International Journal of
Business and Economic Sciences Applied Research
IJBESAR
ijbesar.ihu.gr

Financial Reporting Material Misstatements, Earnings Conservatism and Managerial Replacement Decisions

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ARTICLE INFO

Article History

Received 25 September 2020;
Accepted 8 March 2021

JEL Classifications
K22, M41, M43, M49

Keywords:
Misstatement Disclosure, Financial Reporting Credibility, Earnings Conservatism, Manager Replacement

ABSTRACT

Purpose:
Based on signal theory and legitimacy theory, this paper examines whether firms with financial reporting misstatements (restatements) would prefer conservative financial reporting to send signals regarding their determinants of improving financial reporting credibility and legitimate organizational image in Taiwan. This paper further examines whether these firms reduce the demand for conservative financial reporting after replacing managers in the reveal of restatements.

Design/methodology/approach:
This paper adopts the ordinary least squares (OLS) regression models to estimate the hypotheses and uses different measures of earnings conservatism, such as the Basu's (1997) asymmetric timeliness of earnings measure based on a one-year period and the Basu's (1997) asymmetric timeliness of earnings measure based on a multi-year period.

Finding:
The results show that financial reporting behavior of restating firms would become more conservative in the reveal of restatements. However, when restating firms make replacement decisions for managers following restatements, they would demand less conservative financial reporting. This suggests that earnings conservatism and corporate governance may be substitutes in the context of restatements in Taiwan.

Research limitations/implications:
The findings have essential implications for Taiwanese security regulators and those who are debating the value of earnings conservatism for capital markets. When Taiwanese security regulators make regulations in relation to corporate governance and financial reporting, they must consider how to encourage firms to strengthen corporate governance and financial reporting credibility. Furthermore, to some extent, the findings of this paper support the efforts made by security regulators to enhance manager turnover disclosure transparency.

Originality/value:
By extending and advancing past research on restatements and earnings conservatism, this paper contributes to support that restating firms would enhance earnings conservatism following restatements in Taiwan. Moreover, this paper also contributes to support that earnings conservatism may be the substitute of governance mechanisms such as manager replacement in the context of restatements in Taiwan. Due to different institutional backgrounds and governance strength between Western countries and Asian countries, it's important to examine what post-restatement actions would be taken by Taiwanese firms and how they select optimal governance structure in the reveal of restatements. The findings of this paper facilitate to enhance the understanding of the relationship between restatements and earnings conservatism and how corporate governance affects the above relationship following restatements in Taiwan.

1. Introduction

Financial reporting scandals have drawn increased attention from market participants and regulators (i.e., Enron). The Enron scandal forces the passage of the Sarbanes-Oxley Act (SOX), which strengthens financial reporting accountability of top management and the oversight functions of the board and the board sub-committees. The SOX requires CEOs and CFOs to be named to certify the fairness of the presentation of financial statements (Kryzanowsk and Zhang, 2013; Chang and Choy, 2016; Zhao et al., 2017). Following the SOX, the past few years have seen more

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DOI: 10.25103/ijbesar.141.01

governance reforms all around the world. There is no exception to Taiwan. In order to provide good investor protection and to assure reliable financial disclosure, the Taiwanese government has continuously improved corporate governance practices by revising security-related regulations. Restatements show that there are misstatements in financial statements, which thus provide visible targets for blame. Prior literature has predominately supported the great adverse economic consequence of restatements, such as declined stock prices, increased bankruptcy probability, increased litigation costs and more difficulties in raising firm capital (Bardos and Mishra, 2014; Amel-Zadeh and Zhang, 2015; Ma et al., 2015). Restatements enhance investors' risk perceptions of financial reporting and represent a loss of organizational legitimacy, which send signals to financial statement users that financial reporting has low credibility and thus would mislead their decisions (Dao et al., 2014; Farhangdoust and Sayadi, 2020). Restatements destabilizes governance equilibrium of restating firms (Johnstone et al., 2011). Restating firms may be motivated to take actions to send signals about their determinants of improving governance practices and legitimate organizational image. A majority of studies have examined the real actions pertaining to governance reforms proceeded by restating firms in responding to restatements (Kryzanowski and Zhang, 2013; Xu and Zhao, 2016; Agrawal and Cooper, 2017), including the reduction of executive compensation (Cheng and Farber, 2008), the replacement of executives and auditors (Agrawal and Cooper, 2017) and the appointment of a successor CEO with specific qualities (Gomulya and Boeker, 2014; Xu and Zhao, 2016). However, the literature has paid less attention to what kinds of post-restatement actions that restating firms can take to directly improve financial reporting credibility, such as enhancing earnings conservatism[1] (Huang et al., 2009; Ettredge et al., 2012; Chen et al., 2014; Farhangdoust and Sayadi, 2020). As restatements are trust-destroying events for investors (Almer et al., 2008), it's important to investigate the issue.

Earnings conservatism refers to economic losses to be recognized more timely than economic gains (Ruch and Taylor, 2015; Zhong and Li, 2017). Adopting conservative financial reporting policies may be vital financial reporting strategy for restating firms to respond to the crisis of the loss of financial reporting credibility. Few studies investigate the relationship between restatements and earnings conservatism, particularly which mainly focus on American firms and adopt the Basu's (1997) single-period asymmetric timeliness measure (here refers to the traditional Basu measure) to examine earnings conservatism (Huang et al., 2009; Ettredge et al., 2012; Chen et al., 2014). There's necessary to provide more examination on the issue and turn attention to investigate firms in Asian countries such as Taiwan. Taiwanese regulators have continuously strengthened governance practices. However, compared to American firms, Taiwanese firms have weaker governance practices and provide weaker protection for shareholders (Yeh and Woidtke, 2005). In order to provide Taiwanese investors accurate financial reporting, in the mid-2007, the Taiwan Stock Exchange (TWSE) has established a specialized area for revised financial reporting on the Market Observation Post System website. Nowadays, Taiwanese investors can clearly distinguish misstated and corrected financial reporting of restating firms (TWSE, 2007).

Due to little evidence regarding the association between restatements and earnings conservatism and unique institutional environment and governance features in Taiwan, based on signal theory and legitimacy theory (Cho and Patten, 2007; Sanders and Boivie, 2004; Chakravarthy et al., 2014; Islam et al., 2020), this paper examines whether restating firms would take particular post-restatement actions to send signals regarding their determinants of improving financial reporting credibility and legitimate organizational image in Taiwan, such as adopting more conservative financial reporting policies. In major analysis, this paper adopts the Basu's (1997) measure estimated cumulatively over multiple years (here refers to the modified Basu measure) to mitigate the bias in the Basu's (1997) measure estimated based on a one-year period (Ahmed and Duellman, 2007; Lafond and Roychowdhury, 2008; LaFond and Watts, 2008). This paper also examines the hypotheses by adopting the Basu's (1997) single-period asymmetric timeliness measure and re-examines the hypotheses by replacing the dummy variable of manager replacement with the continuous variable of manager replacement frequency and using the Ball and Shivakumar's (2005) model with regressions based on cash flows and total accruals.

