ISSN 2721-0677 (online)
IJESSS
INTERNATIONAL JOURNAL OF ENVIRONMENTAL, SUSTAINABILITY AND SOCIAL SCIENCE
Indexed by : sinta 3 Crossref GARUDA Google scholar

THE EFFECT OF EARNINGS CHARACTER, ITS COMPONENTS, AND SHARE PRICES OF CONSUMER NON-CYCLICALS FIRMS LISTED ON THE INDONESIA STOCK EXCHANGE

Volume: 7
Number: 6
Page: 1552 - 1563

Pinky Permata Sari[1], Pujiono[2]
[1]Department of Accounting, Faculty of Economics and Business, Universitas Negeri Surabaya, Indonesia
Corresponding author: Pinky Permata Sari
E-mail: pinky.23191@mhs.unesa.ac.id

Article History:
Received: 2026-10-02
Revised: 2026-10-30
Accepted: 2026-11-10

Abstract:
We examine whether the fiscal year-end share prices of consumer non-cyclical firms listed on the Indonesia Stock Exchange are associated with the composition of reported earnings represented by three cash and accrual profiles and the absolute size of net income and operating cash flow. The sample consists of 933 annual observations and 134 companies from 2016 to 2025. The reference group is the class without any loss observations. Two dummy variables code the earnings profiles. The fitted share prices in Categories 1 and 2 are about 44.2% and 40.4% below the reference group holding the other regressors constant according to the WLS estimates. The coefficients of ln|CFO| and ln|NI| are positive (0.368 and 0.105; $p<0.001$). These logs are only size, and not whether cash flow or profit is positive or negative. The model does not capture some dependence at the firm level. The proportion of firms that have losses varies across categories. The results are best interpreted as associations, not as causal evidence for the quality of earnings. Further robustness checks of the full panel are needed.

Keywords: Earnings character; Earnings quality; Operating cash flow; Accruals; Market value; Value relevance

INTRODUCTION

Accounting earnings are the most central figure in financial statements and the one most frequently referenced by investors. Ball and Brown (1968) demonstrate that earnings announcements carry information that is reflected in share prices, and Ohlson (1995) gives a formal framework for expressing the market value of equity in terms of accounting figures. However, earnings are an aggregate figure that disguises the diverse nature of their constituents (Kothari, 2001). The usefulness of earnings for decision making is contingent on the degree to which the number captures the underlying performance and the extent to which it is still subject to estimates (Dechow *et al.*, 2010).

Net income is conceptually made up of accruals and operating cash flow. Richardson *et al.* (2005) report that the cash component is more persistent than the accrual component. Dechow and Dichev (2002) provide evidence of a reduction in earnings quality due to the presence of accrual estimation errors. Dechow *et al.* (2010) consider persistence and accrual quality as important measures of earnings quality. Thus, two companies with similar earnings magnitude can tell different economic stories if the composition of their cash and accruals is different.

Consumer non-cyclicals provide a useful source of evidence on how investors interpret accounting performance. For example, PT Unilever Indonesia Tbk (UNVR) in our database. The company reported a positive net income and positive operating cash flow, but its closing share price fell from IDR 11,180 at the end of 2017 to IDR 1,885 at the end of 2024. But this one difference is not enough to explain the decline, because prices are also influenced by expectations, risk, corporate actions, and other things that have nothing to do with the earnings structure. It does, however, raise the question of whether firms with different cash and accrual profiles also tend to be priced differently.

Empirical evidence on the market's assessment of the components of earnings is mixed. Hayn (1995) and Collins et al. (1999) find that the relation between earnings and prices is different for loss firms and profitable firms, while Francis et al. (2005) find that bad accruals quality is discounted. Zacharias et al. (2025) in Indonesia, the earnings are more valuable if they are disaggregated into their components.

This open-access article is distributed under a Creative Commons Attribution (CC-BY-NC) 4.0 license

IJESSS
INTERNATIONAL JOURNAL OF ENVIRONMENTAL, SUSTAINABILITY AND SOCIAL SCIENCE
Indexed by : sinta 3 Crossref GARUDA Google scholar

In most of this work, each of the components is entered as a separate continuous variable. Only a few studies go a step further and classify firms into profiles according to their earnings composition.

We relate the magnitude of net income and operating cash flow to the year-end share prices using 933 annual observations of consumer non-cyclicals companies from 2016 to 2025. The WLS estimates suggest that the prices of Categories 1 and 2 are below that of the profitable reference category, even after controlling for the absolute size of both earnings components. However, the estimates are not able to fully disentangle the composition of earnings from whether a firm earned a profit or not because the distribution of observations with losses is uneven across the categories. Our contribution is a simple classification built directly from financial statement figures. The findings are still considered associations, not causal effects.

