

Literature review of earnings management: Who, why, when, how and what for?

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Abstract

Accounting scandals such as Enron, Toshiba, Gowex or Pescanova are issues of special interest, given the impact that such fraudulent transactions have on society due, especially to earnings manipulation. The aim of this paper is to review the literature concerning earnings management and the implications of the latter for stakeholders and firms. Using the Web of Science database, I investigate the most cited papers on this topic. A classification of the causes that drive managers to manipulate earnings is presented. I also explore the papers that show the trade-off faced by managers among the two techniques usually recognised in the earnings management literature, real activity and accrual manipulation, and when they are normally used. One of the major implications of earnings management is the deterioration of information quality in the financial statements, which could mislead stakeholders' decisions.

Keywords: Earnings management, accrual manipulation, real activity manipulation, consequences of earnings management, causes of earnings management

1. Introduction

Accounting scandals have always caught public interest. They negatively impacted public confidence in institutions such as stock markets, bankers, auditors, corporate managers and even governments (Sanders, Hamilton, Denisovsky, Kato, Kawai, Kozyreva & Tokoro, 1996). The important social prejudices caused by earnings management can be noted, for instance, in scandals such as Enron or Parmalat (Wu, 2010) as well as in most recent examples like Pescanova or Gowex. In regard of this, there are two extant lines of research focused on investigating accounting frauds or scandals. First, I have found studies that investigate who engage in earnings management and why, the motivations for wrongdoing, managers' behaviour and their characteristics and ways of detecting frauds. These studies are common within the psychological approach and are focused on the fraudster with the aim of developing ways to prevent that kind of behaviour, especially through audit procedures (e.g., Brazel, Jones & Zimbelman, 2009). Second, there is an area that investigates the outcomes of earnings management, for instance, stock market's reactions usually applying economic theories related to agency problems or markets' efficiency (e.g., Dechow, Sloan & Sweeney, 1995; García Lara, García Osma & Mora, 2005; Cohen, Dey & Lys, 2008; Cohen & Zarowin, 2010; Kothari, Mizik & Roychowdhury, 2016; among others). In this respect and based on the positivist agency theory, that takes place when cooperating parts have different targets (Ross, 1973; Jensen & Meckling, 1976), managers could engage in earnings management to their own benefit due to the split among ownership and management (Abdul Rahman & Haneem Mohamed Ali, 2006). Thus, they could affect the annual reports which serve for the stakeholders' decision making. In this line, accounting research link the definition of earnings management with research focused on frauds and accounting scandals (Cooper, Dacin & Palmer, 2013) as earnings management is a clear signal of deceiving management (Beasley, Carcello & Hermanson, 1999; Beasley, Carcello, Hermanson & Neal, 2010; Jones, 2011). It should be noted that fraudulent accounting is related to practices that violate accounting standards, while earnings management are those practices that involve manipulation of financial statements by managers with different purposes (Healy & Wahlen, 1999, p.368). In this sense, earnings management is strongly related to the quality of information included in companies' financial statements, which is a relevant and recurring topic in accounting research (Collins, Pincus & Xie, 1999; Barth, Landsman & Lang, 2008). Financial statements should provide useful information about companies' financial situation to facilitate stakeholders' decision making (Epstein & Jermakowicz, 2008; Mackenzie, Coetsee, Njikizana, Chamboko, Colyvas & Hanekom, 2012). Moreover, the level of usefulness of financial information is strongly related to the quality of earnings (Ball & Shivakumar, 2005). In order to be useful, information must be relevant, comparable, verifiable, timely and understandable (IFRS-Framework). The presence of significant earnings management that originates from information asymmetry and agency problems between companies' insiders and outsiders, could affect such features and its effect occurs in the firm, in the organizational field and societies in general (Cooper, Dacin & Palmer, 2013).