A plenty of studies have examined the association between corporate governance and earnings conservatism, which adopt composite governance measure (Lara et al., 2009) or common governance mechanisms such as the board of director characteristics (Beekes et al., 2004; Ahmed and Duellman, 2007; Lara et al., 2007; Chi et al., 2009) and managerial ownership (LaFond and Roychowdhury, 2008). These research investigates the countries with different institutional environment, different extent of investor protection (Bushman and Piotroski, 2006) and informational asymmetry (LaFond and Watts, 2008). Furthermore, these research also examines the issues related to family firms (Raithatha and Shaw, 2019) and business group affiliated firms (Chan and Hus, 2013; Yang et al., 2014). The divergent findings show that earnings conservatism and corporate governance are likely to be substitutes (LaFond and Watts, 2008; LaFond and Roychowdhury, 2008; Chi et al., 2009; Chan and Hsu, 2013)) or complements (Beekes et al., 2004; Bushman and Piotroski, 2006; Ahmed and Duellman, 2007; Lara et al., 2007; Xia and Zhu, 2009; Yang et al., 2014). However, past literature investigating the relationship between earnings conservatism and corporate governance rarely concerns on restatement-related issues (Ettredge et al., 2012). Ettredge et al. (2012) examine the impact of restatements on earnings conservatism for American firms and examine how particular governance mechanism--the change of outside directors affects the above relationship. They find that restating firms would enhance earnings conservatism and earnings conservatism is high in the firms improving governance following restatements. This suggests that earnings conservatism and governance mechanisms may be complements for American firms involving restatements. As top managers are the first to be blamed for the restatement events, a

[1] Earnings conservatism includes conditional conservatism and non-conditional earnings conservatism. Conditional conservatism is news-dependent earnings conservatism whereas non-conditional earnings conservatism is news-independent earnings conservatism (Ahmed and Henry, 2012). In this paper, earnings conservatism adopts conditional conservatism.

DOI: 10.25103/ijbesar.141.01

plenty of studies have examined the effect of restatements on manager turnover. It is suggested that manager replacement is a common disciplinary action in response to restatements (Burks, 2010; Land, 2010; Wang et al., 2013; Dao et al., 2014) and is a vital outcome of governance quality in a firm in the literature (Aivazian et al., 2005).

Ahmed and Henry (2012) indicate that firms may select an optimal governance structure according to their unique governance environment. Unlike American firms with stronger governance practices and better investor protection, Taiwanese firms feature weaker governance practices and worse protection for minority shareholders (Yeh and Woidtke, 2005). Due to Taiwan's institutional backgrounds and unique governance features, it is unlikely for Taiwanese firms with restatements to adopt multiple actions to alleviate the negative impact of restatements. Thus, in the setting of Taiwan, when restating firms make manage replacement decisions following restatements, they may demand less earnings conservatism. In this regard, it is reasonably expected that earnings conservatism and corporate governance are more likely to be substitutes rather than complements in the context of restatements in Taiwan. Based on the above, this paper further examines if restating firms make manager replacement decisions following restatements, whether their financial reporting will become less conservative. The findings of this paper show that Taiwanese firms would adopt more conservative financial reporting policies in the reveal of restatements whereas the above relation becomes weaker when managers are replaced.

The remainder of this paper is as follows. Section 2 presents the literature review and hypothesis development. Section 3 provides the research methodology. Section 4 presents the results. Finally, conclusions, contributions, research limitations and future research directions are reported in Section 5.

2. Literature Review

With the rise of many financial reporting scandals, restatement issues have been increasingly received concern. Restatements represent that financial reporting has misstatements and is corrected late (Hasnan et al., 2020). Restatements bring negative economic consequences such as the increase the incidence of shareholder lawsuits and more difficulties in raising capital (Bardos and Mishra, 2014; Amel-Zadeh and Zhang, 2015; Ma et al., 2015). Given that restatements constitute a more direct breach of investors' trust (Almer et al., 2008), restating firms have incentive to improve financial reporting credibility. Modern business operations are built on all kinds of contracting relationship such as debt contracts. Contracting explanation is generally used to explain how earnings conservatism assists firms in alleviating agency problems such as reducing information asymmetry or litigation costs. Earnings conservatism facilitates efficient contracting between mangers and shareholders in the existence of agency problems and can effectively reduce market uncertainly, information asymmetry (Ahmed and Duellman, 2007; Lafond and Roychowdhury, 2008; LaFond and Watts, 2008), information risk (Kravet and Shevlin, 2010), bankruptcy risk (Biddle et al., 2020), financial reporting credibility (Francis et al., 2004) and litigation risk (Watts, 2003a, b; Ruch and Taylor, 2015). Moreover, earnings conservatism is an efficient financial reporting mechanism in the absence of contracting, which constrains managers' opportunistic behavior and thus can assure reliable financial disclosure (Watt, 2003a, b; Ahmed and Duellman, 2007; Lafond and Roychowdhury, 2008; LaFond and Watts, 2008; Zhong and Li, 2017; Xia et al., 2019).

In order to recover investors' confidence in financial reporting, restating firms may change financial reporting policies in the reveal of restatements. For example, Wiedman and Hendricks (2013) document that accrual quality improves following restatements (both earnings and non-earnings error restatements). Furthermore, firms' aggressive financial reporting policies often leads to accounting scandals such as restatements (Almer et al., 2008). Hence, restatement events have underscored the value of conservative financial reporting (Krishnan and Visvanathan, 2008; Ettredge et al., 2012). Adopting conservative earnings recognition methods should be a direct way for restating firms to restore the loss of investors' confidence in the capital markets. Signal theory and legitimacy theory illustrate why firms encountering troubles would send positive signals to the market and take decisive actions to defend their legitimacy. Signal theory depicts why firms in an uncertain market would convey the information about the quality of activities which are credible to individuals (Sanders and Boivie, 2004; Bergh et al., 2014). Legitimacy theory asserts that firms will do whatever they regard as necessary to preserve the image of legitimate businesses with legitimate aims and methods of achieving it (Cho and Patten, 2007; Islam et al., 2020). According to signal theory and legitimacy theory (Cho and Patten, 2007; Sanders and Boivie, 2004; Chakravarthy et al., 2014; Islam et al., 2020), restating firms would view post-restatement actions (i.e., enhancing earnings conservatism) as positive signals to stakeholders and as legitimizing tools against legitimacy loss to re-gain firm reputational capital often lost at the revelation of restatements.