Literature review and hypothesis development

Signalling theory, agency theory and value relevance

According to signaling theory, parties with better information send signals to parties with worse information, and these signals are credible if they are difficult to imitate by parties of inferior quality (Spence 1973; Ross 1977). Cash is difficult to manipulate and objective, so the degree to which operating cash flow covers earnings is a good indicator. In the accrual part, agency theory states that the information asymmetry between shareholders and management allows for discretion (Jensen and Meckling, 1976) and managers can use judgment in financial reporting to change users' perceptions of firm performance (Healy and Wahlen, 1999). For differences in signal quality to be transmitted into prices, the market needs to be at least semi-strong form efficient (Fama, 1970). The regression of share prices on accounting numbers is based on the Ohlson (1995) framework (Barth et al., 2001).

Earnings quality and cash and accrual composition

Persistence, accrual quality and price response to earnings are all properties that can be used to proxy earnings quality (Dechow et al., 2010). If the share of accruals increases relative to cash flow, the room for managerial judgment within earnings becomes more spacious and this may reduce the quality of earnings (Healy and Wahlen, 1999). The cash component is more persistent than the accrual component and less reliable accruals are associated with larger errors in market valuation (Richardson et al., 2005). Francis et al. (2005) also demonstrate that poor accrual quality is penalized with a higher cost of capital. Therefore, analyzing the cash and accruals composition is a common method of measuring the quality of earnings.

Earnings character

In this study, earnings character is simply a categorization of firms based on their cash and accrual composition. It is not intended as a stand-alone, validated indicator of earnings quality. The accounting identity NI = CFO + TA, where total accruals (TA) is defined as NI − CFO (Hribar and Collins, 2002), creates three mutually exclusive groups (Table 1). Observations in Category 1 have a CFO greater than the NI, making TA negative. Observations with TA > NI (i.e., CFO < 0) are classified as Category 2, while observations with CFO ≥ 0 and TA ≥ 0 are classified as Category 3. The grouping is based only on the levels and signs of the components. It should not be interpreted as evidence of managerial discretion or conservatism without further testing.

This open-access article is distributed under a
Creative Commons Attribution (CC-BY-NC) 4.0 license

IJESSS
INTERNATIONAL JOURNAL OF ENVIRONMENTAL, SUSTAINABILITY AND SOCIAL SCIENCE
Indexed by : sinta 3 Crossref GARUDA Google scholar

Table 1. Classification of earnings character

Category	Condition	Component implication	Interpretation
Category 1	CFO > NI	Negative total accruals (TA < 0); profitability may be positive or negative	Negative accrual profile; not by itself evidence of accounting conservatism
Category 2	CFO ≤ NI and TA > NI	Negative CFO; total accruals at least zero	Negative operating cash flow profile
Category 3 (reference)	Other than Categories 1 and 2	Nonnegative CFO and TA; nonnegative NI	Nonnegative cash flow and accrual profile; no loss observations

Source(s): Author's own creation

Separating observations by conditions based on sign is common in accounting research. Basu (1997) shows that earnings behave differently for firms with good and poor performance owing to conditional conservatism and separates the two conditions with a dummy variable, while Hayn (1995) shows that losses carry different information from profits. Because earnings character is a categorical variable, it is operationalised through two dummies with Category 3 as the reference group (Suits, 1957); the reason is explained in Section 3.3.

Hypothesis development

Cash and accrual composition may be associated with stock prices because different profiles convey different information about the persistence and realisation of earnings (Jensen and Meckling, 1976; Richardson et al., 2005). A priori, a negative operating cash flow profile might be priced differently from the comparison category. However, the proposed groups also differ in profitability status, and CFO > NI is not by itself sufficient evidence of conservative accounting. Accordingly, the empirical comparisons are treated as a test of whether the categories are associated with different share prices, rather than as an unambiguous ranking of earnings quality.

H1. Share prices differ across earnings character categories after accounting for the measured magnitudes of earnings components.

Operating cash flows are more persistent and harder to manipulate than accruals since they record cash receipts and payments that have actually occurred (Dechow and Dichev, 2002; Richardson *et al.*, 2005). Francis *et al.* (2005) also find that the market discounts earnings that have poor accrual quality.

H2. The absolute magnitude of operating cash flow is positively associated with share prices, conditional on the remaining regressors.

The information content of net income has been consistently demonstrated (Ball and Brown, 1968), and the price response to earnings has been found to increase with their persistence (Kormendi and Lipe, 1987). Earnings are the accounting figure most closely related to share prices, as indicated by value relevance studies (Kothari, 2001; Barth *et al.*, 2001).

H3. The absolute magnitude of net income is positively associated with share prices, conditional on the remaining regressors.