There are two different tools of earnings management real activities and accruals (Schipper, 1989). Prior research shows that the discussion on earnings management was primarily focused on accrual manipulation strategies while, recently, many articles have focused on real activity manipulation as a proxy of earnings management. In accrual manipulation, managers introduce their judgement and subjectivity by accounting choices in the financial reports, and hence it could distort a company's underlying operating performance. However, it does not generally involve altering operations themselves (Kothari et al., 2016). In real activity manipulation, on the other hand, managers' objectives are to mislead stakeholders into believing that the results reported in the financial statements have been achieved in the normal course of operations (Roychowdhury, 2006). Both methods may be used to manage earnings upwards or downwards for several reasons and with different implications for the future of the firm. Real activity is preferred to accrual manipulation because it is easier to implement, less costly and more difficult to detect by outsiders (García Lara et al., 2005). However, real manipulation is perceived to be less ethical than accrual manipulation (Graham, Harvey & Rajgopal, 2005), and it can reduce the future valuation of companies (Cohen & Zarowin, 2010) as well as their profitability and long-term competitiveness (Kothari et al., 2016). The decision to opt for one methodology rather than the other can be modified when managers identify circumstances or events whether they need to achieve particular objectives. Furthermore, a novel research avenue in earnings management is the investigation of the drivers for the choice of one practice over the other and to explain the reason such as an IPO or financial distress situations (Cohen et al., 2008; Cohen & Zarowin, 2010; Campa & Camacho-Miñano, 2015).

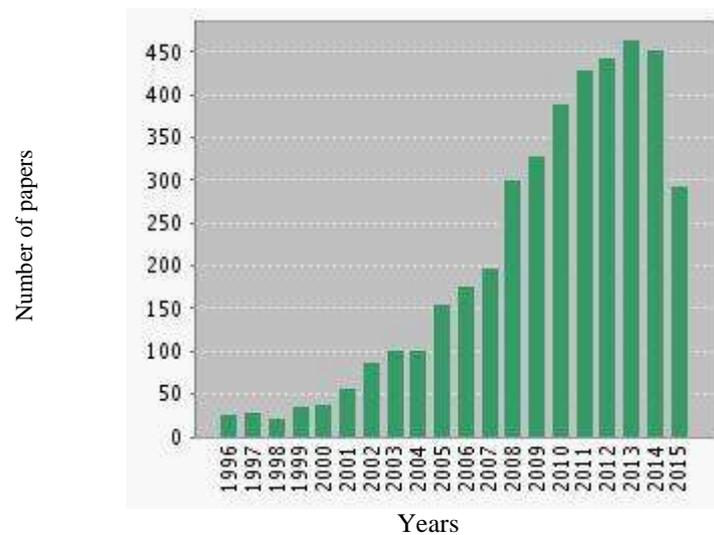
Accounting standard regulators are worried about the implications that both types of earnings management cause to information quality (Jaggi & Sun, 2012). Furthermore, the consequences originated from earnings management practices have several implications for stakeholders and regulators. Thus, investors and auditors must analyse cautiously the information provided by financial statements which may have been manipulated, while the board of directors and investors should be aware of the opportunistic behaviour that managers can adopt to beat benchmarks.

The aim of this paper is to review the academic evidence on earnings management and its consequences for the firm, the stakeholders and institutional setters. In particular, I focus the literature review on the definitions of earnings management (what), the origin or causes that drive managers to engage in earnings management (who and why), the techniques used (how and when) and the consequences of both techniques as well as the trade-off that managers face and the implications of incurring in such manipulation.

The rest of the paper is structured as follows. Section 2 presents the methodology used to compile the literature review. Section 3 provides the literature review related to the term earnings management as well as the causes commonly discussed in prior research. The different tools to manipulate earnings and the consequences derivate of such practices are shown in section 4. To conclude, section 5 provides the main conclusions related to the practical implications that earnings management could originate.

