence. This is also in line with the research results of Rahmadhani et al. (2016), Amaliyah & Suwanti (2017), Maharani & Majidah (2020), and Sukaesi (2016). Therefore, based on the explanation above, the following hypothesis is described.

H_{2a}: Sales volatility has a negative effect on earnings persistence in consumer cyclical sector companies.

H_{2b}: Sales volatility has a negative effect on earnings persistence in consumer non-cyclical sector companies.

Debt Level

The level of debt reflects the company's ability to repay its debt as it falls due. Proper use of debt can increase operating profit, which is greater than the interest expense that must be borne by the company (Nuraeni et al., 2018). In signal theory, companies with prospects will avoid additional sales of company shares. If companies too often add new shares to the market, this will cause bad signals that can depress the company's share price. Therefore, the company seeks to raise new capital by other means, such as debt (Przepiorka & Berger, 2017). Based on agency theory, principals expect high-quality company financial performance. If the agent can adequately manage funds from the principal, the principal's trust in the company will also be greater. Thus, the company can gain convenience in managing its financial performance and is considered capable of maintaining its profits in the future (Amaliyah & Suwanti, 2017).

Rahmadhani et al. (2016) and Kasiono & Fachrurizie (2016) stated in their research that the level of debt had a significant positive influence on earnings persistence. These results are also in line with research conducted by Nuraeni et al. (2018), Lasrya & Ningsih (2020), Abbas & Hidayat (2020), Mahendra & Suardikha (2020), and Nurdiniah et al. (2021). Thus, the next hypothesis can be written as follows:

H_{3a}: The level of debt has a positive effect on the persistence of earnings in consumer cyclical sector companies.

H_{3b}: The level of debt has a positive effect on the persistence of earnings in consumer non-cyclical sector companies.

Firm Size

Firm size is the proportion that determines the size of the company by measuring the number of its assets. Agency theory indicates that the principal or investor trusts the agent or management to manage the company (Schroeder et al., 2019). Investors generally have more confidence in large companies because they can improve their performance (Sabila et al., 2021). Companies that have reached the maturity level reflect the company's stability and can generate higher profits than small companies. According to signaling theory, this may provide a positive signal when the company's resources are greater to operate and maintain its activities and maintain its earnings persistence (Nuraeni et al., 2018).

Research conducted by Susilo & Anggraeni (2016) showed that firm size had a significant positive impact on earnings persistence. Likewise, the research of Arisandi & Astika (2019), Nurmalasari et al. (2020), Sabila et al. (2021), and Prasetyo et al. (2021) obtained similar results. Therefore, the following hypothesis can be formulated based on the description above.

H_{4a}: Firm size has a positive effect on earnings persistence in consumer cyclical sector companies.

H_{4b}: Firm size has a positive effect on earnings persistence in consumer non-cyclical sector companies.

Accrual Amount

Accrual is the difference in profit recorded in the income statement with net cash inflows from operating activities. The financial statements are prepared on an accrual basis, so there is an accrual component in the financial statements. Accruals require the recognition of income and assets, expenses, and increases in debt by amounts expected to be paid, generally in cash (Warren et al., 2018). Based on the bonus plan hypothesis in positive accounting theory, managers tend to perform earnings management to obtain the desired compensation. If the payroll system depends on bonuses, managers will tend to choose accounting methods to maximize their salary, such as the accrual method (Bwarleling, 2017). It shows that the greater the accruals in a company, the greater the chances of earnings management. In highlighting the theory, principals expect high quality from submitting financial statements. Meanwhile, the accrual component fluctuation in the company causes disturbances that can reduce the persistence of earnings because the disturbance is caused by transitory events or the application of the

accrual concept in the accounting (Sukaesi, 2016). According to signaling theory, this can provide poor signals from the company to external parties.

Rahmadhani et al. (2016) and Sukaesi (2016) stated that accrual amounts significantly adversely affected earnings persistence. It is also directly proportional to the research of Pernamasari (2018) and Adiati et al. (2018). Based on this description, the next hypothesis can be described as follows.

H_{5a}: Accrual amount has a negative effect on earnings persistence in consumer cyclical sector companies.