METHOD

Data and sample

The population is 135 firms in consumer non-cyclicals that are included in IDX-IC sector D. Removing one company that only listed in 2026, there are 134 firms that could be observed over 2016 to 2025. The firm was included in the sample, if it was listed, had audited accounts and had a closing price at the end of the year. This gives an unbalanced panel of 933 observations, of which 711 have a positive net income and 222 (23.8%) a loss. The counts agree with the original sampling. The data for each firm and an annual reconciliation of the sample are not appended to this article. Four firms report in US dollars, so their net income and operating cash flow were converted into rupiah using the average middle rate of Bank Indonesia annually. Data for accounts and closing prices were obtained from IDX and Yahoo

This open-access article is distributed under a Creative Commons Attribution (CC-BY-NC) 4.0 license

IJESSS
INTERNATIONAL JOURNAL OF ENVIRONMENTAL, SUSTAINABILITY AND SOCIAL SCIENCE
Indexed by : sinta 3 Crossref GARUDA Google Scholar

Finance. To replicate the sample, we would require the precise sequence of exchange rates, company identifiers, fiscal years, and the handling of stock splits or other price modifications.

Variable measurement

Table 2 describes the meaning of each variable. The dependent variable is the natural log of the closing price per share on the last trading day of the fiscal year. This is a price per share, not a market cap or enterprise value. Where ln|NI| and ln|CFO| denote net income and operating cash flow, respectively. Absolute values are treated logarithmically, so the sign is lost. For example, a loss of IDR 1 billion and a profit of IDR 1 billion result in the same transformed NI. Thus, a positive coefficient does not mean that a higher share price is always associated with a higher (signed) cash flow or profit. Moreover, ln|x| is not defined at x = 0, so any zero observations have to be identified and treated separately. The reference group has no loss observations and the category dummies capture only part of the sign information. A reasonable robustness check can be performed with the original data, using an appropriate sign-preserving transformation like an inverse hyperbolic sine, scaled appropriately, and with explicit loss dummies (Bellemare and Wichman, 2020).

Table 2. Variable definitions

Variable	Measurement
Share price (LnMV)	Natural logarithm of closing price per share at fiscal year end (IDR/share); not market capitalisation
Earnings character (D_1, D_2)	D_1 = 1 if CFO > NI, 0 otherwise; D_2 = 1 if CFO ≤ NI and TA > NI, 0 otherwise; Category 3 as reference
Net income (LnNI)	Natural logarithm of the absolute nonzero net income (IDR); sign is discarded
Cash flow from operations (LnCFO)	Natural logarithm of the absolute nonzero operating cash flow (IDR); sign is discarded

Source(s): Author's own creation

Empirical model

The dummy regression model is estimated as follows:

$$LnMV_{it} = \beta_0 + \beta_1 D_{1it} + \beta_2 D_{2it} + \beta_3 LnNI_{it} + \beta_4 LnCFO_{it} + \varepsilon_{it} \quad (1)$$

Category 3 is not a separate dummy (D_3). $D_1 + D_2 + D_3 = 1$ for all observations, because each observation is assigned to only one of the three categories. Hence, the D_3 column is the same as the constant column minus D_1 and D_2 ($D_3 = 1 - D_1 - D_2$). This perfect multicollinearity due to the inclusion of all three dummies with the constant is termed the dummy variable trap. In that case the coefficients have no unique solution, and statistical software simply drops one of the dummies (Suits, 1957). Category 3 is still in the model, though: it is captured by the constant β_0, which serves as the benchmark. Replacing the dummy variables with their respective categorical values, equation (1) is broken down into three regression lines with the same slopes but different intercepts:

Category 3 ($D_1 = 0$; $D_2 = 0$): $LnMV = \beta_0 + \beta_3 LnNI + \beta_4 LnCFO$ (2)

Category 2 ($D_1 = 0$; $D_2 = 1$): $LnMV = (\beta_0 + \beta_2) + \beta_3 LnNI + \beta_4 LnCFO$ (3)

Category 1 ($D_1 = 1$; $D_2 = 0$): $LnMV = (\beta_0 + \beta_1) + \beta_3 LnNI + \beta_4 LnCFO$ (4)

Coefficients β1 and β2 compare the modelled share price of Categories 1 and 2 with Category 3 while holding ln|NI| and ln|CFO| fixed. With a logged dependent variable, the exact percentage difference implied by a dummy coefficient is $(\exp(\beta) - 1) \times 100\%$; no retransformation correction is applied when comparing conditional means in levels. β3 and β4 are elasticities of share price with respect to |NI| and |CFO| (nonzero values only), so they refer to size, not to signed net income or signed cash flow. What the model gives are conditional associations; it does not identify causal effects.