2. Methodology for literature review

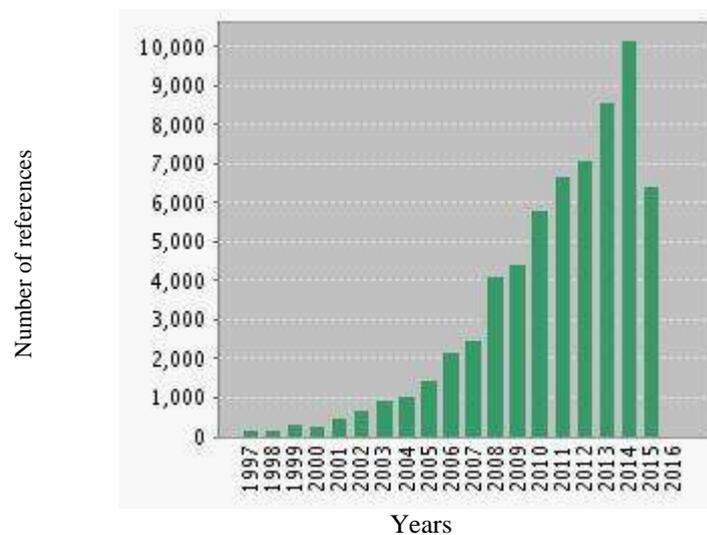
The term "earnings management" is an accounting concept widely investigated since the late eighties, it being an important ethical financial reporting issue, since accountants deal with that everyday around the world (Armstrong, 1993). Most of the prior literature has been driven by positive accounting theory proposed by Watts and Zimmerman (1986). However, recent research has shifted the focus to capital market motivations (Xiong, 2006) or agency theory. The database "Web of Science", provided by Thomson Reuters, gave 6,836 results when I searched for papers with "topic" equal to "earnings management" on October 5th 2015, within social sciences and business and economics research areas. It shows that such a topic is of relevant interest to the international academic community. As indicated by Figure 1, since the year 2001 the trend of publications related to the earnings management has consistently increased, showing a singular rise in 2008. The number of articles increases from 80 papers per year in 2006, to more than 400 papers per year from 2011 onwards.



Source: Web of Science Database

Figure 1. Evolution of the number of articles published on the Web of Science database each year.

Another interesting fact is the number of references of articles on “earnings management”. As shown in Figure 2, the trend is growing since 2000 but it almost doubled to 2,200 from 2007 to 2008. In 2014 the number of “earnings management” citations reached more than 10,000 references, representing a significant increase of 95% on this subject in the last ten years. Therefore, we can conclude that this is a hot topic in the accounting field, which still attracts the attention of many researchers around the world.



Source: Web of Science Database

Figure 2. Evolution of the number of references in journals of impact each year.

3. Definitions of earnings management and causes

3.1 Definitions of earnings management

Before addressing the issue in greater detail, it is necessary to specify what earnings management means. There is not an accepted sole definition for this term (Healy & Wahlen, 1999; Beneish, 2001), but previous literature shows

that there are no considerable differences among the meanings by different authors. The majority of researchers agree that its origin dates back to the middle of the twentieth century. Hepworth (1953) was the first who started this topic-related research. Watts and Zimmerman (1978) state that earnings management occurs when managers have a discretionary behaviour related to accounting numbers with or without limits and this behaviour can be adopted in order to maximize the value of the company. Even so, Davidson, Stickney and Weil (1988) established that earnings management is ‘the process of taking deliberate steps within the constraints of generally accepted accounting principles to bring about a desired level of reported earnings’. In a similar way, Schipper (1989) defines earnings management as the intentional behaviour to alter the financial reports in their external process with the aim of obtaining a private gain. However, the most used description by researchers in this area is that earnings management is “the manipulation of the companies’ financial statements by managers based on their own judgment, with the purpose of confusing users about the company’s real economic situation, either, to influence contracts that can rely on financial statements” (Healy & Wahlen, 1999, p. 368). Close to all the definitions cited above Phillips, Pincus and Rego (2003) define it as a strategy to generate accounting earnings through managerial discretion related to accounting choices and operating cash flows. In this line, García Lara et al. (2005) establish that earnings management is an intentionally carried out management practice, opportunistic and/or educational, with the purpose to report desired results, distinct from the real ones. Among the several definitions of this concept, Scott (2009, p.403) determines earnings management as “the choice of accounting policies or actions that can affect earnings in order to achieve a specific objective”. Since there is not a commonly accepted definition, the meaning of earnings management will largely depend on the context of the research. For instance, while most of research focused on U.S. companies relates the use of accruals to income smoothing motivation and the provision of additional information to users (Collins et al., 1999; Tucker & Zarowin, 2006), transnational studies relate discretionary accruals to a decrease in the information quality, due to the presence of weak national legislation or low investor protection (Leuz, Nanda & Wysocki, 2003). The above definitions of earnings management coincide and suggest that this term would be defined as the intended manipulation of financial statements, carried out by managers driven by different purposes.

