International Journal of Innovative Finance and Economics Research 7(4):74-93, Oct.-Dec., 2019
© SEAHI PUBLICATIONS, 2019 www.seahipaj.org ISSN: 2360-896X

Determinants of Accounting Earnings Surprises in South Africa

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ABSTRACT
The study was carried out to investigate the determinants of accounting earnings surprises in South Africa. A total of two hundred (200) firm-year data obtained from twenty (20) quoted companies for the period of Ten years (2008 – 2017) were used for the study. Descriptive statistics and correlation matrix was employed alongside the panel regression to investigate these determinants. The variables used for the study include Earning Surprises (ERNSP) as dependent variable while independent variables include Firm Reputation (FRMREP), Earnings Management (ERNMAG), Sales Growth (SALSGT), Cash Flow (CSHFL), and Firm Size (FSIZE). The results indicate that all the variables studied have no significant effect on earnings surprises of industrial firms in South Africa. Firm reputation and earnings management were found to have insignificant positive influences while sales growth, cash flow and firm size were found to have insignificant negative influences on earnings surprises. It was recommended that: investors in South Africa may not bother themselves about the variables tested in this study as none of them have significant effect on the earnings surprises of industrial companies in their country. Our study contributes to the earnings surprises literature by extending the study of earnings surprise determinants to South African industrial companies; modifying existing models and updating literature.
Keywords: Earnings surprises, Firm Reputation, Earnings Management, Sales Growth, operating cash flow and firm size

INTRODUCTION
Earning is an important indicator of a firm's financial well being. It is little wonder then that financial analysts go a long way to provide estimates of earnings (Schipper 1991). Analysts' earnings forecasts help to promote stock market efficiency as they are used by investors in evaluating firm performance, forming earnings expectations and setting stock prices (Brown1993; Degeorge, Patel & Zeckhauser 1999; Clement & Tse, 2003). A study in Japan by Covrig and Low (2005) indicate that investors place a great deal of emphasis on the forecasts made by analysts as the basis of their stock related decisions. So, the accuracy of the analyst's forecasts is of great importance to the companies and general public.
Earnings surprises occur when actual earnings differ from expected earnings. Earnings surprises both positive and negative have drawn the attention of accounting and finance scholars because they are abnormal situations that distorts the smooth and efficient functioning of markets (Pfarrer, Pallock & Rindova 2010; Tan, Libby & Hunton, 2002). Large earnings surprises, whether positive or negative, can have adverse effects on investors' perception of a firm and tend to engage them in active sense making and reevaluation of such a firm (Ajinkya & Gift, 1984; Skinner, 1994; Jin, 2006; Williams, 1996).

Accordingly, managers strive to facilitate and improve their firms' valuations by avoiding earnings surprises and meeting analysts' consensus estimates (Degeorge, Patel & Zeckhauser, 1999). Thus, meeting analysts' earnings expectations either exactly or within a few cents is the norm.

However, earnings surprises do occur. The determinants of earnings surprises may be macroeconomic (boom, depression, inflation etc.), analyst specific (analysts experience, skills, or behaviors), or firm-specific - firm size, reputation, industry etc. (Ernstberger Kroter & Stadler, 2008). Among the firm-specific factors that can influence earnings surprises are: firm reputation, earnings management, sales growth, cash flow and firm size, which are the variables of our study.

Prior studies carried out on accounting earnings surprises have examined different aspects of the determinants of accounting earnings surprises. Baea, Stulzb and Tanc (2008), Myring and Wrege (2009) and Athavale, Myring and Groober (2013) focused on analyst-specific factors of earnings surprises. Chopra (1998), Hope and Kang (2005), Black and Carnes (2008), Daske, Hail, Leuz andVerdi, (2008) Byard, Li and Yu, (2011), Tarca and Wee (2012) and Horton, Serafeim and Serafeim (2013) on their part examined the macroeconomic factors of accounting earnings surprises. Also Hutira (2016), Abraham and Harrington, (2016); Baumeister, (2017) addressed the firm-specific aspect of the problem.

From the forgoing, it is clear that virtually all the studies on this subject were done in advanced economies like the U.K, the U.S. and some Asian countries. No work to the best of our knowledge has been done on the determinants of accounting earnings surprise of industrial firms in South Africa. This is the gap this study filled.

The objective of this study is to investigate the factors that determine earnings surprises (analysts' forecast errors) in Nigeria. The study sought to find and answers to the following research questions: To what extent does firm reputation affect the earnings surprises of industrial firms in Nigeria? To what extent does earnings management affect the earnings surprises of industrial firms in Nigeria? What is the degree of the influence of sales growth on the earnings surprises of industrial firms in Nigeria? To what level does operating cash flow affect the earnings surprises of industrial firms in Nigeria? And to what extent does firm size influence the earnings surprises of industrial firms in Nigeria?

The results of this study will be of benefit to the following categories of people in the following ways: Knowledge of the factors that drive earnings surprises in South Africa will reduce the uncertainties in the investment climate, thereby making it easier for Investors to decide on which stock to invest in. Managers will be helped to identify the activities that drive positive earnings surprises concentrate on them. Increased literature on the subject will provide researchers with more materials for analysis and further research on this area of knowledge.

We investigated the firm-specific factors of earnings surprises (firm reputation, earnings management, sales growth, cash flow and firm size while focusing on the industrial sector of South African economy for ten years (2008 to 2017).

Review of Related Literature

2.1 Conceptual Framework

2.3.1 Firm Reputation and Earnings Surprises

Prior researchers differ on the effect of firm reputation on earnings surprises of firms. Lys and Soo, (1995) expected that firms more frequently cited in newspapers and journals are to be associated with more accurate analysts' forecasts. This is explained by the assumption that corporate visibility leads to more available public information for the analysts, which in turn should lead to more accurate forecasts.

Similarly, Personne and Pääjärvi (2013) expected firms that are more frequently cited in newspapers and journals to be associated with more accurate analysts' forecasts as is explained by Lys and Soo's (1995). They however found that more corporate visibility leads to a higher forecast error -suggesting that the more visible a firm is in the news, the harder it will be to make an accurate forecast for that company. Seen from another perspective, this result suggests that companies that are not frequently mentioned in the news will be easier to forecast. A possible explanation to this may be that these companies are more stable, and therefore have no scandals to be reported in the news.

According to Fombrun, (1996), reputations are built through consistent behaviors that produce valued outcomes, and high-reputation firms are likely to possess underlying capabilities that generate consistent and predictable patterns of behavior and performance. They also have incentives to exert additional effort to maintain predictability and reliability, as these attributes are central to maintaining high levels of reputation.