Estimation technique

We first ran the baseline model as a pooled OLS regression. The checks were a Kolmogorov–Smirnov test, the Durbin–Watson statistic, variance inflation factors and the Glejser test. The Glejser test pointed to heteroskedasticity, so the model was estimated again by WLS, with weights equal to the inverse squared fitted values from a regression of the absolute OLS residuals. The WLS coefficients and test statistics shown here are the original estimates. Standard errors clustered by firm and panel estimators were not computed. WLS on its own does not deal with serial correlation within firms, firm

This open-access article is distributed under a Creative Commons Attribution (CC-BY-NC) 4.0 license

IJESSS
INTERNATIONAL JOURNAL OF ENVIRONMENTAL, SUSTAINABILITY AND SOCIAL SCIENCE
Indexed by : sinta 3 Crossref GARUDA Google

heterogeneity or possible omitted variables. It also relies on the fitted scale values being positive and nonzero for every observation, which needs to be checked. For now, then, the results describe conditional associations. They still need to be compared with models that include firm and year effects and with inference clustered by firm on the full panel.

RESULTS AND DISCUSSION

Descriptive statistics are presented in Table 3. Prices are between IDR 3 and IDR 83,800 per share. The reason to take the log of the price variable is the standard deviation is almost three times larger than the mean which is IDR 1,947.36. Net income improved from a loss of IDR 5.23 trillion to a profit of IDR 15.56 trillion. Operating cash flow is in the range of -IDR 4.84 trillion to IDR 20.19 trillion.

Table 3. Descriptive statistics

Variable	N	Min.	Max.	Mean	SD
MV (IDR/share)	933	3	83,800	1,947.36	5,604.39
NI (IDR)	933	−5.234E+12	1.556E+13	6.830E+11	1.956E+12
CFO (IDR)	933	−4.844E+12	2.019E+13	9.704E+11	2.574E+12
LnMV	933	1.099	11.336	6.222	1.628
LnNI	933	16.662	30.375	25.452	2.383
LnCFO	933	17.365	30.636	25.733	2.281

Note(s): E+12 denotes multiplication by 10^{12}

Source(s): IBM SPSS output, author's own creation

It can be observed from Table 4 that Category 1 is the largest group, with 622 observations (66.7%). Category 2 has 171 observations (18.3%) and Category 3 has 140 observations (15.0%). Out of the 222 loss observations, 187 are classified as Category 1 and 35 are classified as Category 2. Category 3. No. When we compare categories, we have to compare groups with a different mix of profitable and unprofitable firms. This is a major limitation of the analysis and is relevant for the interpretation of the regression.

Table 4. Distribution of earnings character

Category	N	Percentage	Of which losses
Category 1 (CFO > NI)	622	66.7%	187
Category 2 (CFO ≤ NI and TA > NI)	171	18.3%	35
Category 3 (reference)	140	15.0%	0
Total	933	100.0%	222

Source(s): Author's own creation

Table 5 summarises the diagnostics for the WLS model. The Kolmogorov–Smirnov test ($p = 0.200$) fails to reject the assumed distribution of residuals at the 5% level, although this is not evidence that the residuals are exactly normal. The VIF values are well below the commonly used thresholds for severe collinearity and range from 2.079 to 2.830. The Durbin-Watson statistic of 0.651 indicates possible positive dependence in the residuals. However, its usual critical values are derived for a single time series and are not directly applicable to an unbalanced firm panel. The significance levels presented in Table 7 may be affected by the presence of correlation within firms that is not accounted for in the model. No test for serial correlation that is appropriate for panel data was performed, and standard errors were not clustered by firm (Petersen, 2009; Baltagi, 2021).

This open-access article is distributed under a Creative Commons Attribution (CC-BY-NC) 4.0 license

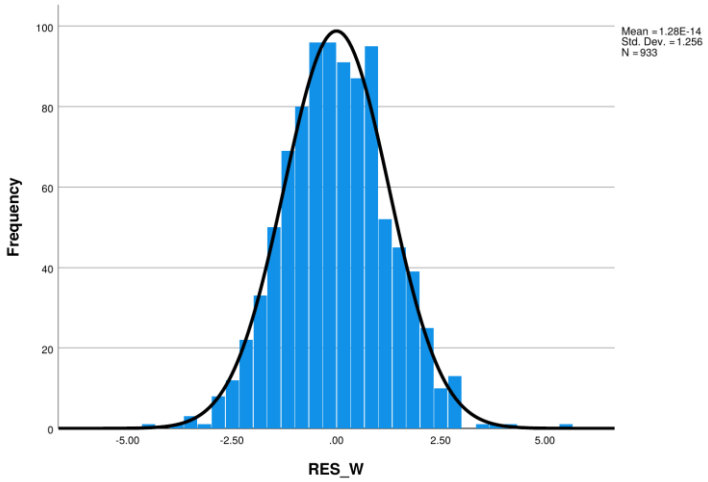
IJESSS
INTERNATIONAL JOURNAL OF ENVIRONMENTAL, SUSTAINABILITY AND SOCIAL SCIENCE
Indexed by :