Regarding this, prior literature has shown many incentives that drive managers to manipulate the results of the company. Healy and Wahlen (1999) provide three general categories: capital market motivations, contracting motivations and regulatory motivations. I extend this taxonomy following the classification provided by Campa and Camacho-Miñano (2015) of the most referred to earnings management’s incentives in the prior literature. These incentives are classified as internal and external causes, where the internal causes are those directly controlled by companies while external causes are those that firms cannot directly control.

3.2 Internal causes of earnings management

According to previous studies, the papers about the driving motivation for earnings management can be grouped into three categories: 1) contracting motivations, compensation and lending contracts, 2) capital market motivation, and 3) type of company.

Some research shows that managers will have greater incentives to manipulate earnings if they have debt covenants based on the profitability of the company, in order to avoid the risk of cancellation (DeAngelo, DeAngelo & Skinner, 1994; DeFond & Jiambalvo, 1994; Sweeney, 1994; Dechow et al., 1995) or the renegotiation of the debt conditions (Watts & Zimmermann, 1986; Jaggi & Lee, 2002). Other studies suggest that manager’s compensation is prone to being an incentive to manipulate, since it is likely they will be willing to engage in such manipulation to increase their compensation or bonus plans (Healy, 1985; Gaver, Gaver & Austin, 1995; Holthausen, Larcker & Sloan, 1995; Shuto, 2007).

The second point in this section is related to the evidence of capital market motivation for earnings management. The valuation of shares using information disclosure by the financial statements could potentially create incentives to manipulate the financial information provided by these documents (Healy & Wahlen, 1999). In this respect prior work documents that managers manipulate earnings regarding capital market expectations to increase the results of the company (Teoh, Welch & Wong., 1998a, 1998b; Erickson & Wang, 1999; Myers, Myers & Skinner, 2007), to avoid losses or decreased earnings (Burgstahler & Dichev 1997; Glaum, Lichtblau & Lindemann, 2004) and to beat or meet analysts’ forecasts in order to obtain an advantage over analysts ensuring future growth forecasts (Burgstahler & Dichev, 1997; Graham et al., 2005; Lee, Petroni & Shen, 2006; Scott, 2009; Keung, Lin & Shih, 2010).

Finally, several authors agree that private companies usually manipulate their results more than public companies due to their higher level of information asymmetry among managers and the rest of the stakeholders

(Mikhail, Walther & Willis, 1999) and the lower level of monitoring (Ball & Shivakumar, 2005). This trend is observed both in Anglo-Saxon countries (Beatty & Harris, 1999; Ball & Shivakumar, 2005) and in continental countries (Vander Bauwhede & Willeken, 2000; Arnedo, Lizarraga & Sanchez, 2007).

3.3 External causes of earnings management

Empirical evidence shows that external causes of earnings management are given mainly by the institutional framework, the degree of investor protection in the country where the company is located, bankruptcy proceedings, economic crises, tax rates and accounting regulations.

Depending on the country where the company is located, they are subject to a different legal framework (i.e. code versus common law) which is the base of the level countries' investor protection (La Porta, Lopez-de-Silanes, Shleifer & Vishny, 1997, 1998). There is evidence showing that the legal framework of a country has an impact on earnings management and firms in code law countries manipulate in a different manner to common law countries due to the level of investor protection (Archambault & Archambault, 2003; Leuz et al., 2003; Soderstrom & Sun, 2007; Enomoto, Kimura & Yamaguchi, 2015). For instance, Leuz et al. (2003) find evidence that shows that accrual manipulation decreases in countries with stronger investor protection. In a similar vein, García Lara et al. (2005) suggest that companies from code law countries are more willing to smooth out earnings than their common law peers, while Enomoto et al. (2015) find evidence of the use of real activity manipulation as a substitute for accrual manipulation in countries with stronger investor protection.