H_{5b}: Accrual amount has a negative effect on earnings persistence in consumer non-cyclical sector companies.

Research Method

This study is quantitative and employs an associative methodology. This study examines the determinants of earnings persistence, such as cash flow volatility, sales volatility, debt level, firm size, and accrual amount, for consumer goods industry firms listed on the IDX from 2011 to 2020. According to the IDX-IC classification, the sector was classified into two groups: the consumer cyclical sector (non-primary consumption goods) and the consumer non-cyclical sector (primary consumption goods). The results from each sector were compared. The information was obtained from the financial reports published by each company on the official websites of the Indonesia Stock Exchange as well as on their respective company. The data collection method used was a document and literature review. The total population for this study was 103 companies, and 14 companies were chosen as samples using the purposive sampling method, as shown in Table 1; the equation model can be expressed as seen in Formula 1.

$$EP_{it} = \alpha + \beta_1 CFV_{it} + \beta_2 SALVOL_{it} + \beta_3 DAR_{it} + \beta_4 SIZE_{it} + \beta_5 TACC_{it} + e \dots \dots \dots (1)$$

Description:

EP_{it} = Earnings persistence

α = Constant

β_{1,2,3,4,5} = Regression coefficient

CFV_{it} = Cash flow volatility

SALVOL_{it} = Sales volatility

DAR_{it} = Debt level

SIZE_{it} = Firm size

TACC_{it} = Accrual amount

e = Regression error

Table 1. Research Sample

	Consumer Cyclical	Consumer Non-Cyclical	Total
1. Companies in the consumer goods sector listed on the IDX from 2011 to 2020.	55	48	103
2. Companies that have published financial statements on the IDX over 2011-2020.	(17)	(21)	(38)
3. Companies that used the rupiah currency in their financial reporting.	(1)	(0)	(1)
4. Companies that recorded positive profits in a row over the period 2011-2020.	(30)	(20)	(50)
Research Sample	7	7	14
Observation Period in Year	10	10	10
Research Data	70	70	140

The dependent variable is earnings persistence. Earning persistence is the ability of earnings that can be used as a parameter in the future repeatedly and continuously (Hui et al., 2016). The profit measurement used in this study was adapted from Prasetyo et al. (2021) and Jannah et al. (2020), as shown in Formula 2.

$$\text{Earnings persistence}_{it} = \frac{\text{Earnings before tax}_{it} - \text{Earnings before tax}_{it-1}}{\text{Total asset}_{it}} \dots \dots \dots (1)$$

The other indicator to measure the persistence earnings as a robustness test is the regression coefficient of the previous year's earnings before tax on the current year's pre-tax earnings. It was based on the research of Oktavia & Susanto (2022), Agustina et al. (2021), Lasrya & Ningsih (2020), Mahendra & Suardikha (2020), Maqfiroh & Kusmuriyanto (2018), Amaliyah & Suwarti (2017), and Scott (2015) and written in Formula 3 below.

$$\text{Pre-tax earnings}_{it} = \alpha + \beta \text{Pre-tax earnings}_{it-1} + e \dots \dots \dots (3)$$

This study used five independent variables: cash flow volatility, sales volatility, debt level, firm size, and accrual amount. Cash flow volatility is an index of the distribution of the cash flow of the company. According to

research by Amaliyah & Suwarti (2017) and Susilo & Anggraeni (2016), the measurement of cash flow volatility is written as follows.

$$CFV_{it} = \frac{\sigma(CFO)_{it}}{Total\ asset_{it}} \dots\dots\dots (4)$$

Sales volatility is an index of the distribution of a company's sales distribution. Based on the research by Jannah et al. (2020), the sales volatility is calculated by the following formula.

$$SALVOL_{it} = \frac{\sigma(Sales)_{it}}{Total\ asset_{it}} \dots\dots\dots (5)$$

The level of debt is the firm's ability to pay obligations or liabilities when they reach maturity. The research of Jannah et al. (2020) measures the debt level with the Debt to Asset Ratio approach, which can be formulated as follows.