Table 5. Summary of model diagnostics (WLS)

Test	Statistic	Result	Conclusion
Normality (Kolmogorov-Smirnov)	Asymp. Sig.	0.200	Residuals normal
Autocorrelation	Durbin-Watson	0.651	Positive autocorrelation
Multicollinearity: D_1	Tolerance / VIF	0.481 / 2.079	Absent
Multicollinearity: D_2	Tolerance / VIF	0.442 / 2.264	Absent
Multicollinearity: LnNI	Tolerance / VIF	0.353 / 2.830	Absent
Multicollinearity: LnCFO	Tolerance / VIF	0.382 / 2.615	Absent

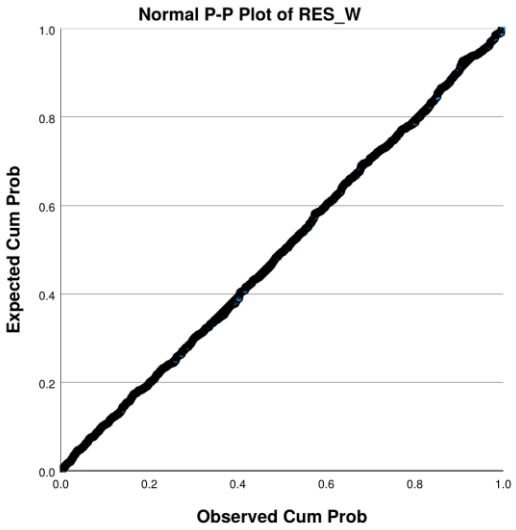
Source(s): IBM SPSS output, author's own creation

Figure 1. Histogram of WLS model residuals



Source(s): IBM SPSS output, author's own creation

Figure 2. Normal P-P plot of WLS model residuals



Source(s): IBM SPSS output, author's own creation

Table 6 presents the results of the Glejser test. Pooled OLS shows that absolute residuals are related to LnNI ($p < 0.001$) and LnCFO ($p = 0.016$), indicating heteroskedasticity. These p values are > 0.05 after WLS. Figure 3 is a scatterplot that shows no clear pattern. It follows that WLS has reduced the heteroskedasticity that the test is able to detect. It does not demonstrate that the errors are

This open-access article is distributed under a Creative Commons Attribution (CC-BY-NC) 4.0 license

IJESSS
INTERNATIONAL JOURNAL OF ENVIRONMENTAL, SUSTAINABILITY AND SOCIAL SCIENCE
Indexed by :

homoskedastic . It does not deal with the problem of dependence within firms. This means inference requires robust standard errors which are valid for panel data.

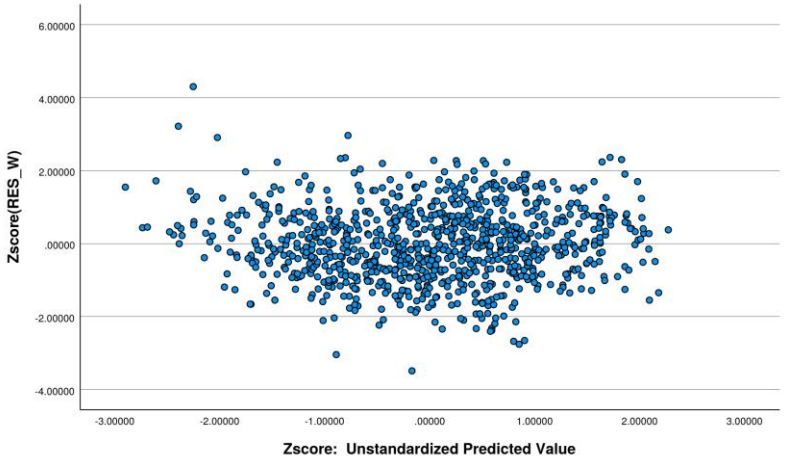
Table 6. Glejser test before and after WLS

Variable	t (OLS)	Sig. (OLS)	t (WLS)	Sig. (WLS)
D_1	1.428	0.154	0.055	0.957
D_2	1.556	0.120	−0.339	0.735
LnNI	4.425	< 0.001	−0.561	0.575
LnCFO	−2.411	0.016	0.629	0.529

Note(s): Dependent variables: absolute OLS residuals (ABS_RES) and absolute weighted WLS residuals (ABS_RESW)

Source(s): IBM SPSS output, author's own creation

Figure 3. Scatterplot of residuals against predicted values of the WLS model



Source(s): IBM SPSS output, author's own creation

Hypothesis testing and fitted model results

Table 7 presents the WLS estimates, with the log of the share price at year end as the outcome. The F statistic is 196.086 ($p < 0.001$) and the adjusted R^2 is 0.456. Taken together, the regressors are jointly significant, and they explain about 45.6% of the variation in log share prices. These numbers do not show causality, nor do they show that the model deals properly with panel dependence, endogeneity or unobserved firm effects.