Related to the bankruptcy proceedings, there is evidence that suggests that bankrupt companies manipulated results more than healthy firms (Rosner, 2003, Garcia Lara et al., 2005; Campa & Camacho-Miñano, 2014). However, the economic situation could also be an incentive. In this regard, extant literature finds that during periods of crisis managers have more incentives to engage in downwards earnings management and blame the economic situation for such descent (Smith, Kestel & Robinson, 2001; Saleh & Ahmed, 2005).

Furthermore, evidence shows that changes in legislation can affect the way managers manipulate earnings (Goncharov & Zimmermann, 2006; Cohen et al., 2008). In this line, the modification of corporate tax rates may be one of the factors that could also motivate earnings management (Goncharov & Zimmermann, 2006) and when firms have a high concentration of subsidiaries in foreign countries with a strong rule of law (Dyreg, Hanlon & Maydew, 2012). Previous research shows that managers found tax-incentives in the presence of a tax reform, driving them to manipulate earnings (Gramlich, 1991; Boynton, Dobbins & Plesko, 1992; Scholes, Wilson & Wolfson, 1992; Guenther, 1994; Maydew, 1997; Lopez, Regier & Lee, 1998; Calegari, 2000; Poterba, Rauh, Venti & Wise, 2007; among others).

4. Earnings management tools and their consequences

There are two techniques commonly recognised to manipulate earnings: accrual manipulation or real activity manipulation (Schipper, 1989). The research focused on accrual manipulation represents the most significant part in previous literature. Until the beginning of the 21st century, all of the studies used accruals manipulation as a proxy for earnings management. Nevertheless, total accruals can be split across discretionary and non-discretionary accruals, discretionary accruals being related to adjustment to cash flows carried out by managers, while non-discretionary accruals are those accounting adjustments to the companies' cash flows stated by accounting standard setters. Despite this, the disaggregation of these two variables has not been taken into account in the models most frequently proposed by prior research (i.e. Healy, 1985; DeAngelo, 1986; Jones, 1991; Dechow et al., 1995; Kothari, Leone & Wasley, 2005; among others). Even though, the aggregate accrual models have been widely criticised (i.e. Kothari et al., 2005; Ibrahim, 2009; Stubben, 2010), and even though they have some limitations, they still remain the most used by researchers in this area (Ibrahim, 2009).

Since accruals include a component of subjectivity, they are not completely identifiable or observable, and managers can take advantage of this situation to achieve a desired result (Alexander, Britton & Jorissen, 2011). Accrual manipulation is originated by the valuation of accounting items not directly related to changes in cash flow. Examples are the choice among the different depreciation methods, the valuation of inventories or the choice of the basis for asset valuation (historical cost or fair value), and the estimation of provisions. Even if these ways to manipulate earnings look easy, this is not what managers usually prefer, since annual reports must provide information about changes in the valuations of accounting items that could alert the stakeholders. Furthermore, it

has been shown that firms that manipulate accruals will have to bear the cost of the reversal in subsequent years (Allen, Larson & Sloan, 2013) and for this reason it gives limited benefits (Teoh et al., 1998a).

Real activity manipulation instead directly affects economic results and is carried out through activities that involve the cash flows of the company. While manipulating through accrual manipulation is the technique which has been investigated by a higher number of papers, Graham et al. (2005) show that managers widely use real activity manipulation. Real activity manipulation occurs when managers put in place actions that change or restructure operations, investment or financial transactions with the aim of influencing the accounting system (Gunny, 2010). The main types of real activity manipulation are:

- Sales manipulation: Accelerating sales for the year through price reductions or not agreed sales on credit award will increase the results of the current year. However, it will result in a lower cash flow in the following periods (Roychowdhury, 2006).
- Overproduction: Managers will choose to use the overproduction with the intention of reducing costs through the achievement of economies of scale (Lin, Radhakrishnan & Su, 2006; Roychowdhury, 2006; Zang, 2012).
- Discretionary cost reduction: It results in reducing expenditures on certain items, such as research and development, thus altering the result of the current period. It could also have negative effects on companies' strategy and cause a decrease in the future results (Cohen et al., 2008).