Past literature only provides limited understanding of the relationship between restatements and earnings conservatism (Huang et al., 2009; Ettredge et al., 2012; Chen et al., 2014; Farhangdoust and Sayadi, 2020). For example, Huang et al. (2009) examine the change of earnings conservatism following restatements after SOX for American firms. They find that earnings conservatism slightly increases in the post-restatement period after the SOX enactment in 2002. Ettredge et al. (2012) examine the linkage of earnings conservatism to overstated earnings in and after the restatement period for American firms. Their results show that restating firms have lower conservatism level in financial reporting in the restatement period whereas the conservatism increases after the restatement period. Farhangdoust and Sayadi (2020) examine the association between restatements and earnings conservatism for companies listed on the Tehran Stock Exchange. Their findings indicate that restating firms have higher conservatism during the years of restatements. The above studies suggest that financial reporting is an essential way for firms to communicate with the users of financial statements. Particularly, conservative financial reporting may be

DOI: 10.25103/ijbesar.141.01

an important financial reporting strategy for restating firms as the response to restatements. Drawing from signal theory and legitimacy theory (Cho and Patten, 2007; Sanders and Boivie, 2004; Chakravarthy et al., 2014; Islam et al., 2020), restating firms would have incentive to adopt conservative financial reporting policies following restatements to send messages about their efforts of enhancing financial reporting credibility and legitimate the organizational image. Based on the above, this paper proposes H1:

H1: Compared to non-restating firms, in the reveal of restatements, restating firms tend to adopt conservative financial reporting strategy.

As managers in restating firms agreed financial misstatements, punishing these managers and appointing new managers with particular expertise following restatements can help alleviate the negative perceptions of investors (Collins et al., 2008; Wang et al., 2013). Past research has provided the evidence regarding the punishments for managers involving in restatements, including the replacement of managers and auditors (Chakravarthy et al., 2014; Dao et al., 2014; Rich and Zhang, 2016; Agrawal and Cooper, 2017) and the reduction of executive compensation (Cheng and Farber, 2008; Collins et al., 2008; Wang et al., 2013) and improved actions such as the appointment of a successor CEO with specific qualities (Gomulya and Boeker, 2014; Xu and Zhao, 2016). Compared to compensation reduction, the loss of jobs must be more severe punishment for managers. Nowadays, Taiwanese firms are required to disclose manage turnover information in time on the Market Observation Post System website of the TWSE. This shows that manager turnover information is significantly relevant to financial statement users' decision-making. As mentioned earlier, restating firms may adopt conservative financial reporting strategy as the response to restatements. Previous studies document that the level of earnings conservatism mainly depends on governance strength. There are inconsistent findings in the relationship between earnings conservatism and corporate governance. On the one hand, prior evidence shows that earnings conservatism and corporate governance are complements, suggesting that firms with strong governance mechanisms prefer to adopt conservative financial reporting policies (Beekes et al., 2004; Bushman and Piotroski, 2006; Ahmed and Duellman, 2007; Lara et al., 2007; Xia and Zhu, 2009; Yang et al., 2014). For example, Beekes et al. (2004) examine how earnings timeliness and conservatism are related to the composition of the board of directors. Their findings show that there is positive relationship between the percentage of outside directors and earnings conservatism, suggesting that firms with more outside directors tend to rapidly recognize bad news in earnings. Ahmed and Duellman (2007) investigate the association between the characteristics of the board of directors and earnings conservatism. They find that more inside directors harm earnings conservatism whereas more outside directors enhances earnings conservatism. Lara et al. (2007) examine the linkage of the board characteristics and earnings conservatism. Their findings show that when the influence of the CEO on the board of directors in a firm is low, the firm would have high earnings conservatism. Yang et al. (2014) investigate the linkage between business group firms and earnings quality such as earnings conservatism. Their evidence shows that compared to non-group firms, group firms have more informational asymmetry problems and thus report less conservative earnings.

On the other hand, prior evidence also shows that earnings conservatism and corporate governance are substitutes, suggesting that firms with weak governance mechanisms demand more earnings conservatism (LaFond and Watts, 2008; LaFond and Roychowdhury, 2008; Chi et al., 2009; Chan and Hsu, 2013). For example, LaFond and Watts (2008) examine how information asymmetry between firm insiders and shareholders is related to earnings conservatism. Their results show that information asymmetry reduces with the increase of earnings conservatism because conservative earnings deters managers to manipulate earnings. LaFond and Roychowdhury (2008) examine the relationship between managerial ownership and earnings conservatism. They document that managerial ownership is negatively associated with earnings conservatism, showing that earnings conservatism can deter agency problems between managers and shareholders. Chi et al. (2009) examine the association between earnings conservatism and corporate governance. Their results show that firms with CEO duality report more conservative earnings whereas those with more institutional shareholding report less conservative earnings. Ettredge et al. (2012) investigate whether resting firms increase earnings conservatism following overstated earnings. Their findings indicate that the earnings conservatism increases following restatements and the extent of the increase following restatements are contingent on the extent of governance improvement such as the increase of the percentage of outside directors.

Restating firms can take different post-restatement actions to convey messages regarding their efforts of enhancing financial reporting credibility and legitimate organizational image. Firms may choose optimal governance structure based on their unique governance environment (Ahmed and Henry, 2012). Manager replacement is also a possible post-restatement action and is one of major governance mechanisms (Aivazian et al., 2005). The survey of Dianto and Aswar (2020) shows several factors such as top management support is vital to improve financial reporting with implementation of accrual accounting. This suggests that new managers may implement accrual-based accounting with considering earnings conservatism in the future. Taiwanese firms feature weak protection for minority shareholders (Yeh and Woidtke, 2005). Hence, if Taiwanese firms experience restatements, it is less likely for them to adopt multiple actions following restatements to send signals regarding their determinants of improving financial reporting credibility and legitimate organizational image. When restating firms choose to replace managers to respond to restatements, they would demand less conservative earnings recognition methods. According to the above, this paper proposes H2.

DOI: 10.25103/ijbesar.141.01

H2: In the reveal of restatements, restating firms replacing firm executives would reduce the demand for conservative financial reporting.

3. Data, Methodology and Empirical Results

This paper examines a sample of publicly traded companies listed on the TWSE and Over-The-Counter (OTC) that announced restatements during 1995-2005, excluding the financial and insurance industry due to their unique security regulations. In Taiwan, firms are required to disclose manager turnover information in time in the Market Observation Post System website of the TWSE. This paper follows previous literature to collect data for manager turnover (Desai et al., 2006; Arthaud-Day et al., 2006). Data for manager turnover was constructed from the Market Observation Post System website of the TWSE, using variations of the word "replace". Control variables were also collected from the Taiwan Economic Journal (TEJ) database.