Table 7. WLS estimation results

Variable	Predicted sign	B	Std. error	Beta	t	Sig.
Constant		−5.443	0.472		−11.524	< 0.001
D_1	+	−0.584	0.114	−0.178	−5.098	< 0.001
D_2	−	−0.517	0.141	−0.133	−3.657	< 0.001
LnNI	+	0.105	0.024	0.176	4.324	< 0.001
LnCFO	+	0.368	0.027	0.524	13.401	< 0.001
N		933				
Adjusted R^2		0.456				
F (Sig.)		196.086				< 0.001

Note(s): Dependent variable: LnMV; weighted least squares estimation with weight W

Source(s): IBM SPSS output, author's own creation

Compared with Category 3, and keeping ln|NI| and ln|CFO| fixed, Category 2 has a coefficient of −0.517 ($p < 0.001$), or a modelled share price about 40.4% lower. For Category 1 the coefficient is −0.584 ($p < 0.001$), which translates into a price about 44.2% lower. One coefficient having the expected sign is

This open-access article is distributed under a
Creative Commons Attribution (CC-BY-NC) 4.0 license

IJESSS
INTERNATIONAL JOURNAL OF ENVIRONMENTAL, SUSTAINABILITY AND SOCIAL SCIENCE
Indexed by :

not enough to support the overall directional claim. Both dummies are negative, and the sign for Category 1 runs against the positive direction originally predicted. The positive coefficients on Ln|CFO| (0.368) and Ln|NI| (0.105) relate price to the size of these figures, not to signed cash flow or income. The p values come straight from the WLS model and are not adjusted for possible dependence within firms.

Based on Table 7, the estimated regression equation is as follows:

$$LnMV = -5.443 - 0.584D_1 - 0.517D_2 + 0.105LnNI + 0.368LnCFO \quad (5)$$

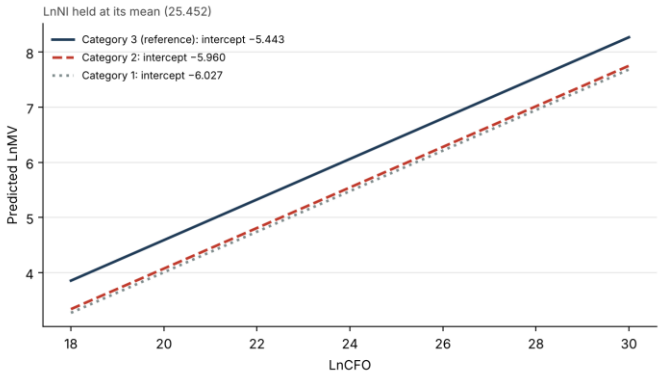
Following equations (2) to (4), equation (5) decomposes into three parallel regression lines:

Category 3: $LnMV = -5.443 + 0.105LnNI + 0.368LnCFO$ (6)

Category 2: $LnMV = -5.960 + 0.105LnNI + 0.368LnCFO$ (7)

Category 1: $LnMV = -6.027 + 0.105LnNI + 0.368LnCFO$ (8)

Figure 4. Regression lines by earnings character category



Source(s): LnNI is held at its mean (25.452). Author's own creation

The fitted lines in Figure 4 are parallel because the model assumes common slopes for ln|NI| and ln|CFO| across categories. It can be seen that the reference category has the highest predicted log share price for identical values of those two absolute magnitudes. This conditional comparison does not mean that companies in Category 3 are of higher market capitalization or better earnings quality. The alternative reference coding reported shows a difference between Category 1 and Category 2 of B = 0.066 (p = 0.522), which is not statistically distinguishable from zero with the original WLS standard errors. Both category comparisons should be reconsidered in terms of profitability status and panel dependence.

Discussion

Earnings character. In the reported WLS specification, Categories 1 and 2 are associated with lower share prices at year end than Category 3, conditional on ln|NI| and ln|CFO|. The identification of a pricing discount due to earnings quality or earnings management is insufficient, as this pattern is consistent with the possibility that investors have different interpretations of cash and accrual composition. Category 1 has 622 observations of which 187 are loss observations. All the 140 reference observations have positive income. Therefore, the negative coefficient on Category 1 may be partially capturing differences in profitability and information not captured by the absolute value transformations. Big bath accounting is only one possible mechanism that was not tested in this study and should not be advanced as an empirical explanation. Further analysis with loss indicators and appropriate panel controls is needed before ascribing the category coefficients to accrual quality.