In this line, Campa and Camacho-Miñano (2015) provide a table (Table 1 from their paper) that compiles from previous literature the forces which drive managers to choose between both techniques, classifying the forces among internal and external. Accordingly, it is noted that as external forces that drive managers to choose real activity over accrual manipulation are the overvaluation of firm's stock prices (Badertscher, 2011), the audit quality (Burnett, Cripe, Martin & McAllister, 2012), the high marginal rates, initial public offering and lightly regulated market (Alhadab, Clacher & Keasey, 2013), the upcoming credit rating changes (Kim, Kim & Song, 2013) as well as the strong investor protection (Enomoto et al., 2015). On the other hand, managers prefer to engage in accrual manipulation if they are in a lower taxation conditions or the country does not have a stable situation (Durnev, 2010).

The timing is also an element to take into account. Zang (2012) shows how managers could manipulate earnings using real activity manipulation during the fiscal year and adjust the results of the company according to their goals using accrual manipulation after the earnings' announcement. Facing a legislation reform, the choice depends on the type of reform and also if they are volunteer or mandatory adopters. For instance, Cohen et al. (2008) show that managers engaged in real activity manipulation after the Sarbanes and Oxley Act, while a notable increase in accrual manipulation was noted just in the previous period. Ewert and Wagenhofer (2005) found evidence that managers preferred accrual manipulation after the accounting standards were strengthened while Ippino and Parbonetti (2011) show evidence of a preference for real activity over accrual manipulation after the mandatory IFRS adoption. In this last sense, we might be cautious before extracting some conclusions as there is an ongoing debate on the topic. Addressing the external forces, managers incurred in accrual more than real earnings management if the executives are younger than their counterparts (Demers & Wang, 2010), if the accounting flexibility is lower as well as the institutional ownership (Zang, 2012) or depending on the ownership structure. In this last case it is shown that the family firms are more disposed to engage in accrual manipulation than the rest of the firms (Achleitner, Guenter, Kaserer & Siciliano, 2014). On the other hand, around seasoned equity offerings managers are willing to engage more in real activity than accruals to take advantage of the lower risk of detection (Kothari et al., 2016). Finally, the use of real earnings management has been highlighted in the quarter of a debt covenant violation (Bhuiya & Henry, 2013), to reach benchmarks (Bjurman & Weihagen, 2013) or to manipulate earnings downwards by the new CEO's (Geertsema, Lont & Lu, 2014).

Table 1 shows a resume of the consequences detected in the previous literature related to both techniques. Managers faced a trade-off to manipulate through real activity or accrual manipulation. Even the choice is mainly based on the cost that it represents for the company.

Table 1. Accrual-based vs. real earnings management's consequences

	Accrual-based earnings management	Real earnings management	Authors
Timing	After fiscal year-end	Before fiscal year-end	Zang (2012)
Costs	Low	High	Bhojraj, Hribar, Picconi and McInnis (2009); Chen, Yen and Chang (2009); Cohen and Zarowin, (2010); Kothari et al. (2016)
Detection risk	Moderate/high	Low	Garcia Lara et al. (2005); Kothari et al. (2016).
Affected earnings components	Accruals	Accruals/Cash Flows	Schipper (1989); Cheng (2004); Roychowdhury (2006); Zang, (2012); Cohen et al. (2008); Gunny (2010)
Risk of litigation	High	Low	Heninger, (2001); Garcia Lara et al. (2005)
Constraints	Prior manipulations/GAAP/ auditors & enforcement bodies	Marginal costs/benefits	Burnett et al. (2012); Zang (2012)
Manner to manipulate	Easily Difficultly	Difficultly Easily	Alexander et al. (2011); Garcia Lara et al. (2005); Gunny (2010); Kothari et al. (2016)
Perceptions from managers	Less ethical	More ethical	Graham et al. (2005)

Source: Adapted by the author from several sources.