3.1 Sample Descriptions

The restatement sample was obtained from the TEJ database, including quarterly or annual restatements. Initially, this paper obtained a sample of 1,359 firm-year observations. Observations not meeting the following criteria were dropped: (1) missing and incomplete data on the TEJ database (226 observations), (2) restatements for technical reasons[2] (852 observations), (3) multiple restatements during the aggregation period[3] (170 observations) and bankruptcy (55 observations). Finally, the restating firms total fifty-six. Further, this paper selects a control firm for each sample firm based on the following criterions (Agrawal and Chadhad, 2005; Desai et al., 2006): (1) each pair of firms are in the same industry, (2) a control firm has similar firm size in terms of log of total market capitalization to the matched restating firm at the beginning of the restatement announcement year, and (3) a control firm does not announce any restatement in two years before and after the restatement year announced by its matched restating firm. The final sample used to the test hypotheses includes one hundred and twelfth firms. The sample size is similar to other studies on earnings quality (Dechow, 1995) and manager turnover (Duggal and Cudd, 1993).

3.2 Research Models

This paper adopts ordinary least squares (OLS) regression models to estimate the hypotheses. Traditionally, earnings conservatism is measured based on Basu's (1997) single-period asymmetric timeliness of earnings measure. NI is earnings per share before extraordinary items and discontinued operations deflated by share price at the beginning of the period. R is the buy and hold return (measuring the timeliness of earnings with respect to positive returns or good news). DR is a dummy variable that equals 1 if R is less than 1 and 0 otherwise. The interaction term of R*DR measures the incremental timeliness of earnings with respect to negative returns or bad news. Basu's (1997) single-period asymmetric timeliness of earnings measure is shown as follows.

$$NI = \beta_0 + \beta_1 R + \beta_2 DR + \beta_3 R*DR + \varepsilon$$

The single-period Basu measure is dependent on the composition of equity at the beginning of the period and ignores conservatism effects prior to the estimation period. Therefore, several studies suggest that it is better to cumulatively estimate the asymmetric timeliness of earnings measure over several prior years to mitigate the bias in the Basu's (1997) single-period asymmetric timeliness of earnings measure (Ahmed and Duellman, 2007; Lafond and Roychowdhury, 2008; LaFond and Watts, 2008). The focus of this paper is to examine whether financial reporting behavior of restating firms becomes conservative in the reveal of restatements. Following the above literature, this paper uses the Basu's (1997) measure estimated cumulatively over multiple years (three years) to measure earnings conservatism. In the multi-year test, this paper measures earnings and returns cumulatively over the current and the following two fiscal years. The aggregation period includes the restatement announcement year and two years after the restatement announcement year.

Variables definitions are as follows. *NI* refers to cumulative net income before extraordinary income divided by market value of equity at the beginning of aggregation period. *R* refers to buy and hold return over the aggregation period. *DR* refers to a dummy variable equals 1 if R is less than 1 and 0 otherwise. *FR* refers to a dummy variable equals 1 if a firm restated earnings and 0 otherwise. *REPLACE* refers to a dummy variable equals 1 if there is any manager replacement over the aggregation period and 0 otherwise. *GROWTH* refers to the sales growth rate, defined as the average annual sales growth rate for two years prior to the end of the aggregation period. *ROA* refers to the return of assets, defined as operating income after depreciation scaled by average assets at the end of the aggregation period. *LEV* refers to the leverage ratio, defined as the ratio of total liabilities divided by total assets at the end of the aggregation period. *SIZE* refers to firm size, defined as the natural log of market capitalization at the end of the aggregation period. The model of this paper is as follows.

$$NI = \beta_0 + \beta_1 R + \beta_2 DR + \beta_3 R*DR + \beta_4 FR + \beta_5 FR*R + \beta_6 FR*DR + \beta_7 FR*R*DR$$

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[2] In consistent with most studies (Agrawal and Chadha, 2005; Aier et al., 2005), this paper excludes restatements prompted by mergers and acquisitions, discontinued operations, stock splits, accounting rule changes, and changes in accounting method.

[3] In order to provide a clean window to observe financial reporting behavior of restating firms in the reveal of restatements, this paper requires that each restating firm has only announced a restatement in the aggregation period.

DOI: 10.25103/ijbesar.141.01

$$+ \beta_8\, REPLACE + \beta_9\, REPLACE*R + \beta_{10} REPLACE*DR + \beta_{11} REPLACE*R*DR + \beta_{12} FR*REPLACE$$
$$+ \beta_{13}\, FR*REPLACE*R + \beta_{14} FR*REPLACE*R*DR + \beta_{15} GROWTH + \beta_{16} GROWTH*R$$
$$+ \beta_{17}\, GROWTH*DR + \beta_{18}\, GROWTH*R*DR + \beta_{19}\, LEV + \beta_{20}\, LEV*R$$
$$+ \beta_{21}\, LEV*DR + \beta_{22}\, LEV*R*DR + \beta_{23}\, ROA + \beta_{24}\, ROA*R + \beta_{25}\, ROA*DR$$
$$+ \beta_{26} ROA*R*DR + \beta_{27} SIZE + \beta_{28} SIZE*R + \beta_{29} SIZE*DR + \beta_{30} SIZE*R*DR + \varepsilon$$

NI = cumulative net income before extraordinary income divided by market value of equity at the beginning of the aggregation period;

R = buy and hold return over the aggregation period;

DR = a dummy variable equals 1 if *R* is less than 1 and 0 otherwise;

FR = a dummy variable equals 1 if a firm announced restated earnings and 0 otherwise;

REPLACE = a dummy variable equals 1 if there is any manager replacement over the aggregation period and 0 otherwise;

GROWTH = The sales growth rate, defined as the average annual sales growth rate for two years prior to the end of the aggregation period;

ROA = The return of assets, defined as operating income after depreciation scaled by average assets at the end of the aggregation period;

LEV = The leverage ratio, defined as the ratio of total liabilities divided by total assets at the end of the aggregation period;

SIZE = Firm size, defined as the natural log of market capitalization at the end of the aggregation period.

This paper adds *FR* with *R*, *DR* and the interaction term of *R**DR* to examine H1. H1 predicts that restating firms will enhance earnings conservatism as the response to restatements, representing that they may tend to incorporate bad news into earnings on a timely basis. This should lead to a statistically significant negative coefficient on *FR**R* and a statistically significant positive coefficient on *FR**R**DR*. *R**DR* captures the sensitivity to bad news for firms where *FR* equals zero, while *FR**R**DR* captures the marginal effect for firms where *FR* equals one. Manager replacement (*REPLACE*) is a dummy variable equals 1 if there is any replacement of firm executives over the aggregation period and 0 otherwise. *REPLACE* is interacted with *R*, *DR* and *R**DR*. Due to the uncertain relationship between manager replacement and earnings conservatism, this paper does not expect that manager replacement has any particular relationship with the asymmetric timeliness of earnings measure. Manager replacement is an essential indicator to measure firm risk. When manager replacement is bad news, restating firms would choose to adopt conservative financial reporting strategy as the post-restatement action. Conversely, when manager replacement is good news, restating firms would demand less earnings conservatism to respond to restatements. The interaction term of *FR**REPLACE**R**DR* is used to test H2. H2 proposes that restating firms replacing managers in the reveal of restatements would be less motivated to adopt conservative earnings recognition methods. This suggests that the coefficient on *FR**REPLACE**R* will be positive and the coefficient on *FR**REPLACE**R* *DR* will be negative.