Operating cash flow. In the WLS model, ln|CFO| has a coefficient of 0.368 (standardised beta = 0.524; $p < 0.001$). With the other regressors held constant, a 1% rise in the absolute value of (nonzero) operating cash flow goes with a modelled share price roughly 0.368% higher. When CFO is negative, though, a larger |CFO| means a bigger cash outflow. So the result does not show that better (signed) operating cash flow raises prices. The fairly large standardised coefficient holds for this specification only, and whether it survives firm and year effects has not been tested.

Net income. The coefficient on ln|NI| is 0.105 (standardised beta = 0.176; reported $p < 0.001$). This denotes a positive association between the absolute magnitude of nonzero net income and the share price at year end in the reported model. This cannot be read into a uniformly positive correlation with profitability. Higher values of ln|NI| are also the consequence of larger absolute losses. In view of the

This open-access article is distributed under a
Creative Commons Attribution (CC-BY-NC) 4.0 license

loss observations in the sample and the potential correlation within firms, this result should be considered descriptive until models robust for panel data and retaining the sign are estimated.

Conclusions

The reported WLS analysis identifies associations between the categorical cash and accrual profiles, the absolute magnitudes of earnings components, and share prices at year end among the consumer non-cyclicals firms in the sample. Relative to a reference group comprising only profitable observations, both Categories 1 and 2 have lower fitted share prices, while ln|CFO| and ln|NI| have positive coefficients. None of this proves a causal effect, and it does not show that higher signed cash flow or income reliably pushes prices up. The Category 1 result is especially hard to read, because the share of observations with losses differs so much between categories.

For users of financial statements, the findings motivate examining cash flows alongside net income and distinguishing profits from losses when comparing firms. They should not be treated as evidence that any single accounting profile necessarily leads to higher equity valuation. Practical recommendations for issuers or regulators remain preliminary until the estimates are verified under richer specifications and suitable inference for panel data.

This study has many important limitations. The result is the price per share, not the total equity market value. This number can be sensitive to corporate actions and scaling per share. The comparison group has no loss observations and there is no documentation on treatment of zeros values. Moreover, the absolute value log transforms wipe out the signs of net income and cash flow. The pooled WLS specification does not control for unobserved firm heterogeneity, omitted confounders, or serial correlation within firms. The standard errors reported were not re-estimated using methods robust to panel dependence. Replication Use original annual firm data to check sampling and currencies. Include loss indicators and firm/year controls. Test alternatives that preserve the sign. Check inference clustered by firm. Look at market capitalization or specifications scaled per share as appropriate. These analyzes must be carried out prior to the results being interpreted as preliminary conditional associations.

Notes

[1.] Under the ln|x| transformation, a positive and a negative value of equal size receive the same regressor value, and the log is undefined at x = 0. This article does not report whether any zero values occurred or how they would be handled. This measurement issue is taken into account throughout the interpretation of the results.

References

Ball, R. and Brown, P. (1968), "An empirical evaluation of accounting income numbers", *Journal of Accounting Research*, Vol. 6 No. 2, pp. 159-178, doi: 10.2307/2490232.

Baltagi, B.H. (2021), *Econometric Analysis of Panel Data*, 6th ed., Springer, Cham, doi: 10.1007/978-3-030-53953-5.

Barth, M.E., Beaver, W.H. and Landsman, W.R. (2001), "The relevance of the value relevance literature for financial accounting standard setting: another view", *Journal of Accounting and Economics*, Vol. 31 Nos 1-3, pp. 77-104, doi: 10.1016/S0165-4101(01)00019-2.

Basu, S. (1997), "The conservatism principle and the asymmetric timeliness of earnings", *Journal of Accounting and Economics*, Vol. 24 No. 1, pp. 3-37, doi: 10.1016/S0165-4101(97)00014-1.

Bellemare, M.F. and Wichman, C.J. (2020), "Elasticities and the inverse hyperbolic sine transformation", *Oxford Bulletin of Economics and Statistics*, Vol. 82 No. 1, pp. 50-61, doi: 10.1111/obes.12325.

Bhargava, A., Franzini, L. and Narendranathan, W. (1982), "Serial correlation and the fixed effects model", *The Review of Economic Studies*, Vol. 49 No. 4, pp. 533-549, doi: 10.2307/2297285.

Collins, D.W., Pincus, M. and Xie, H. (1999), "Equity valuation and negative earnings: the role of book value of equity", *The Accounting Review*, Vol. 74 No. 1, pp. 29-61, doi: 10.2308/accr.1999.74.1.29.