Pfarrer, Pollock And Rindova (2010) posit that both the underlying capabilities and incentives of high-reputation firms are less likely to lead them to announce higher earnings surprises than firms that do not possess this asset. They find that firms that have accumulated high levels of reputation ("high-reputation" firms) are less likely to announce positive surprises than firms without this asset.

Pfarrer, (2007) documents that an increase in financial reputation decreases the likelihood of the firm engaging in positive and negative earnings surprises, especially material surprises. On the other hand, analysts are also expected to have greater difficulty in accurately forecasting earnings for high growth firms (Huttom, Lee and Shu, 2012; Barth, Kasnik and McNochols (2001).

2.3.2 Earnings Management and Earnings Surprises

The effect of earnings management on forecast accuracy is well documented in extant literature. Burgstahler and Dichev (1997) provide evidences that earnings are managed upward to meet or slightly beat analyst forecasts. Dechow and Skinner (2000) find that discretionary accruals are greater in zero earnings surprises than for non-zero surprise. Phillips, Pincus and Rego (2003) and Ayers, Jiang, and Yeung (2006) find evidences consistent with an association between discretionary accruals and meeting or beating analyst forecasts. WANG (2016) submits that managers have strong incentives to manage earnings upwards to meet the analysts' expectations to implement their stock-related objective/compensations and that given several incentive for earnings, managers will spare no effort to seize opportunities to engage in earnings management to meet analysts' forecast. Hence, higher discretional accruals are consistently discovered in firms meeting or just beating analysts' forecasts than firms just missing analysts' forecasts.

Prior studies show that managers always manage earnings to beat analysts' forecast through several ways such as changing to accounting choice that will produce earnings. Appreciation accounting choice always generates more earnings. Additionally, firms can beat analysts forecast through accrual accounting method. Ayers, Jiang, and Yeung (2006) document evidences that support an association between discretionary accruals and meeting or beating analyst forecasts as they provide proofs that firms have strong incentives to increase discretionary accruals in order to make earning upwards.

Also, managers use downward management of forecast to meet analysts' forecast. Bartov, Givoly and Hayn (2002), and Matsumoto (2002) document evidence of firms managing analysts' forecasts to realize positive earnings surprise. Using a measure of expected earnings based on previous earnings change and prior returns, she finds a greater frequency of firms with less than this expectation that meet the consensus forecasts than for firms that do not. Burgstahler, Luzi and Luez (2006) also present evidence for downward forecast management to meet analysts' forecast.

Prior studies identify three methods firms generally employ to achieve earnings targets: accrual management, expectation management, and real earnings management. The results of several studies carried out to investigate the association between accrual management and the disproportionate number of reported earnings surprises equal to a few cents per share or less are mixed. While some studies like Payne and Robb, (2000); Matsumuto, (2002); Ayers, Jiang and Yeung (2006) find that accrual management is associated with meeting or beating analysts' earnings forecasts, others like Schwartz, (2004); and Phillips, Pincus and Rego (2003) fail to find such relationship.

Graham, Harvey and Rajgopal (2005) report that real activities management is the preferred method of earnings management among managers as it suffers less regulatory scrutiny and is harder to be challenged by auditors. Also, the post-SOX period witnessed a shift from accrual management to real earnings management (Cohen, Dey and Lys (2008) which is coincidental to the spike of cash flows forecast. Several studies indicate that cash flows forecast limit the opportunity sets for managers to manipulate accruals (Call, 2009; and McInnis and Collins, 2011).

When firms' ability to manage earnings through accruals is curtailed they are likely to move to other mechanisms to meet earnings benchmarks. Roychowdhury (2006) finds that firms manipulate real activities, such as reducing discretionary expenditures, increasing production levels, or offering excessive discounts to generate higher earnings. Earlier researchers opine that firms turn to these real activities management techniques for earnings management when the costs of managing earnings through accruals increases (Cohen, Dey and Lys, 2008; Cohen and Zarowin, 2008).

Other thresholds investigated in the literature involve avoiding losses and earnings declines – see Burgstahler and Dichev (1997) for example. As cash flow forecasts constrain accrual management, it becomes reasonable for firms to turn to these options of benchmark beating mechanisms in the face of cash flow forecasts. McInnis and Collins (2009) posit that the incidence of real activities management and expectations management will increase in the presence of cash flow forecasts.

Roychowdhury (2006) documents evidence that firms manipulate real activities to avoid reporting losses. He defines real activities management as departures from normal operational practices, motivated by managers' desires to mislead at least some stakeholders into believing that certain financial reporting goals have been met in the normal course of operations. These departures do not necessarily contribute to firm value even though they do enable managers to meet reporting goals. Unlike accrual manipulation, real activities management is executed during the fiscal year as it would be too late to manipulate real activities at year-end if the realized year-end earnings fall out of the threshold.

Degeorge, Patel and Zeckhauser (1999) provide evidence showing that companies voluntarily manage their earnings with the aim of meeting or exceeding three earnings targets: zero earnings, last period's earnings, and analysts' earnings forecasts. This paper focuses on earnings management designed to achieve the last earnings threshold within the framework of the sub-Sahara African market. Applying Burgstahler and Dichev's (1997) methodology type to the annual data corresponding to the period from 1997 to 2004, Amar and Abaoub (2010), document that Tunisian companies managed earnings to avoid losses and earnings decreases rather than to avoid negative earnings surprises.

2.3.3. Sales Growth and Earnings Surprises

In normal situations, sales and earnings are directly related, with earnings following the trend of sales. Under such condition, it is easy for analysts to predict earnings. However, when there are fluctuations in sales growth, it becomes difficult for analysts to forecast earnings correctly – leading to earnings surprises. Hecht and Voulteenaho (2003), Lettau and Ludvigson (2004) provide direct evidence that aggregate earnings outcome or surprise correlates with growth and movement in sales. Conversely, Voulteenaho (2002) documents that returns are unrelated to post sales history, suggesting that earnings neither under reacts nor overreacts to aggregate increase in revenue due to sales growth news.

The introduction of innovative and anticipated products in Research and Development (R & D) intensive companies brings about accelerated sales growth which may not be sustained in the following periods as the novelty of the products wanes. Such firms suffer from earnings volatility which in turn promotes earnings surprises (Abraham and Harrington, 2016).

Higgins (2008) asserts that when there is unanticipated sales declines, analysts may not be able to assess the impact of fixed costs which may not drop to off-set the variability in sales growth. Hence firms with high fixed costs are inherently more difficult to forecast when sales fluctuate – leading to large forecast errors.