In consistent with prior literature (Ahmed and Duellman, 2007; Lafond and Roychowdhury, 2008), this paper controls for several variables in the model: the sales growth rate (*GROWTH*), the leverage ratio (*LEV*), *ROA* and firm size (*SIZE*) to incorporate the effect of sales growth, the leverage, ROA and firm size on the association among restatements, manager replacement and earnings conservatism. All control variables in the regression model are also interacted with *R*, *DR* and *R**DR*. Firms with high sales growth are likely to adopt aggressive financial reporting (Palmrose et al., 2004), suggesting that *GROWTH* will result in a lower asymmetric timeliness coefficient. Moreover, firms with high leverage face more shareholder and bond-holder conflicts and thus have high demand for conservative financial reporting (Ahmed and Duellman, 2007; Lafond and Roychowdhury, 2008). High-performing firms and large firms have high political costs and face high public concern. They would tend to enhance earnings conservatism. According to the above, this paper expects that these variables (*LEV*, *ROA* and *SIZE*) will result in high asymmetric timeliness coefficients.

4. Empirical Results

4.1 Descriptive Statistics and Regression Analysis

Descriptive statistics of the variables on the modified Basu measure (*NI*, *R* and *DR*) for restating firms are depicted as follows. The mean (median) value of net income before extraordinary income divided by the beginning market value of equity (*NI*) is -0.708 (0.136). The average of buy and hold return (*R*) is 0.231 (the median is -0.305) and the average of *DR* is 0.643 (the median is 1.000). This paper also examines the correlation of the modified Basu measure with *FR*. The results show that *FR* is significantly negatively related to *NI* ($p<0.1$) and significantly positively

DOI: 10.25103/ijbesar.141.01

related to *DR* ($p<0.1$). *NI* is significantly negatively correlated with *DR* ($p<0.1$), showing that reported earnings reflect at least a portion of the information reflected in returns. The inter-correlation among these independent variables used in the model is lower than 0.7, indicating that there exists no serious multicollinearity problems. Table 1 presents detailed industry distribution of the sample. Most observations derive from the electronics industry (36%), reported in Table 1. Table 2 presents restatement reasons. The result shows that securities-related (30.36%) is the most common restatement reason, which is followed by other restatement reasons such as revenue recognition (17.86%) and cost of goods sales or operating expense (16.07%).

Table 1: Industry Classification of the 112 Firms

Industry	Number of Firms	Percentage (%) of Total Sample
Cement	4	4%
Food	4	4%
Plastic	4	4%
Textiles	12	12%
Electric and machinery	4	4%
Electrical appliance and cable	4	4%
Chemical and Bio	2	2%
Glass and ceramics	4	4%
Steel and iron	2	2%
Fiber	2	2%
Automobile	2	2%
Electronics	36	36%
Construction	8	8%
Transportation	8	8%
Tourism	2	2%
Department stores	6	6%
Others	8	8%
Total	112	100%

Table 2: Restatement Reasons

Reasons	Numbers	Frequency（%）
Revenue recognition	10	17.86
Cost of goods sales or operating expense	9	16.07
In-process R&D	2	3.57
Net income adjustments	2	3.57
Restructuring, assets and inventory	7	12.50
Securities-related	17	30.36
Related-party transactions	4	7.14
Unspecified	5	8.93
Total	56	100

Table 3 reports empirical results. In Table 3, model 1 is the restricted model and model 2 is the full, unrestricted model in which this paper enters main effects, interaction terms and control variables to ensure a rigorous test of the hypothesized effects. As expected with H1, the results from model 1 and model 2 both indicate that there is greater timeliness of earnings with respect to bad news for restating firms in the reveal of restatements ($p < 0.1$), suggesting that restating firms adopt conservative financial reporting following restatements. Besides, in consistent with H2, the results from model 2 point out that good news ($p < 0.1$) for restating firms replacing managers in the reveal of restatements will be reflected in earnings over a number of periods and accounting is less timely than for bad news ($p < 0.05$), showing that restating firms replacing managers would reduce the demand for earnings conservatism.

DOI: 10.25103/ijbesar.141.01

As expected, this paper does not find that *REPLACE* has any particular relationship with the asymmetric timeliness of earnings. In addition, control variables are generally significant in the hypothesized directions in the models. The results from model 1 and model 2 show that firms with high sales growth tend to delay recognition of bad news in earnings ($p < 0.1$) whereas those with high leverage tend to delay recognition of good news in earnings. The results from model 1 indicate that firms with high *ROA* prefer to recognize good news less timely ($p < 0.1$). Unexpectedly, the results from model 1 and model 2 show that big size firms would delay recognition of bad news in earnings ($p < 0.05$). The t-values reported in Table 3 are adjusted according to White's heteroskedasticity-consistent standard errors.

This paper also adopts the traditional Basu measure to examine the hypotheses, reported in Table 4. Prior studies assert that the Basu's (1997) single-period measure omits conservatism effects prior to the estimation period (Ahmed and Duellman, 2007; Lafond and Roychowdhury, 2008; LaFond and Watts, 2008). As expected, the results adopting the Basu's (1997) one-year measure (reported in Table 4) show that there is low statistical significance of the hypotheses. Moreover, the results are not very consistent with those adopting the modified Basu measure based on a multi-year period (reported in Table 3). In consistent with the assertions of past literature (Ahmed and Duellman, 2007; Lafond and Roychowdhury, 2008; LaFond and Watts, 2008), the results support that the modified Basu model estimated cumulatively over long horizons can mitigate the bias in the traditional Basu measure and thus is better to explain the hypotheses. As those reported in Table 3, the t-values reported in Table 4 are also adjusted according to White's heteroskedasticity-consistent standard errors.