$$DAR_{it} = \frac{Total\ debt_{it}}{Total\ asset_{it}} \dots\dots\dots (6)$$

Firm size is a parameter which indicates the condition or characteristics of the company by observing its size. Referring to the research of Susilo & Anggraeni (2016), firm size can be found with the following formula.

$$SIZE_{it} = Ln(Total\ Asset)_{it} \dots\dots\dots (7)$$

The accrual amount is a non-cash flow recorded in the financial statements. It is measured based on the difference between the net income and cash from operating activities contained in the cash flow statement. Research by Amaliyah & Suwarti (2017) and Rahmadhani et al. (2016) measures the number of accruals through the following formula.

$$TACC_{it} = \frac{\sigma(Earning_{it} - CFO)_{it}}{Total\ asset_{it}} \dots\dots\dots (8)$$

Result and Discussion

A descriptive statistical analysis was used to view the data description for each variable. The variables are earnings persistence, cash flow volatility, sales volatility, debt level, firm size, and accrual amount. Based on 140 samples obtained, the descriptive statistical analysis in this study was carried out as presented in Table 2.

Table 2. Descriptive Analysis Result

	EP	CFV	SALVOL	DAR	SIZE	TACC
Mean	0.011333	0.073655	0.279161	0.368190	29.16334	0.067642
Maximum	0.139497	0.294797	0.972144	0.697491	32.72561	0.309606
Minimum	-0.072694	0.004435	0.011534	0.070684	26.47916	0.014099
Standard Deviation	0.031746	0.047056	0.199399	0.154907	1.462141	0.042748

Based on Table 2, the lowest value on earning persistence (EP) was -0.072694 which was obtained from a consumer cyclical sector company, Surya Citra Media Tbk (SCMA), in 2019. Likewise, the maximum value was also held by the same company in 2011 amounted to 0.139497. As a result, the standard deviation obtained was 0.031746, and the mean of 0.011333, meaning that the sample of companies used in this study, on average, had persistent earnings because the value was more than zero.

Cash flow volatility (CFV) had a minimum value of 0.004435. It was obtained by a consumer cyclical sector company, MNC Land Tbk (KPIG) in 2020, which means that the company had the highest cash flow volatility. Meanwhile, the maximum was from a consumer non-cyclical sector company, Siantar Top Tbk (STTP) in 2011, amounting to 0.294797. It indicated that the company had the lowest cash flow volatility. The standard deviation was 0.047056, and the mean was 0.073655, which means that the average standard deviation of cash flows to total assets was 7%.

Sales volatility (SALVOL) had the lowest value on sales volatility, which was 0.011534, obtained by a consumer cyclical company, MNC Land Tbk (KPIG) in 2020. This indicates that the company had the highest sales volatility. The highest value was obtained by a consumer non-cyclical sector company, namely Siantar Top Tbk (STTP), of 0.972144 in 2011. This indicates that this company had the lowest sales volatility. The standard deviation was 0.199399, and the mean was 0.279161, meaning that the average standard deviation of sales to total assets was 27.9%.

The minimum value of debt level (DAR) was 0.070684 and obtained from the consumer cyclical sector company, MNC Land Tbk (KPIG). Meanwhile, the maximum value was 0.697491, owned by Gema Grahasarana Tbk (GEMA) in 2011 from the consumer of the cyclical sector. The standard deviation was 0.15490, and the mean

was 0.368190, which indicates that the sample companies had an average debt of 36%. It indicates that the companies used as samples had a relatively safe debt level because the value is lower than 50%.

Firm size (SIZE) had the minimum value, 26.47916, held by Akasha Wira International Tbk (ADES) in 2011 in the consumer non-cyclical sector. Meanwhile, the highest score was 32.72561, obtained by Indofood Sukses Makmur Tbk (INDF) in 2020 and classified as a consumer non-cyclical sector. The standard deviation was 1.462141, and the mean was 29.16334, meaning that the companies had a large average company size scale.