Kothari et al (2005) noted that sales declines in particular are less predictable than sales increases because many firms withhold news of bad performance. As such, it is more difficult for analysts to produce accurate forecast of sales decline firms.

According to Mintzberg and Waters (1982), analysts may respond to unrealized or emergent sales opportunities by revising their original earnings forecasts, but in the event that such revisions fail to capture all the elements of either unrealized or emergent sales opportunities, actual earnings deviates from analysts forecasts in the form of positive or negative earnings surprises.

2.3.4 Cash flow and Earnings Surprises

The influence of cash flow on earnings surprises is very sparse in literature. Li and Zhang (2014) assert that Because of managers' incentives to meet cash flows forecasts, the addition of such forecast may alter managerial behaviors. Mcinnis and Collins (2011) provide empirical evidence that cash flows forecast improves the quality of reported accruals and reduces the likelihood of earnings surprises. This is in line with the idea that cash flow forecasts are driven by concerns over earnings quality. In addition, cash flow forecasts also convey information about future cash flows. Call (2009) documents that managers are disciplined by analysts' cash flows forecast as it creates incentives for them to report more informative cash flows data, arguing that current cash flows become more predictive of future cash flows among firms with cash flows forecast, and that investors place more weight on the cash component of earnings. Pae and Yoon, (2012) in their recent study report that cash flows forecast are not naïve extensions of earnings forecasts. Moreover, Brown and Pinello (2011) indicate that firms who meet both earnings and cash flows forecasts have significantly higher abnormal stock returns around earnings announcement dates, compared to firms who meet only earnings forecasts but miss cash flows forecast. Additionally, they document that firms who miss earnings forecasts but meet cash flows forecast experience significantly higher abnormal stock returns than firms that miss both forecasts. Their findings suggest that investors value cash flows forecast. Conversely, Givoly, Hayn and Lehavy (2009) did a contrast of the accuracy of analysts' cash flow and earnings forecasts and report that cash flows forecast is less accurate and improves at a slower rate compared to earnings forecasts.

Call, Chen and Tong (2008) examine the relative accuracy of analysts' earnings forecasts when they are issued with cash flow forecasts. In line with their priori expectation they find that analysts' earnings forecast that are accompanied by cash flow forecasts are more accurate than those unaccompanied by cash flow forecasts. Call (2008) asserts that cash flow forecasts, serve an important monitoring role over firms' reported cash flow information, and improves its predictive ability. In line with his assertion Call reported greater ability of reported cash flows to predict future cash flows for firms whose analysts issue cash flow forecasts and improvements when analysts begin forecasting cash flows. Call also reports that the abnormal operating cash flows of firms are significantly lower in the years immediately following the initiation of analysts' cash flow forecasts. Wasley and Wu (2006) provide evidence that cash flow forecasts act to limit opportunistic earnings management, predicting that when management issues cash flow forecasts, they commit in advance to a certain cash flows/ accruals relationship, thereby decreasing the degrees of freedom in earnings management. In line with this prediction, their empirical results show that managers who engage in upward earnings management by manipulating discretionary accruals are less likely to issue a management cash flow forecast as doing so would draw attention to the upward manipulation in earnings.

So far, extant literature concentrates on the effect of cash flows forecast on earnings surprises. However this study focuses on exploring how firms' cash flow position influence analysts' earnings forecast errors.

2.3.5 Firm Size and Earnings Surprise

Firm size according to Brown (1998) is a well-documented determinant of forecast accuracy, with larger firms generally having more accurate forecasts. It is expected that larger firms should provide additional disclosure than smaller firms, which should in turn lead to a decrease in forecast errors. Conversely, larger firms may also have more complex activities which may decrease forecast accuracy (Brown et al., 2009). Ionascu (2011) documents that larger Romanian listed companies and those that are better governed tend to have more accurate forecasts - confirming the international trends. He explored the analysts' forecast accuracy for companies listed on Bucharest Stock Exchange (BSE) Romania. Based on a sample of 266 firm-month observations (predictions made in 2008 for 2009 and 2010), the paper investigates several firm specific factors documented by the literature to have a significant impact on forecast accuracy, and shows that for Romanian listed companies, forecast errors for earnings per share reported under local GAAP are negatively correlated with the size of the firm and the corporate governance policies. Personne and Pääjärvi, (2013) find that the forecast accuracy is better when the amount of analysts following a firm is high, the firm size is larger, the forecasted company's

corporate visibility in the news is more frequent, and the predictability of earnings is higher. The trading volume does not have a significant effect on analysts' forecast accuracy.

Hutira (2016) argues that "The principal rationale explaining this relationship is that larger firms generally have a large analyst following, which contributes to more extensive coverage and aggregate information gathering". Other potential explanations include greater scrutiny by market participants that pressure the company into better reporting, stable earnings and more comprehensive disclosure by the firm's managements. Extant literature indicates that firm size is related to the amount of public information that is available about the company. Larger companies are typically more scrutinized by the investment community, and thereby a greater amount of public information will be available. Firm size has also been found to be related to the number of analysts following a firm (Bhushan, 1989). Our a priory expectation is that a higher value of firm size will have a positive relationship with forecast precision, because more information will be available to the analysts, contributing to more precise forecasts. Firm size is measured as the natural logarithm of the company's average year-end market value, following the examples of Bhushan (1989) and Das et al (1998).

2.2 Theoretical Framework

The study relates to two theories – namely: the Signaling Theory and the Rational Expectation Theory (RET)

The Signaling Theory – which was propounded by Michael Spence in 1973, is built on the asymmetry of financial information – the assumption that information is not equally available to all parties at the same time - and the consequent sub-optimum investment policy. Signaling theory states that financial decisions made by corporate managers send signals to investors to counter the effect of information asymmetries. Such signals are the foundations of communications policy in finance. The theory proposes that markets respond to good and bad signals, as such signals which are signs of potential returns.

The Rational Expectations Theory (RET) - was first propounded by Muth (1961) as an explanation of the behavior of market participants. The theory states that market participants have rational expectations that are updated appropriately when new information becomes available (Givoly, 1985). It further states that although the individual expectations differ, the average future expectations of market participants are more accurate than economic models used for calculating the average. This implies that while the expectations of individual agent's may be wrong, the expectations of the market on average will be correct (Muth, 1961). What matters therefore, is not whether investors over- or under react to new information, since it is assumed that the weighted average of all participants' expectations will contribute to efficiency (Ritter, 2003).

This study is anchored on the Rational Expectation theory as it is consistent with the idea of analyst's consensus forecast which is a major factor in the determination of earnings surprises.