Table 3: Restatements, Earnings Conservatism and Manager Replacement - -the Modified Basu Measure (Dependable Variable-- *NI*)

Variables	Sign	Mode 1		Model 2	
		Coefficient	t value	Coefficient	t value
Intercept	?	0.498	1.023	0.618	1.247
R	+	-0.109	-0.759	-0.246	-1.244
DR	?	3.704	1.539	3.181	1.615
*R*DR*	+	1.019	1.883**	8.956	2.051**
FR	?	-0.038	-0.904	-0.051	-0.911
*FR*R*	-	-0.007	-0.420	-0.011	-0.402
*FR*DR*	?	1.780	1.141	2.788	1.227
*FR*R*DR*	+	4.280	1.365*	6.328	1.450*
REPLACE	?			-0.001	-0.007
*REPLACE *R*	?			-0.025	-0.640
*REPLACE *DR*	?			0.135	0.062
*REPLACE *R*DR*	?			-0.789	-0.178
FR REPLACE*	?			0.074	0.754
FR REPLACE *R*	+			0.003	0.063
FR REPLACE*DR*	?			-7.166	-1.857*
FR REPLACE *R*DR*	-			-1.482	-1.968**
GROWTH	?	0.000	-0.169	0.000	-0.311
*GROWTH*R*	+	0.000	-1.239	0.000	-0.456
*GROWTH*DR*	?	-0.088	-1.435	-0.100	-1.582
*GROWTH*R*DR*	-	-0.162	-1.377*	-0.179	-1.444*
LEV	?	0.135	0.527	0.103	0.380
*LEV*R*	-	-0.018	-0.168	0.031	0.221
*LEV*DR*	?	1.548	1.264	1.679	1.540
*LEV*R*DR*	+	4.453	1.603*	4.894	1.926**
ROA	?	0.010	3.726***	0.011	3.306***
*ROA*R*	-	-0.001	-1.398*	-0.001	-0.482
*ROA*DR*	?	0.264	1.015	0.137	0.650
*ROA*R*DR*	+	0.577	1.093	0.359	0.896
SIZE	?	-0.062	-0.774	-0.076	-0.941
*SIZE*R*	-	0.018	0.722	0.033	1.208

DOI: 10.25103/ijbesar.141.01

*SIZE*DR*	?	-6.285	-1.550	-5.542	-1.650
*SIZE*R*DR*	+	-1.743	-1.871**	-15.752	-2.079**
Adjusted R2		0.468		0.536	

Note: p-value in parentheses. ***significant at the 0.01 level, **significant at the 0.05 level, and *significant at the 0.10 level. The number of the sample firms is 112. The t-values are adjusted according to White's heteroskedasticity-consistent standard errors.

Table 4: Restatements, Earnings Conservatism and Manager Replacement – the Traditional Basu Measure (Dependable Variable-- *NI*)

Variables	Sign	Mode 1		Model 2	
		Coefficient	t value	Coefficient	t value
Intercept		-5.014	-1.350	-4.801	-1.305
R	+	-0.502	-2.143**	-0.179	-0.473
DR	?	1.453	0.740	1.156	0.550
*R*DR*	+	4.219	1.029	3.820	0.917
FR	?	-0.399	-1.109	-0.304	-0.937
*FR*R*	-	2.459	1.073	1.807	0.823
*FR*DR*	?	3.137	1.067	2.907	0.954
*FR*R*DR*	+	-5.502	-1.248	-5.185	-1.188
REPLACE	?			0.346	0.715
*REPLACE *R*	?			-0.156	-0.287
*REPLACE *DR*	?			-0.236	-0.480
*REPLACE *R*DR*	?			-0.427	-0.688
FR REPLACE*	?			0.174	0.283
*FR*REPLACE *R*	+			-0.592	-0.741
FR REPLACE *DR*	?			0.269	0.368
*FR*REPLACE *R*DR*	-			2.708	1.661*
GROWTH	?	0.004	1.017	0.003	0.686
*GROWTH*R*	+	-0.003	-1.074	-0.002	-0.638
*GROWTH*DR*	?	-0.002	-0.372	0.000	0.067
*GROWTH*R*DR*	-	0.012	1.306*	0.015	1.403*
LEV	?	-5.152	-1.444	-5.641	-1.410
*LEV*R*	-	4.571	1.442*	4.538	1.333*
*LEV*DR*	?	4.362	1.195	4.508	1.117
*LEV*R*DR*	+	-5.725	-1.757**	-6.504	-1.787**
ROA	?	-0.014	-0.722	-0.023	-0.952
*ROA*R*	-	2.984	1.290	2.937	1.195
*ROA*DR*	?	2.749	1.139	4.237	1.441*
*ROA*R*DR*	+	-5.116	-1.728**	-2.207	-0.562
SIZE	?	1.026	1.403*	1.009	1.373
*SIZE*R*	-	-0.534	-1.202	-0.468	-1.011
*SIZE*DR*	?	-0.887	-1.127	-0.832	-1.035
*SIZE*R*DR*	+	0.510	2.179**	0.507	2.141**
Adjusted R2		0.289		0.253	

Note: ***significant at the 0.01 level, **significant at the 0.05 level, and *significant at the 0.10 level. The number of the sample firms is 112. The t-values are adjusted according to White's heteroskedasticity-consistent standard errors.

4.2 Robustness Tests

This paper further tests the robustness of the results for H1 and H2. First, this paper replaces the dummy variable of manager replacement reported in Table 3 with the continuous variable of manager replacement frequency (*REPLACES*) (reported in Table 5) to re-examine the hypotheses. The results in Table 5 are generally consistent

DOI: 10.25103/ijbesar.141.01

with those in Table 3 (the major analysis). In Table 5, the coefficients on *FR*R*DR* in model 1 and model 2 are significantly positive (p<0.1) and the coefficient on *FR*R* in model 2 is significantly negative (p<0.05), revealing that restating firms recognize bad news in earnings more timely whereas delay recognition of good news in earnings. Hence, H1 receives further support. Furthermore, model 2 shows that the coefficient on *REPLACES*FR*R* is significantly positive (p<0.05), which further supports H2. Restating firms would reduce the demand for earnings conservatism when replacing managers in the reveal of restatements. The t-values reported in Table 5 are also adjusted according to White's heteroskedasticity-consistent standard errors. Second, this paper adopts the model of Ball and Shivakumar (2005). Ball and Shivakumar (2005) assert that their measure is more efficient to calculate earnings conservatism than the traditional Basu measure based on a one-year period and can reduce the risk of drawing incorrect inferences due to market inefficiencies. Hence, this paper also follows the model of Ball and Shivakumar (2005) to measure earnings conservatism with adopting regressions based on total accruals and cash flow, which is reported as follows.

$$ACCR = \beta_0 + \beta_1 CF + \beta_2 DCF + \beta_3 CF*DCF + \varepsilon$$

ACCR = total accruals (defined as income before extraordinary items minus cash flow from operations) scaled by average total assets;

CF = cash flows from operations divided by average total assets;

DCF = a dummy variable equals 1 in the case of negative *CF* and 0 otherwise.