The accrual amount (TACC) had a minimum value of 0.014099. This value was obtained by a consumer non-cyclical sector company, Indofood Sukses Makmur Tbk (INDF), in 2020. The highest value was 0.309606, obtained from MNC Land Tbk (KPIG), one of the consumer cyclical companies in 2011. The standard deviation was 0.042748, and the mean of accruals amount was 0.067642, meaning that the average company sample used had a difference in net income and cash from operating activities to total assets of 6%.

Based on the chow test, Hausman test, and LaGrange multiplier test in the model specification test, the panel data regression model selected for the consumer cyclical sector was the fixed effect model (FEM). However, the consumer non-cyclical sector used the random effect model (REM). Afterward, the hypothesis results are described in Table 3.

Table 3. Hypothesis Analysis Result

Variable	Consumer Cyclical (FEM)		Consumer Non-Cyclical (REM)	
	Coefficient	Probability	Coefficient	Probability
C	2.505776	**	0.106790	-
CFV	0.514892	-	0.209163	**
SALVOL	-0.074846	-	0.000630	-
DAR	0.106651	-	-0.074617	***
SIZE	-0.085762	**	-0.001884	-
TACC	-0.880870	***	-0.436062	***
F-statistic	0.004641		0.021066	
Adj. R²	0.228599		0.119556	

***significant in 0.01; **significant in 0.05

Subsequently, a robustness test was conducted to ascertain the consistency and reinforce the research findings. Thus, when the effect of the independent variable on the dependent variable is calculated using a distinct method to measure the persistence of earnings, its consistency can be observed. The results of the consumer cyclical sector and consumer non-cyclical sector robustness tests are shown in Tables 4 and 5 below.

Table 4. Hypothesis Analysis and Robustness Test Result of Consumer Cyclical

Variable	Hypothesis Analysis Results (FEM)		Robustness Test Results (FEM)	
	Coefficient	Probability	Coefficient	Probability
CFV	0.514892	-	25.78026	**
SALVOL	-0.074846	-	-1.743001	-
DAR	0.106651	-	0.781889	-
SIZE	-0.085762	**	-0.640314	-
TACC	-0.880870	***	-12.60189	***
F-statistic	0.004641		0.000006	
Adj. R²	0.228599		0.416518	

***significant in 0.01; **significant in 0.05

Table 5. Hypothesis Analysis and Robustness Test Result of Consumer Non-Cyclical

Variable	Hypothesis Analysis Results (REM)		Robustness Test Results (FEM)	
	Coefficient	Probability	Coefficient	Probability
CFV	0.209163	**	-6.388488	-
SALVOL	0.000630	-	4.968592	-
DAR	-0.074617	***	0.778746	-
SIZE	-0.001884	-	2.227496	-
TACC	-0.436062	***	-3.468019	-
F-statistic	0.021066		0.040810	
Adj. R²	0.119556		0.141808	

***significant in 0.01; **significant in 0.05

The Influence of Cash Flow Volatility on Earnings Persistence

As presented in Table 3, cash flow volatility in the consumer of the cyclical sector has a regression coefficient value of 0.514892 and the probability value of $0.5440 > 0.05$. These results indicate that cash flow volatility does not affect earnings persistence, and **H1a** is therefore rejected. Based on agency theory, financial information related to cash flows is sometimes stabilized on an annual basis to attract investors. Management uses earnings management to determine accounting policies in order to prevent fluctuations in operating cash flows. Actions taken by manipulating cash flow information will reduce the company's value. As a result, investors pay no attention to cash flow in seeing the persistence level of profits, or there is only a neutral signal. This result is in line with Kasiono & Fachrurizie (2016), Prasetyana & Wuryani (2019), Oktavia & Susanto (2022), and Jannah et al. (2020), who stated that volatility in cash flow had no significant effect on earnings persistence. However, based on the result of the robustness test, cash flow volatility in the consumer cyclical sector has a significant positive impact earnings persistence. Therefore, it can be concluded that the research result is inconsistent.