2.4 Empirical Review

Myring, and Wrege, (2009) examined time-series variations in the accuracy of analysts' earnings forecasts and analyst specific factors that might explain these variations. They document that analysts' annual earnings forecast error has decreased over the sample period (1984-2006). In addition, forecasts had become more timely and frequent and analysts tend to issue forecasts for more consecutive years before being replaced. They also find evidence that analysts issue forecasts for fewer companies per year and have a greater degree of industry-specific specialization. The results of their analysis suggest that changes in analyst-specific characteristics have enhanced analysts' ability to make accurate forecasts.

Pfarrer, Pollock and Rindova (2010) examine the effects of firm reputation and celebrity on earnings surprises and investors' reactions and document that firms with high levels of reputation ("high-reputation" firms) are less likely, while celebrity firms are more likely to announce positive earnings surprises. However, both high-reputation and celebrity firms attract greater market reactions for positive surprises and smaller reactions for negative surprises than other firms.

Amar and Abaoub (2010) focus on earnings management designed to achieve the earnings thresholds of zero earnings, last period's earnings, and analysts' earnings forecasts within the framework of the

Tunisian market. Their findings indicate that Tunisian companies managed earnings to prevent losses and decreases earnings instead of preventing negative earnings surprises.

Cheong, and Al Masum (2010), compared the financial analysts' forecast accuracy of pre- and post-Australian International Financial Reporting Standards (AIFRS) adoption and report that forecast accuracy improved post- AIFRS adoption. They also find evidence that analysts following may improve forecast accuracy by adding more firm-specific information to the market.

McInnis and Collins (2011) studied the Effect of Cash Flow Forecasts on Accrual Quality and Benchmark Beating and document that the joint provision of both earnings and operating cash flow increases the transparency and the expected costs of manipulating accruals used to manage earnings. As a result, firms' propensity to meet or beat earnings benchmarks through earnings manipulation will decline following the provision of cash flow forecasts. The overall effect is a decline in earnings surprises.

Molekian, Ahmadpour, Rahmani, and Dargaei, (2011) studied the "factors of earnings forecast accuracy of companies and document a negative relationship between forecast period, leverage and corporate governance and forecast error.

Ionascu (2011) investigated the properties of analysts' forecast accuracy for companies listed on Bucharest Stock Exchange (BSE) Romania. The results indicate the earnings surprises of Romanian listed companies, based on earnings per share, reported under local GAAP are inversely related with the size and corporate governance policies of the firms, suggesting that larger firms and those with better governance will more probably to provide additional disclosures, and thus reduce earnings surprises. Analysts forecast error was regressed on firm size, corporate governance, analysts following, IFRS adoption, forecast horizon and previous error.

Siegel, Lessard and Karim (2011) examined "Analyst forecast accuracy and firm growth", represented by business segment industry specialization and diversification. Forecast error was found to be negatively associated with business segment industry specialization, while Diversification (high growth firms) increases (decreases) forecast error. High growth, focused firms are associated with noncomplex portfolios and business segment industry specialization. In the simultaneous equation model used, Tobin's Q predicts analysts forecast accurately.

Athavale, Myring and Groeber (2013) examine changes in analyst forecast accuracy in the BRIC countries (Britain, Russia, India and Chine) within the period 1994-2009. They find that the level of forecast accuracy in BRIC countries is fairly high with some signs of improvement; that analysts in BRIC countries are making forecasts with greater frequency; some surprising disparities in capital market practices in BRIC countries, with higher levels of specialization and fewer companies followed - leading to lower forecast accuracy; that analysts tend to issue forecast for companies for longer periods of time (i.e., are more experienced in the companies for which they issue forecasts); that in BRIC countries, analyst forecast accuracy can be largely explained by forecast age. Forecast frequency and years of experience are not significant determinants of forecast accuracy. Interestingly, while there are country-specific differences in forecast age, forecast frequency, years of experience, number of companies followed and industry specialization, these differences had narrowed during the period of their study, i.e. there is some evidence of convergence.

Nima, Tamjidi, Hajiabad, and Aydenlu (2013) evaluated the relationship between analysts' forecast error and abnormal returns and systematic risk in Tehran Stock Market from 2006 to 2012 and document linear positive relationship between earnings forecast error and abnormal returns and no relationship between earnings forecast error and systematic risk.

Espahbodi, Esphabodi and Esphabodi (2015) examined the poser "did analysts forecast accuracy and dispersion improve in 2002, following the increase in regulation" and find that within the sample period (1993 – 2013) both magnitude and the dispersion of forecast errors have been steadily increasing.

Hutira (2016) examines the "Determinants of Analyst Forecasting Accuracy" with a particular focus on the industry of the firm being forecasted. The study provides evidence showing that forecast accuracy has been persistently declining over the sample period while forecast dispersion has been steadily growing. Moreover, it finds that there are significant differences in forecast accuracy by industry.

Chu, Dechow, Hui, and Wang (2016) examined "the valuation premium for a string of positive earnings surprises: the role of earnings manipulation (in US from 1985 to 2010). They document that earnings manipulation positively influences earnings string (consecutive positive earnings surprises) with related valuation.

Howe and Houston (2016) examined earnings management, earnings surprises and distressed firms (in USA, from 1989 – 2011). Using a total of 131,751 quarterly observations; the regression results indicate that investors are significantly less responsive to earnings surprises of distressed firms and that distressed firm's experience large-in-magnitude investor response to positive earnings surprises than negative earnings surprises. This means that investors' response to negative earnings surprises of non-distressed firms is significantly larger than that of positive earnings surprises.

Abraham and Harrington (2016) examined the predictors of the degree of positive earnings surprises and report that the number of analysts following significantly predict positive earnings surprises of less than 20%, 21-30%, 31-100% and greater than 100% regardless of business condition, while sales and industry type show similar results for weak business condition. Cash flow explained the positive earnings surprises in the 21-30% earnings surprises range for weak business condition, while industry type was significant in the less than 20%-100% earnings surprises category for strong business condition.

Baumeister (2017) investigated the influence of corporate social responsibility (CSR) reports quality on sell-side analyst forecast accuracy. A multiple-regression model shows a significant inverse relationship between CSR quality and forecast accuracy in both same fiscal year and one fiscal year ahead forecast horizons, for companies situated in Western Europe and North America. The probit regression model used indicate that the probability of overestimating earnings and thus making overly optimistic forecasts was greater in firms that issued better quality CSR reports for the one year ahead forecast horizons.