This paper augments the model of Ball and Shivakumar (2005) by interacting independent variables with *FR* and *REPLACE*. *FR* and *REPLACE* are defined as the above mentioned. As prior literature (Lara et al., 2009), control variables adopted in the traditional Basu model are ignored in the model of Ball and Shivakumar (2005). The augmented model of Ball and Shivakumar (2005) is shown in the following.

$$\begin{aligned} ACCR = {} & \beta_0 + \beta_1 CF + \beta_2\, DCF + \beta_3\, CF*DCF + \beta_4 FR + \beta_5\, FR*CF + \beta_6\, FR*DCF \\ & + \beta_7\, FR*CF*DCF + \beta_8\, REPLACE + \beta_9\, REPLACE*CF + \beta_{10}\, REPLACE*DCF \\ & + \beta_{11}\, REPLACE*CF*DCF + \beta_{12} FR*REPLACE + \beta_{13}\, FR*REPLACE*CF \\ & + \beta_{14}\, FR*REPLACE*DCF + \beta_{15}\, FR*REPLACE*CF*DCF \end{aligned}$$

Table 5: Robustness Tests -Restatements, Earnings Conservatism and Manager Replacement –the Modified Basu Measure (Dependable Variable-- *NI*)

Variables	Sign	Model 1	
		Coefficient	**t value**
Intercept		0.453	0.780
R	+	-0.246	-1.046
DR	?	0.396	1.548
*R*DR*	+	1.068	1.860**
FR	?	0.046	1.006
*FR*R*	-	-0.042	-2.244**
*FR*DR*	?	4.587	1.521
*FR*R*DR*	+	8.138	1.495*
REPLACES	?	0.084	1.492
*REPLACES*R*	?	-0.029	-1.231
*REPLACES*DR*	?	2.415	1.121
*REPLACES*R*DR*	?	4.008	1.002
*FR*REPLACES*	?	-0.146	-2.232**
*FR*REPLACES*R*	+	0.069	2.000**
*FR*REPLACES*DR*	?	-3.522	-1.079
*FR*REPLACES*R*DR*	-	-4.927	-0.766
GROWTH	?	0.000	0.102
*GROWTH*R*	+	-0.001	-1.332*

DOI: 10.25103/ijbesar.141.01

*GROWTH*DR*	?	-0.086	-1.362
*GROWTH*R*DR*	-	-0.159	-1.301*
LEV	?	0.116	0.422
*LEV*R*	-	0.035	0.314
*LEV*DR*	?	1.452	1.146
*LEV*R*DR*	+	4.287	1.484*
ROA	?	0.010	3.242***
*ROA*R*	-	0.000	-0.045
*ROA*DR*	?	0.253	0.937
*ROA*R*DR*	+	0.557	1.005
SIZE	?	-0.058	-0.609
*SIZE*R*	-	0.032	0.929
*SIZE*DR*	?	-6.860	-1.570
*SIZE*R*DR*	+	-1.848	-1.862**
Adjusted R2		0.422	

Note: ***significant at the 0.01 level, **significant at the 0.05 level, and *significant at the 0.10 level. The number of the sample firms is 112. The t-values are adjusted according to White's heteroskedasticity-consistent standard errors.

The results in Table 6 are similar to those in Table 3 and Table 5. In Table 6, model 2 shows that the coefficient of the interaction term for *FR*CF*DCF* is significantly positive ($p < 0.05$). Consistent with H1, restating firms tend to adopt conservative financial reporting as the response to restatements. Model 2 further shows that the coefficient of the interaction term for *FR*REPLACES*CF*DCF* is significantly negative ($p < 0.05$). H2 receives further support. Restating firm replacing managers would adopt less earnings conservatism in the reveal of restatements. The t-values reported in Table 6 are adjusted according to White's heteroskedasticity-consistent standard errors.

Table 6: Robustness Tests -- Restatements, Earnings Conservatism and Manager Replacement (Dependent Variable-- *ACCR*)

Variables	Sign	Mode 1		Model 2	
		Coefficient	t value	Coefficient	t value
Intercept	?	-0.028	-1.212	-0.023	-0.830
CF	-	-1.429	-3.793***	-1.891	-4.028***
DCF	?	-0.072	-1.539	-0.089	-1.618
*CF*DCF*	+	1.386	11.594***	1.424	10.665***
FR	-	-0.016	-0.558	-0.002	-0.066
*FR*CF*	-	0.086	0.333	0.061	0.188
*FR*DCF*	+	0.073	1.369	0.079	1.262
*FR*CF*DCF*	+	0.517	1.143	1.031	1.840**
REPLACE	-			-0.017	-0.363
*REPLACE*CF*	?			-0.122	-0.793
*REPLACE*DCF*	+			0.032	0.297
*REPLACE*CF*DCF*	?			0.805	1.231
*FR*REPLACE*	-			-0.058	-0.957
*FR*REPLACE*CF*	+			0.197	0.450
*FR*REPLACE*DCF*	+			-0.018	-0.159
*FR*REPLACE*CF*DCF*	-			-1.375	-1.770**
Adjusted R2		0.604		0.600	

Note: ***significant at the 0.01 level, **significant at the 0.05 level, and *significant at the 0.10 level. The number of the sample firms is 112. The number of the sample firms is 112. The t-values are adjusted according to White's heteroskedasticity-consistent standard errors.

5. Conclusion

Many outbreaks of financial reporting scandals lead to an increasing interest in firms' financial reporting quality (Chang and Choy, 2016; Zhao et al., 2017). These events violate investors' expectations about credible financial reporting (Wans, 2020). Earnings misstatements (restatements) bring about significant economic negative consequence (Bardos and Mishra, 2014; Amel-Zadeh and Zhang, 2015; Ma et al., 2015) and deteriorate investors' confidence in financial reporting credibility (Chen et al., 2014). Firms' aggressive financial reporting policies often result in restatements (Almer et al., 2008). Accordingly, in the reveal of restatements, in order to alleviate the negative perceptions of investors, restating firms may prefer conservative financial reporting policies. Earnings conservatism can produce earnings that reflect bad news faster than good news and assist firms in reducing information asymmetry, agency problems, market uncertainty (Watts, 2003a, b; Ahmed and Duellman, 2007; LaFond and Roychowdhury, 2008; Ruch and Taylor, 2015; Zhong and Li, 2017), bankruptcy risk (Biddle et al., 2020), information risk (Kravet and Shevlin, 2010) and litigation risk (Watts, 2003a, b; Ruch and Taylor, 2015) and improving financial reporting credibility (Francis et al., 2004).

Based on signal theory and legitimacy theory (Cho and Patten, 2007; Sanders and Boivie, 2004; Chakravarthy et al., 2014; Shan and Taylor, 2014; Islam et al., 2020), restating firms may enhance earnings conservatism to respond to restatements so that they can convey messages about their efforts of enhancing financial reporting credibility and restore the image of legitimate businesses. Past studies provide little examination into the relationship between restatements and earnings conservatism and most focuses on American firms. These findings show that adopting conservative financial reporting policies may be important strategy for restating firms to respond to restatements (Huang et al., 2009; Ettredge et al., 2012; Farhangdoust and Sayadi, 2020). It's necessary to enhance the understanding of the issue and extend the investigation to the setting of Asian countries such as Taiwan. Compared to American firms, Taiwanese firms have weaker governance practices and feature worse investor protection (Yeh and Woidtke, 2005). This raises the question whether financial reporting of Taiwanese firms involving in restatements would become conservative in the reveal of restatements.