Meanwhile, in the consumer non-cyclical sector, the regression coefficient obtained is 0.209163, and the significance value of $0.0370 \leq 0.05$; therefore **H1b** is rejected. There was a significant positive effect of cash flow volatility on earning persistence. In general, earnings contain a transitory component that may arise for several reasons, one of which is a debt agreement based on the company's accounting profit. It encourages managers to manipulate earnings through specific methods to maintain the persistence of the company's profits and keep it looking high, even though the cash flow obtained by the company is fluctuating. According to agency theory, management always strives to present financial statements to show that the company's profit condition is good under various conditions. In addition, these companies have high cash flow volatility because they have been carrying out projects for several years. It causes the company's cash flow to decrease because it has to make various expenses for the project. However, operating cash flow recovered after the projects were completed, so the cash flows from operating activities also increased. This is, therefore, an excellent signal for stakeholders that the company can complete project work well and again increase its operating cash flow again. The result of this study is also supported by Amaliyah & Suwanti (2017) and Ariyanti et al. (2021), who obtained similar results. Based on the robustness test, the volatility cash flows in the consumer cyclical sector have a significant earnings persistence. Therefore, the research result is inconsistent.

The Influence of Sales Volatility on Earnings Persistence

The sales volatility variable in the cyclical consumer sector had a regression coefficient of -0.074846 and a probability of $0.6146 > 0.05$, which means sales volatility has no influence on earnings persistence in the cyclical consumer sector, therefore, **H2a** is rejected. Likewise, the consumer non-cyclical sector obtained a regression coefficient of 0.000630 and a probability of $0.9698 > 0.05$. It means sales volatility does not affect earnings persistence, so it can be concluded that **H2b** is rejected. Based on the agency theory, the agent always strives to maintain and increase the sales level in order to meet the principal expectations. Managers also tend to maximize company sales to get compensation by positive accounting theory. The tendency of these actions will provide a neutral signal to investors who observe that, however, the sales volatility and earnings persistence will not be affected. The results of the study are also similar to research conducted by Lasrya & Ningsih (2020), Yahya & Hidayat (2020), Pratikto et al. (2021), Ariyanti et al. (2021), and Oktavia & Susanto (2022). The result is also similar to the robustness test, which proves that sales volatility has no effect on earnings persistence in both cyclical and non-cyclical consumer sectors. Thus, the research results obtained can be concluded to have been consistent in each sector.

The Influence of Debt Level on Earnings Persistence

The debt level in the consumer cyclical sector had a regression coefficient of 0.106651 with a probability value of $0.0907 > 0.05$, which means that the debt level does not affect the persistence of earnings; therefore, **H3a** is rejected. The high level of debt encourages agents to do anything so that the profits obtained are persistent, as expected by the principal of the agency theory. However, this method can indicate fraud and lower the profit, which will result in bad signals. Therefore, management still chooses to use a reasonable method despite low profit because it does not affect earnings persistence. The results of the study were also in line with the research of Yahya & Hidayat (2020), Jannah et al. (2020), Sabila et al. (2021), and Ariyanti et al. (2021). The robustness test results also prove that the debt level does not affect the persistence of earnings in the consumer cyclical sector so the research results can be reported as robust.

In the consumer non-cyclical sector, the regression coefficient was -0.074617 with a probability of $0.0024 \leq 0.05$. It shows that the debt level has a significant negative impact on earnings persistence, and it may be concluded that **H3b** is rejected. High levels of debt can hamper business development and cause a decline in future earnings. If the debt level increases, the debt payment dependents will also be even more significant and result in

a bad signal. According to the agency theory, the agent will manage earnings to meet principal expectations. The existence of earnings management causes earnings to be biased and has low-profit persistence. The higher the debt level, the company will face tremendous company pressure. It encourages companies to make earnings management aimed at reducing profits and signing another debt agreement. Therefore, the higher the level of debt, the lower the earnings persistence. These results are in line with the research conducted by Marnilin et al. (2015), Kasiono & Fachrurizie (2016), Maqfiroh & Kusmuriyanto (2018), and Gunawan et al. (2020). However, based on the robustness test, the level of debt in the consumer non-cyclical sector does not affect earnings persistence. Therefore, the research results can be declared inconsistent.