TaiebKchaou, Jarboui and Karamti (2017) examined "The Determinants of Forecast Error Made by Ceos: SBF 120 Evidence", to analyze the factors that may affect the reliability of the forecasts and the extent of their influence on the forecast error made by the leaders. The results of the study show that the diversity in the board improves the reliability of the forecasts as they found a positive and significant relationship between the leading woman and the forecast error. They also established a significant and positive impact of board size and duality on the forecast error. Also, the existence of a quality auditor had a positive and significant effect on the reduction of the forecast error.

Li and Shi (2017) applied t-tests and time-series regressions to examine the relationship between analyst characteristics (working experience, company experience, brokerage house size, and boldness in making recommendations) and earnings forecast errors. They document that while working experience of analysts and brokerage size have positive relationship with the analyst's forecast accuracy; boldness is negatively correlated with forecast accuracy.

Ledbetter, Luchs, Myring and Alst (2017) examined the causes of changes in the time-series accuracy of analyst forecasts in Japan for a period of 23 years (1988 – 2010). The results of the analyses suggest that changes in forecast accuracy have been primarily the result of regulatory changes and economic conditions. Analyst characteristics had no significant effect on forecast accuracy.

Areskoug and Karlén (2017) worked on the determinants of analysts' forecast accuracy among Swedish companies – considering among other things the effect of unequal gender representation of female analysts. They document that being a female analyst have a statistically significant positive effect on forecast accuracy. This implies that female analysts covering Swedish stocks seem to do better than their male colleagues. Moreover, firm complexity, industry complexity, brokerage house and analysts' experiences were found to have no significant effect on analysts' forecast accuracy

Oliveira and Girão (2018) in "Accuracy in Earnings Forecast and Organizational Life Cycle Stages: Evidences in the Brazilian Capital market", investigated the effect of the organizational lifecycle on the accuracy of analysts' forecasts in the Brazilian capital market, presupposing that the challenges for the financial analysts' projections can vary in the course of the companies' evolution. The results reveal that the analysts' earnings forecast accuracy is lower for companies in the birth and decline stages, despite controlling for several common factors in the literature on analysts' forecast errors. However, optimistic

or pessimistic forecast biases were less in decline than in non-mature stages, despite the previously mentioned controls.

From the forgoing, it is clear that virtually all the studies on this subject were done in advanced economies like the U.K, the U.S. and some Asian countries. Moreover, the variables used by prior researcher were tested as stand-alone variables, without any attempt to interact any two or more of them together to see their combined effect on earnings surprises. This is the gap this study seeks to fill.

3.0 RESEARCH METHODOLOGY

This section deals with the methodologies adopted for the study which include the research design, the population and samples for the study, sources of data collection, methods of data analysis and the model specification.

The study falls under the Ex-post Facto Research design. This is because panel data (i.e. time series and cross-sectional data) from annual reports of the sampled firms were used for the study. The population of the study comprises of all quoted industrial companies in South Africa for the period of 2008 to 2017. Total samples of twenty-seven (20) quoted companies who have consistently published their annual reports, were purposively selected for the study, based on availability of data. The study covered a period of ten years – making a total of 200 firm-year data. Secondary data used for the study were obtained from the annual reports of the sampled firms. Descriptive statistics and correlation matrix were employed alongside the panel regression to investigate the determinants of accounting earnings surprises in Nigerian industrial firms, using fixed and random effect regression result and Hussmann testing to determine the most suitable result to interpret. Added to the above, the variables for this study include Earning Surprises (ERNSP) as dependent variable while independent variables include Firm Reputation (FRMREP), Earnings Management (ERNMAG), Sales Growth (SALSGT), Operating Cash Flow (CSHFL), and Firm Size (FSIZE).

The descriptive statistics were used to test the normality (normality test) of the data and provide some useful insight into the nature of the data collected from the selected quoted firms studied. Also the correlation analysis (Correlation Matrix) served as a diagnostic test to Check for Multi-co-linearity Problem.

In other to examine the relationships between the dependent variable ERNSP and the independent variables (FRMREP, ERNMAG, SALSGT, CSHFL, and FSIZE) and to also test the formulated hypotheses given, the multiple panel (random effect) regression analysis were used, owing to the fact that the data had both time series (2008-2017) and cross sectional properties 20 quoted firms).

Following the model used by Abraham and Harrington (2016), (reproduced as follows:

Positive Earnings Surprise $= \lambda_0 + \lambda_1 Number\ of\ Analysts + \lambda_2 Instry\ Type_{it} + \lambda_3 Sales_{it} + \lambda_4 Cash\ Flow_{it} + \lambda_5 Market\ Capitalization_{it}$, two models were formulated as tools for testing our hypotheses - one stand alone model and one variables interaction model.

The stand alone model was of the form:

$$ERNSP_{it} = \lambda_0 + \lambda_1 FRMREP_{it} + \lambda_2 ERNMAG_{it} + \lambda_3 SALSGT_{it} + \lambda_4 CSHFL_{it} + \lambda_5 FSIZE_{it} + \mu_{it,}$$

Where, $ERNSP_{it}$ = Earnings Surprise of firm i for year t; $FRMREP_{it}$ = Firm Reputation of firm i for year t;

$ERNMAG_{it}$ = Earnings Management of firm i for year t; $SALSGT_{it}$ = Sales Growth of firm i for year t;

$CSHFL_{it}$ = Cash Flow from operation of firm i for year t; $FSIZE_{it}$ = Firm Size of firm i for year t.

The operationalization/measurement of Variables are summarized below

S/N	VARIABLES	DEFINITION/MEASUREMENT	CODE
1	Earnings Surprises	Standardized difference between actual earnings and expected earnings	*ERNSUP*
2	Firm reputation	Market to book value of equity – calculated as: Market value of common equity divided by book value of common equity at year-end.	*FRMREP*
3	Earnings management	Discretionary Accrual - defined as: Absolute residuals from the total accrual i.e. Discretionary Accrual (DA) = Total Accrual (TA) – (λ_0 + λ_1(1/ASSETS$_{i;t}$-1) + λ_2SALES$_{i;t}$+ λ_3PPE$_{i;t}$)	*ERNMAG*
4	Sales growth	[current year sales – previous year's sales)/ previous year's sales] x100	*SALSGT*
5	Operating cash flow	Cash flow from operations divided by current assets.	*CSHFL*
6	firm size	Log of total assets	*FSIZE*

4.0 PRESENTATION AND ANALYSIS OF DATA

4.1 Presentation of Data

The results of our data analysis are presented as follows:

Table .7: Descriptive Statistics of our Variables for Sampled Manufacturing Firms in South Africa