A plenty of studies have examined the association between earnings conservatism and corporate governance. However, the findings are divergent. Some studies show that they are complements (Beekes et al., 2004; Bushman and Piotroski, 2006; Ahmed and Duellman, 2007; Lara et al., 2007; Xia and Zhu, 2009; Yang et al., 2014) whereas some studies show that they are substitutes (LaFond and Watts, 2008; LaFond and Roychowdhury, 2008; Chi et al., 2009; Chan and Hsu, 2013). Very few studies examine the association between earnings conservatism and corporate governance with discussing the restatement issues. Ettredge et al. (2012) provide some examination on the above association. Their results indicate that earnings conservatism and corporate governance (the changes of different types of outside director positions) are complements and the above relationship will be strengthened with governance improvement. However, they focus on American firms, do not examine the interaction effect and ignore to examine the changes of manager positions. Ahmed and Henry (2012) indicate that firms would consider their unique governance environment to select an optimal governance structure. Due to institutional environment and unique governance features in Taiwan (Yeh and Woidtke, 2005), if Taiwanese firms involving in restatements determine to adopt particular governance improvement as the post-restatement actions, they are likely to demand less earnings conservatisms. This suggests that earnings conservatism and corporate governance may be substitutes in the setting of Taiwan. Prior research documents that firm executives often lost their jobs when financial reporting scandals explode (Chakravarthy et al., 2014; Dao et al., 2014; Rich and Zhang, 2016), showing that manager turnover is a vital outcome of governance quality in a firm (Aivazian et al., 2005). Thus, this paper further examines if restating firms choose to replace managers in the reveal of restatements, whether they would reduce the demand for earnings conservatism in the setting of Taiwan. In line with prior literature (Huang et al., 2009; Ettredge et al., 2012; Farhangdoust and Sayadi, 2020), the results of this paper indicate that restating firms report their financial statements more conservatively following restatements, suggesting that enhancing earnings conservatism is a direct way for restating firms to send messages about their efforts of improving financial reporting credibility and legitimate organizational image. Moreover, the findings further indicate that restating firms with manager replacement would be less motivated to enhance earnings conservatism. The results support that earnings conservatism and corporate governance are substitutes (LaFond and Watts, 2008; LaFond and Roychowdhury, 2008; Chi et al., 2009; Chan and Hsu, 2013).

This paper contributes to the literature and the practice in three ways. First, prior research seldom examines the association between restatements and earnings conservatism and manly examines American firms (Huang et al., 2009; Ettredge et al., 2012; Chen et al., 2014; Farhangdoust and Sayadi, 2020). Drawing from signal theory and legitimacy theory (Cho and Patten, 2007; Sanders and Boivie, 2004; Chakravarthy et al., 2014; Islam et al., 2020), this paper extends the above examination to the context of restatements in the setting of Taiwan and thus facilitates the understanding of how earnings conservatism changes following restatements in Taiwan. In consistent with prior research (Huang et al., 2009; Ettredge et al., 2012; Chen et al., 2014; Farhangdoust and Sayadi, 2020), the results of this paper indicate that earnings conservatism can capture the actions taken by restating firms to convey messages about their efforts of improving financial reporting credibility and legitimate organizational image in the reveal of restatements. The impact of restatements and the degree of adopting earnings conservatism may be different between Western countries such as America and Asian countries such as Taiwan due to different institutional backgrounds and governance strength (Yeh and Woidtke, 2005; LaFond and Watts, 2008; Lin et al., 2014). Hence, the findings of this

DOI: 10.25103/ijbesar.141.01

paper have essential implications for Taiwanese security regulators and those who are debating the value of earnings conservatism for capital markets.

Second, although many studies have paid attention to examine the relationship between earnings conservatism and corporate governance (LaFond and Watts, 2008; LaFond and Roychowdhury, 2008; Chi et al., 2009; Chan and Hsu, 2013; Beekes et al., 2004; Bushman and Piotroski, 2006; Ahmed and Duellman, 2007; Lara et al., 2007; Xia and Zhu, 2009; Yang et al., 2014), these research has mixed findings and rarely investigates restatement-related issues. Ettredge et al. (2012) examine how corporate governance affects the change of earnings conservatism following restatements. However, they do not examine the interaction effect. They only focus on four types of changes in the positions of outside directors and ignore to examine the changes of the positions of firm executives. Moreover, they focus on American firms. Compared to American firms, Taiwanese firms have more informational asymmetry problems between managers and shareholders and provide weaker investor protection (Yeh abd Woidtke, 2005). By extending and advancing past research on restatements and earnings conservatism, this paper contributes to complement previous studies arguing whether earnings conservatism and corporate governance are complements (Beekes et al., 2004; Bushman and Piotroski, 2006; Ahmed and Duellman, 2007; Lara et al., 2007; Xia ad Zhu, 2009; Yang et al., 2014) or substitutes (LaFond and Watts, 2008; LaFond and Roychowdhury, 2008; Chi et al., 2009; Chan and Hsu, 2013). The results indicate that when restating firms choose to replace firm executives following restatements, they would reduce the demand for earnings conservatism.

This paper documents that earnings conservatism may be the substitute of governance mechanisms such as manager replacement in the context of restatements in Taiwan. When Taiwanese security regulators make regulations regarding governance practices and financial reporting policies, they must think how to encourage firms to strengthen governance mechanisms and financial reporting credibility. In Taiwan, manager turnover is regarded as a vital screening standard to review firm financial statements, which is required to be disclosed on the Market Observation Post System website of the TWSE . Since 2007, Taiwanese firms have to report the information about the turnover of firm executives in the annual reports and have to depict their turnover reasons . Therefore, to some extent, the findings of this paper support the efforts made by Taiwanese security regulators to strengthen manager turnover disclosure transparency. Third, several studies indicate that Basu's (1997) contemporaneous asymmetric timeliness of earnings measure leads to biased conclusions and suggest that it is better to cumulatively estimate the traditional Basu measure over multi-year intervals (Ahmed and Duellman, 2007; Lafond and Roychowdhury, 2008; LaFond and Watts, 2008). In line with prior research, the results of this paper show that the modified Basu measure estimated cumulatively over multiple years can yield more meaningful explanations and provide a more powerful test than the traditional Basu measure. There are also several limitations in this paper. First, due to the research focus, this paper only adopts particular measures to examine conditional earnings conservatism. Future research can examine conditional earnings conservatism via other measures and examine unconditional earnings conservatism to investigate restatement-related issues. Second, this paper focuses on Taiwan and uses manager replacement to measure corporate governance. Future research can investigate other countries with unique institutional environment and adopt other governance mechanisms such as board sub-committees as the moderating factors, such as the number of audit committee members to confirm whether earnings conservatism and other governance mechanisms are also substitutes rather than complements in the context of restatements in Taiwan. Besides, as restating firms have different restatement reasons, future research can further investigate whether the reasons of restatements can affect earnings conservatism.

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DOI: 10.25103/ijbesar.141.01