The Influence of Firm Size on Earnings Persistence

Firm size in the consumer cyclical obtained a regression coefficient of -0.085762 with the probability of $0.0129 \leq 0.05$. It is possible to interpret that the size of the company has a negative effect on the persistence of earnings; therefore, H_{4a} is rejected. According to agency theory, investors entrust management to manage their companies. Large companies have extensive resources to carry out their business activities and gain more trust from investors. However, large companies face higher political sensitivity and costs than the smaller ones. Political costs include government intervention, taxes, and other cost demands. Managers reduce political costs by using accounting policy choices that tend to reduce profits. Therefore, the profit will be relatively small and less persistent. In addition, the earnings quality cannot reflect the actual situation and provides a lousy signal. This result is similar to Nuraeni et al. (2018). However, it differs from the robustness test results, which state that firm size does not affect earnings persistence, so the research results are inconsistent.

Meanwhile, the consumer non-cyclical sector has a regression coefficient of 0.001884 and a probability value of $0.3019 > 0.05$. Therefore, there is no effect of firm size on earnings persistence, and therefore, H_{4b} is rejected. Based on agency theory, the management of large or small companies will always try to meet the expectations of their investors. Therefore, the size of a firm does not guarantee that the profits earned will be more persistent and will only provide a neutral signal. It is also in line with research conducted by Amaliyah & Suwarti (2017), Abbas & Hidayat (2020), Gunawan et al. (2020), Maqfiroh & Kusmuriyanto (2018), Nurdiniah et al. (2021), Nahak et al. (2021), and Pratikto et al. (2021). Similar results were also obtained in the robustness test, which proves that there is no effect of firm size on earnings persistence, so it can be stated that the research results are robust.

The Influence of Accrual Amount on Earnings Persistence

The effect of accrual amount on the persistence of earnings in the consumer of cyclical and non-cyclical sectors was similar. The regression coefficient for the cyclical consumer sector is -0.880870, with a probability value of $0.0036 \leq 0.05$. It indicates a significant adverse effect on accrual amount on earnings persistence, and H_{5a} is accepted. Meanwhile, the non-cyclical consumer sector obtained a regression coefficient of -0.436062 and a probability of $0.0021 \leq 0.05$, which means that the accrual amount has a significant negative effect on persistence earnings, so H_{5b} is accepted. Based on the bonus plan hypothesis in positive accounting theory, managers tend to do earnings management to report company profits in order to make it appear stable so that managers can maximize the salary through bonuses. If the accruals in the company's profits increase, this indicates that the opportunity for earnings management will also be higher. The fluctuations in the accrual component of the company can cause disturbances in the persistence of earnings. Therefore, according to agency theory, management or agents will try to provide the information as expected by the principal or investor and give an excellent signal to all stakeholders. The results of this study also obtained the same results as the research of Rahmadhani et al. (2016), Sukaesi (2016), Pernamasari (2018), and Adiati et al. (2018). However, it is different from the robustness test results in the consumer non-cyclical sector. The results obtained are that the accrual amount does not affect the earnings persistence. Therefore, the research results on the variable of accrual amount in the consumer non-cyclical sector are inconsistent.

Conclusion

According to the above research, in the consumer cyclical sector, firm size and accruals have a major effect on earning persistence. At the same time, cash flow volatility, sales volatility, and debt level do not affect earning persistence. The robustness test of the cyclical consumer sector reveals inconsistencies in the results of cash flow volatility, which has a significant positive effect on earnings persistence, and firm size, which does not affect earnings persistence. In the consumer non-cyclical sector, cash flow volatility has a significant positive impact on earnings persistence. However, firm size and accruals have a negative effect, while sales volatility and firm size have no effect. Several variables, including the volatility of cash flows, debt levels, and the accrual amount, have inconsistent results based on the robustness test but have no impact on earnings persistence. These findings suggest

that the determinants of earnings persistence may vary by industry and that different financial factors can affect earnings persistence in different ways. The findings can be helpful for investors, analysts, and policymakers who wish to comprehend the factors that influence earnings persistence in the Indonesian consumer goods sector. The limit of this study is that only 14 out of 103 firms meet the criteria, with seven consumer cyclical companies and seven consumer non-cyclical firms included in the sample. The small sample size influences research results. Future research should include additional industries, which will increase the sample size.

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