	ERNSP	FRMREP	ERNMAG	SALSGT	CSHF	FSIZE
Mean	-252.9109	2.021400	0.038000	11.46685	0.056100	13.36890
Median	5.110000	1.715000	0.000000	8.610000	0.060000	13.50000
Maximum	10238.51	7.850000	4.680000	155.0400	0.330000	16.04000
Minimum	-60400.00	0.060000	-0.280000	-90.04000	-0.600000	9.940000
Std. Dev.	4354.187	1.487418	0.346085	25.30335	0.090269	1.606307
Skewness	-13.20924	1.072440	12.18106	1.611308	-2.223376	-0.188644
Kurtosis	184.0630	3.986700	163.5275	11.15401	17.09024	2.073792
Jarque-Bera	279014.6	46.45076	219688.3	640.6091	1819.238	8.335060
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.015490
Sum	-50582.17	404.2800	7.600000	2293.370	11.22000	2673.780
Sum Sq. Dev.	3.77E+09	440.2700	23.83520	127411.6	1.621558	513.4642
Observations	200	200	200	200	200	200

Source: Researcher's computation (2018): Note: *1%; **5% Level of Significance.

From Table 6 above the mean (average), maximum values, minimum values, standard deviation and Jarque-Bera (JB) Statistics (normality test) were shown. The results expressed in Table 6 helps to provide some insight into the nature of the selected quoted firms in South Africa used in this study. First, it can be observed that on the average, in a 10-year period (2008-2017), the sampled firms in South Africa were characterized by negative Earnings surprise (ERNSP) value of -252.9109. This is an indication that most quoted firms in South Africa have a negative earnings surprise. Negative earnings surprise occurs in a situation when the actual earnings of a firm are less than the analysts' earnings forecasts in a given period. However, a positive mean value of 0.038000 was recorded for Earning Management (ERNMAG) with a standard deviation value of 0.346085. Showing that most of the quoted firms used for this study recorded positive earnings management during the period under study while the high standard deviation value is an indication that the sampled firms are well spread, not being dominated by either firms with large earnings or firms with small earnings during the period under study and this justifies the need for this study as we expect that firms with higher earnings management will determine earnings surprise of such firms. Also, the large difference between the minimum and maximum values of the total assets (FSIZE) showed that the sampled quoted firms in this study are not mainly dominated by either large or small firms and are widely dispersed. This is confirmed by the wide variations recorded in the standard deviation values of

the variables used. And this further justify the need for this study as we expect that firms with large total assets (FSIZE) will drive earnings surprises of quoted firms in South Africa positively than firms with low total assets value.

Furthermore, the Table 6 shows that on the average of ten years period, that the firms sampled are characterized by positive firm reputation (FRMREP) value of 2.021400. This shows that during the period under study, the firms' reputations that convey the economic reputation of the sampled firms were positively recorded. However, the wide variation between the maximum and minimum values of firm reputation (FRMREP) which stood at 7.850000 and 0.060000 respectively justifies the need for this study as we assume that those firms with higher reputation will have higher earnings surprise than those with smaller or negative firm reputation value.

Similarly, sales growth (SALSGT) value on the average stood at 11.46685. This shows that large number of our sampled firms recorded positive sales growth (SALSGT) value during the period under study. In other words, large number of the sampled firms was involved with activities that can result into steady growth rate of sales. Although, the maximum and minimum values of SALSGT shows a wide variation as it stood at 155.0400 and -90.04000 respectively. This wide variation also justifies the need for this study as we assume that firms with steady sales growth will drive earnings surprise more than firms with slow, low or fluctuating sales growth during the period under study.

Also, cash flow (CSHFL) shows a positive mean value of 0.056100. This means that most of our sampled firms were involved in activities that provide less operating cash flow, higher investing and financing activities. However, there is a high variation between the maximum value of CSHFL that stood at 0.330000 and minimum value that stood at -0.600000. This wide variation in CSHFL values among the sampled firms justifies the need for this study as we assume that firms with higher CSHFL value will have higher earnings surprise than those firms with low CSHFL values.

Lastly, in table 6, the Jarque-Bera (JB) which test for normality or the existence of outliers or extreme values among the variables shows that all the variables are distributed normally at the 1% level of significance, except Firm size (FSIZE) that shows normal distribution at 5% significant level. This implies the absence of any outlier in the data relating the variables that might have likely distorted our conclusions, which are therefore reliable for making generalization. This also implies that the least square, fixed and random panel regression estimations can be used to estimate the panel regression models.

4.2 Diagnostic Test to Check for Multi-co-linearity Problem, Using Correlation Matrix.

Multi co-linearity is a near perfect, a high correlation between any two (2) independent variables. It is a problem of cross-sectional data and our data have cross sectional characteristics as it cut across twenty (20) manufacturing firms in South Africa. When there is multi-co-linearity, all your t-values, F-statistics value becomes invalid and the R^2 of the regression result becomes unreliable. The study on trying to diagnose for the presence of multi-co-linearity in our data used, as well as evaluating the association among the variables adopted, employed the Pearson correlation coefficient (correlation matrix) analysis. The result obtained is presented in Table 7 (see appendix 6 for a detailed result).

Table 8: Pearson Correlation Matrix of Data Collected from South Africa Firms

	ERNSP	FRMREP	ERNMAG	SALSGT	CSHFL	FSIZE
ERNSP	**1.00**	**0.07**	**0.15**	**0.01**	**0.01**	**0.20**
FRMREP	**0.07**	**1.00**	**0.04**	**0.11**	**0.25**	**0.02**
ERNMAG	**0.11**	**0.04**	**1.00**	**0.44**	**0.67**	**0.11**
SALSGT	**0.01**	**0.11**	**0.44**	**1.00**	**0.20**	**0.20**
CSHFL	**0.01**	**0.25**	**0.67**	**0.20**	**1.00**	**0.09**
FSIZE	**0.10**	**0.02**	**0.11**	**0.10**	**0.09**	**1.00**

Source: Researcher's Computation (2018)

The use of correlation matrix in most regression analysis is to check for multi-co-linearity and to explore the association between each explanatory variable (FRMREP, ERNMAG, SALSGT, CSHFL, and FSIZE) and the dependent variable Earning surprises (ERNSP). Table 7 focused on the correlation between Earning surprise (ERNSP) proxy and the independent variables (FRMREP, ERNMAG, SALSGT, CSHFL, and FSIZE). The finding from the correlation matrix table shows that all our independent

variables, (FRMREP = 0.07; ERNMAG= 0.01; SALSGT=0.01, CSHFL=0.01, and FSIZE=0.10) were observed to be positively and weakly associated with Earnings surprises ERNSP. In checking for multi-co-linearity, we notice that no two explanatory variables were perfectly correlated. This means that there is no problem of multi-co-linearity between the explanatory variables. Multi-co-linearity usually results to wrong signs or implausible magnitudes in the estimated model coefficients obtained. There will also be bias in the standard errors of the coefficients.