This open-access article is distributed under a
Creative Commons Attribution (CC-BY-NC) 4.0 license

Dechow, P., Ge, W. and Schrand, C. (2010), "Understanding earnings quality: a review of the proxies, their determinants and their consequences", *Journal of Accounting and Economics*, Vol. 50 Nos 2-3, pp. 344-401, doi: 10.1016/j.jacceco.2010.09.001.

Dechow, P.M. and Dichev, I.D. (2002), "The quality of accruals and earnings: the role of accrual estimation errors", *The Accounting Review*, Vol. 77 No. s-1, pp. 35-59, doi: 10.2308/accr.2002.77.s-1.35.

Durbin, J. and Watson, G.S. (1950), "Testing for serial correlation in least squares regression: I", *Biometrika*, Vol. 37 Nos 3-4, pp. 409-428, doi: 10.1093/biomet/37.3-4.409.

Fama, E.F. (1970), "Efficient capital markets: a review of theory and empirical work", *The Journal of Finance*, Vol. 25 No. 2, pp. 383-417, doi: 10.2307/2325486.

Francis, J., LaFond, R., Olsson, P. and Schipper, K. (2005), "The market pricing of accruals quality", *Journal of Accounting and Economics*, Vol. 39 No. 2, pp. 295-327, doi: 10.1016/j.jacceco.2004.06.003.

Glejser, H. (1969), "A new test for heteroskedasticity", *Journal of the American Statistical Association*, Vol. 64 No. 325, pp. 316-323, doi: 10.1080/01621459.1969.10500976.

Hayn, C. (1995), "The information content of losses", *Journal of Accounting and Economics*, Vol. 20 No. 2, pp. 125-153, doi: 10.1016/0165-4101(95)00397-2.

Healy, P.M. (1985), "The effect of bonus schemes on accounting decisions", *Journal of Accounting and Economics*, Vol. 7 Nos 1-3, pp. 85-107, doi: 10.1016/0165-4101(85)90029-1.

Healy, P.M. and Wahlen, J.M. (1999), "A review of the earnings management literature and its implications for standard setting", *Accounting Horizons*, Vol. 13 No. 4, pp. 365-383, doi: 10.2308/acch.1999.13.4.365.

Hribar, P. and Collins, D.W. (2002), "Errors in estimating accruals: implications for empirical research", *Journal of Accounting Research*, Vol. 40 No. 1, pp. 105-134, doi: 10.1111/1475-679X.00041.

Jensen, M.C. and Meckling, W.H. (1976), "Theory of the firm: managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305-360, doi: 10.1016/0304-405X(76)90026-X.

Kormendi, R. and Lipe, R. (1987), "Earnings innovations, earnings persistence, and stock returns", *The Journal of Business*, Vol. 60 No. 3, pp. 323-345, doi: 10.1086/296400.

Kothari, S.P. (2001), "Capital markets research in accounting", *Journal of Accounting and Economics*, Vol. 31 Nos 1-3, pp. 105-231, doi: 10.1016/S0165-4101(01)00030-1.

Ohlson, J.A. (1995), "Earnings, book values, and dividends in equity valuation", *Contemporary Accounting Research*, Vol. 11 No. 2, pp. 661-687, doi: 10.1111/j.1911-3846.1995.tb00461.x.

Petersen, M.A. (2009), "Estimating standard errors in finance panel data sets: comparing approaches", *The Review of Financial Studies*, Vol. 22 No. 1, pp. 435-480, doi: 10.1093/rfs/hhn053.

Richardson, S.A., Sloan, R.G., Soliman, M.T. and Tuna, I. (2005), "Accrual reliability, earnings persistence and stock prices", *Journal of Accounting and Economics*, Vol. 39 No. 3, pp. 437-485, doi: 10.1016/j.jacceco.2005.04.005.

Ross, S.A. (1977), "The determination of financial structure: the incentive-signalling approach", *The Bell Journal of Economics*, Vol. 8 No. 1, pp. 23-40, doi: 10.2307/3003485.

Spence, M. (1973), "Job market signaling", *The Quarterly Journal of Economics*, Vol. 87 No. 3, pp. 355-374, doi: 10.2307/1882010.

Suits, D.B. (1957), "Use of dummy variables in regression equations", *Journal of the American Statistical Association*, Vol. 52 No. 280, pp. 548-551, doi: 10.1080/01621459.1957.10501412.

Zacharias, J.A., Noegroho, Y.A.K., Prabowo, R. and Atahau, A.D.R. (2025), "Value relevance of negative earnings disaggregation: evidence from Indonesia", *Asian Journal of Accounting Research*, Vol. 10 No. 4, pp. 353-370, doi: 10.1108/AJAR-05-2024-0186.

This open-access article is distributed under a
Creative Commons Attribution (CC-BY-NC) 4.0 license