4.3. Test of Hypotheses

The specified model is as follows:

$ERNSP_{it} = \lambda_0 + \lambda_1 FRMREP_{it} + \lambda_2 ERNMAG_{it} + \lambda_3 SALSGT_{it} + \lambda_4 CSHFL_{it} + \lambda_5 FSIZE_{it} + \mu_{it}$.

In other to examine the impact relationships between the dependent variable (ERNSP) and the independent variables (FRMREP, ERNMAG, SALSGT, CSHFL, and FSIZE) and to also test the formulated hypotheses given, the multiple panel (fixed and random effect) regression analysis was used in the study, owing to the fact that the data had both time series (2008-2017) and cross sectional properties (20 quoted manufacturing firms in South Africa). Fixed effect result is presented in table 8 while random effect is presented as table 9. Note that the decision as to which of either fixed or random effect result to interpret will be determined by Haussmann test. Haussmann test conducted for this study is presented as table 10.

Table 9: ERNSP Panel Fixed Effect Regression Result

Cross-sections included: 20
Total panel (balanced) observations: 200

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3862.806	12644.64	-0.305490	0.7604
FRMREP	-49.58649	361.8556	-0.137034	0.8912
ERNMAG	1108.858	1497.716	0.740366	0.4601
SALSGT	-10.00439	14.96817	-0.668378	0.5048
CSHF	4922.255	6203.426	0.793474	0.4286
FSIZE	262.2933	951.2164	0.275745	0.7831
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.102182	Mean dependent var		-252.9109
Adjusted R-squared	-0.020947	S.D. dependent var		4354.187
S.E. of regression	4399.554	Akaike info criterion		19.73286
Sum squared resid	3.39E+09	Schwarz criterion		20.14515
Log likelihood	-1948.286	Hannan-Quinn criter.		19.89971
F-statistic	0.829879	Durbin-Watson stat		2.254118
Prob(F-statistic)	0.695401			

Source: Researchers summary of results (2018) from E-view 9.0 statistical package.

Table 10: ERNSP Panel Random Effect Regression Result

Cross-sections included: 20
Total panel (balanced) observations: 200
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3090.034	2789.432	1.107765	0.2693
FRMREP	216.7466	221.4511	0.978756	0.3289
ERNMAG	146.5344	1372.192	0.106789	0.9151
SALSGT	-6.340146	13.94610	-0.454618	0.6499
CSHF	-805.3194	5012.237	-0.160671	0.8725
FSIZE	-274.4253	200.3490	-1.369737	0.1724

Effects Specification	S.D.	Rho
Cross-section random	0.000000	0.0000
Idiosyncratic random	4399.554	1.0000

Weighted Statistics			
R-squared	0.015387	Mean dependent var	-252.9109
Adjusted R-squared	-0.009989	S.D. dependent var	4354.187
S.E. of regression	4375.880	Sum squared resid	3.71E+09
F-statistic	0.606360	Durbin-Watson stat	2.045089
Prob(F-statistic)	0.695127		

Unweighted Statistics			
R-squared	0.015387	Mean dependent var	-252.9109
Sum squared resid	3.71E+09	Durbin-Watson stat	2.045089

Source: Researchers summary of results (2018) from E-view 9.0 statistical package.

The decision as to which of the tables 8 and 9 above will be interpreted was based on the outcome of the Hussmann test conducted and presented as table 10 below while a detailed result is presented as appendix 8.

Table 11: Hussmann Test Result.
Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	4.912162	5	0.4267

** WARNING: estimated cross-section random effects variance is zero.
Source: Researchers summary of results (2018) from E-view 9.0 statistical package.

The Haussmann test conducted shows a chi-Square Statistics value of 4.912162 with a Probability value of 0.4267. This probability value is not statistically significant since the P-value is more than 10%. The decision rule is that if the p-value is significant (i.e p-value < 10%), interpret fixed effect result, otherwise, use the random effect result and from our Haussmann result, our p-value is not significant. Therefore we interpreted Random effect result (table 9) for our analysis.

In table, 9, R-squared and its adjusted R-squared values were (0.02) and (-0.00) respectively. This is an indication that all the independent variables jointly explain about 2% of the systematic variations in Earnings surprise (ERNSP) of our sampled companies over the ten-year period (2008-2017) while 98% of the systematic variations are captured by the error term.

Test of Autocorrelation: Using Durbin Watson (DW) statistics which we obtained from our regression result in table 9, it is observed that DW statistic is 2.045089 which is approximately 2, agrees with the Durbin Watson rule of thumb. Showing that our data is free from autocorrelation problem and as such fit for the regression result to be interpreted and result relied on. Akika Info Criterion and Schwarz Criterion which are 19.73286 and 20.14515 respectively further strengthen the fitness of our regression result for reliability as they confirm the goodness of fit of the model specified. In addition to the above, the specific findings from each explanatory variable are provided as follows:

4.3.1 Test of Hypothesis One

Firm Reputation (FRMREP) and Earnings surprise (ERNSP), based on the t-value of 0.978756 and P-value of 0.33, in table 9 above, was found to have a positive influence on our sampled quoted companies' Earnings surprise (ERNSP). Although, this influence is not statistically significant as the p-value is more than 10% significance level. This result, therefore suggests that we should accept our null hypothesis one ($H0_1$) which states that Firm reputation (FRMREP) does not have significant effect on Earnings surprise (ERNSP) of quoted firm in South Africa. This means that in South Africa, firm reputation (FRMREP) as a determinant of earnings surprises has a positive insignificant effect on earnings surprise. In other words, firms with high firm reputation record higher earnings surprise than firms with less firm reputation. However, since this influence is not statistically significant, it should be ignored by management as it does to drive or determine earnings surprise of firms in South Africa.

4.3.2 Test of Hypothesis Two

Earning Management (ERNMAG) AND Earnings surprise (ERNSP), based on the t-value of 0.106789 and P-value of 0.92, in table 9 above, was found to have a positive influence on our sampled quoted companies Earning surprise (ERNSP). Although, this influence is not statistically significant as the p-value is more than 10% significance level. This result, therefore suggests that we should accept our null hypothesis two ($H0_2$) which states that earning management (ERNMAG) does not have significant relationship with earnings surprise (ERNSP) of quoted firm in South Africa. This means that in South Africa, earning management (ERNMAG) as a determinant of earnings surprises has positive insignificant effect on earnings surprise. In other words, firms with high earning management records higher earnings surprise than firms with less earning management. However, since this effect is not statistically significant, it should be ignored by management as it does not drive or determine earnings surprise of firms in South Africa.

4.3.3 Test of Hypothesis Three

Sales Growth (SALSGT) and Earnings surprise (ERNSP), based on the t-value of -0.454618 and p-value of 0.65, in table 9 above, was found to have a negative influence on our sampled quoted companies earnings surprise (ERNSP) and this influence is not statistically significant since its P-value is more than 10% significance level. This result, therefore suggests that we accept our null hypothesis three ($H0_3$) which states that sales growth does not significantly influence earnings surprise of firms in South Africa. This means that in South Africa, sales growth drives earnings surprise of a firm positively. However, since this effect is not statistically significant, it should be ignored by management as it does not drive or determine earnings surprise of firms in South Africa.

4.3.4 Test of Hypothesis Four

Cash flow (CSHFL) and Earnings surprise (ERNSP), based on the t-value of -0.1606171 and p-value of 0.87, in table 9 above, was found to have a negative influence on our sampled quoted companies

earnings surprise (ERNSP) and this influence is not statistically significant since its P-value is more than 10% significance level. This result, therefore suggests that we accept our null hypothesis four ($H0_4$) which states that cash flow does not significantly influence earnings surprise of firms in South Africa. This means that in South Africa, cash flows from investing, operating and financing activities do drives earnings surprise of a firm negatively. However, since this effect is not statistically significant, it should be ignored by management as it does not drive or determine earnings surprise of firms in South Africa.

4.3.5 Test of hypothesis five

Firm size (FSIZE) and Earnings surprise(ERNSP), based on the t-value of - 1.369737 and p-value of 0.17, in table 9 above, was found to have a negative influence on our sampled quoted companies earnings surprise(ERNSP) and this influence is not statistically significant since its P-value is more than 10% significance level. This result, therefore suggests that we accept our null hypothesis five ($H0_5$) which states that firm size does not have a significant influence earnings surprise of firms in South Africa. This means that in South Africa, firm size drives earnings surprise of a firm negatively. However, since this effect is not statistically significant, it should be ignored by management as it does not drive or determine earnings surprise of firms in South Africa.

4.4 DISCUSSION OF FINDINGS

Firm Reputation and Earning Surprises (FRMREP) from the results of the study was found to have an insignificant positive influence on earnings surprises of industrial firms in South Africa The implication of this result is that, firm reputation (built through consistent quality products, good customer care) can lead to increase in the earnings of industrial companies in South Africa which in turn leads to earnings surprises. This finding supports the result of a study done by Little, Coffee, Lirely and Little (2010) that established a high positive correlation between corporate reputation and market-to-book value of equity (our proxy for earnings surprise) but negates our findings of negative effect of FRMREP on ERNSP in Nigeria (Okoro and offor, 2019). However the result is statistically not significant- implying that firm reputation does not drive earnings surprises amongst industrial firms in South Africa.

Earnings Management and Earnings Surprise (ERNMAG) based on our findings, was found to an insignificant positive influence on the earnings surprises of industrial firms in South Africa. This result disagrees with the finding of a significant positive effect of earnings management on earnings surprises of firms in Nigeria (Okoro and Offor, 2019). Hoverer, the result negates the findings of Wang (2016) and Burgstahler (2006) of a negative influence of earnings management on earnings surprises.

Sales Growth and Earnings Surprise (SALSGT), based on our findings, was found to have a negative but insignificant influence on the earnings surprises of industrial firms in South Africa. The implication is that steady sales growth in South Africa makes for predictable earnings, which in turn reduces earnings surprises. The result both negates our aprori expectation as well as the findings of Mintzberg and Waters (1982) and Higgins (2008), but affirms the findings of Schwartz, (2004); and Phillips et al., (2003) who fail to establish any relationship between sales growth and earnings surprises.

Cash Flow and Earnings Surprise (CSHFL). Cash flow, based on our findings, was found to have a negative but insignificant influence on earnings surprises of industrial firms in South Africa A possible explanation to this is the fact that a strong cash flow tend to reduce fluctuations in earnings – thereby reducing earnings surprises. The results both negate our priory expectation as well as the findings of Call, Chen and tong (2008).

Firm Size and Earnings Surprise (FSIZE), based on our findings, was found to have a negative but insignificant influence on earnings surprises of industrial firms in South Africa. The implication of this result is that firm size does not drive earnings surprises of manufacturing firms in South Africa. This is similar to what is obtainable in Nigeria (Okoro and Offor, 2019). The South Africa results both negate our aprori expectation but agrees with the findings of Brown, (1998), Ionascu, (2011), Personne & Pääjärvi, (2013) and Hutira, 2016).

5.1 Summary of Findings

The findings of the study are as summarized below:

Firm Reputation (FRMREP) and Earnings Management (ERNMAG) were found to have insignificant positive influence on earnings, while **Sales Growth (SALSGT), Cash Flow (CSHFL and Firm Size (FSIZE)** were found to have insignificant negative influence on earnings surprises.

5.2 CONCLUSION

In this study, we investigated the determinants of accounting earnings surprises of industrial companies in South Africa for the period of 2008 to 2017. A sample of forty twenty (20) quoted companies who had consistently published their annual accounts was randomly selected for the study. Descriptive statistics and correlation matrix were employed alongside the panel regression to investigate these determinants. The variables used for this study include Earning Surprises (ERNSP) as dependent variable while independent variables include Firm Reputation (FRMREP), Earnings Management (ERNMAG), Sales Growth (SALSGT), Operating Cash Flow (CSHFL), and Firm Size (FSIZE). It was found that firm reputation and earnings management have insignificant positive influence on earnings surprises while sales growth, cash flow and firm size were found to have insignificant negative influence on earnings surprises of industrial firms in South Africa. This implies that none of the variables studied drive earnings surprises of industrial firms in South Africa.

5.3 RECOMMENDATIONS

From the foregoing, the following recommendations are made:

vi. South African investors should not bother about firm reputation as it has no significant effect on earnings reputation;

vii. Again South African investor need not concern themselves about earnings management as it has no significant effect on earnings surprises of industrial firms in South Africa.

viii. Once more investors in South Africa need worry about sales growth since it has no significant influence on earnings surprises in their country.

ix. Managers of South African industrial firms need not themselves bother about operating cash flow which has no significant effect on earnings surprises of industrial firms in their country.

x. Managers and investors of South African industrial firms should not bother themselves with the size of the firm as firm size does not drive earnings surprise industrial firms in Nigeria and South Africa.

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