Recent studies have focused on the consequences of accrual and real activities manipulation. In this respect, Gunny (2010) explains why companies prefer the use of real activities to accrual manipulation. The former actions are controlled by managers and are related to firms' operations. Thus they are not within auditors' judgement. They also indicated that if managers engage in accrual manipulation, they prefer to use the accounts that involve items' valuation rather than change accounting policies, which could be more costly and visible (Alexander et al., 2011). Gunny (2010) also found that companies that reached earnings benchmarks through real activity manipulation had a better corporate performance in the subsequent three years to the manipulation than firms that did not engage in real activity manipulation. Nevertheless, there is evidence that shows that firms which engaged in accruals and real activity manipulation to meet earnings' forecast, had a worse corporate performance and also presented an underperformance in the stock market in the subsequent three years to the manipulation, than firms that did not engage in earnings management to beat analysts' forecasts (Bhojraj et al., 2009). However, it is noted that the manipulation of results through real activities manipulation can reduce future valuation of the company (Cohen & Zarowin, 2010) and its profitability and competitiveness in the long-term (Roychowdhury et al., 2015).

This is a key point since it has been shown that managers prefer results related to the short-term. In line with this, Graham et al. (2005) suggest that managers are willing to alter their business plans and sacrifice resources in order to meet previously established objectives, even if it means increasing the risk to reduce future investments. In contrast, Taylor and Xu (2010) provide evidence that, on average, companies try to avoid the manipulation of their operations if it means damaging the future of the company. These results fit in with the investigation of Cheng (2004) which indicates that incentives to managers prevent real activities manipulation. One of the most important consequences of the use of the earnings management is the loss of information or non-transparency in the information provided (Hanlon & Shevlin, 2005). The argument of these authors is based on the fact that accounting profit as well as tax profit provides information about the company. If both results are equal, the market would lose information since one of the measures is being manipulated to give the same result as the other. The manipulation of results with the aim of tax evasion is directly related to the risk of collapse of the shares' price of the company (Jin & Myers, 2006; Hutton, Marcus & Tehranian, 2009; Kim, Li & Zhang, 2011). The explanation for this behaviour is that manipulating earnings with the aim of tax avoidance is an income-decreasing manipulation. If this is perpetrated for long time, it becomes a bad signal for shareholders resulting in a drop in the stock price, due to lack of investors' confidence.

5. Discussion and main conclusions

In this paper, I have reviewed previous academic evidence on earnings management with the aim of providing a useful earnings management index for future researchers in this area, while at the same time, identifying potential lines of research. Particularly, I approach the review on the causes that drive managers to manipulate, the consequences originated by the different ways to manipulate, as well as the trade-off that managers face and the implications of being involved in such manipulation. In this way, I have taken into account the consequences for the firm and the stakeholders: managers, accounting institutional setters, shareholders, future investors and broadly, the users of financial statements.

Previous literature focused on the effects of accounting scandals and frauds, especially the reaction of stock markets to different kinds of earnings management, as well as the dishonest corporate behaviour and firm's corruption. The implications of earnings management affect all the stakeholders that use the information provided by financial statements, and they must trust its reliability when their decision-making is based on accounting information (Zeff, 2007). However, the manipulation of these documents is linked to the quality of information, creating opaqueness in the information and complicating stakeholders' decision making (Epstein & Jermakowicz, 2008; Mackenzie et al., 2012). Moreover, the level of usefulness of financial information is strongly related to the quality of earnings (Ball & Shivakumar, 2005). With regard to this, auditors as well as institutional setters may take into account the existence of these kinds of practices to analyse rigorously the information provided in the annual reports as managers could have altered it in an opportunistic way. Overall, they should be more cautious when some of the incentives described above had just happened or are capable to occur. Likewise, integrity in financial statements is a key point to obtain external resources (Hope, Thomas & Vyas, 2011). Additionally, stakeholders should consider that accrual manipulation and real earnings management could be used simultaneously or as substitutes, given different situations, as previous literature has shown. The consequences also could have implications in corporate governance (Burnett et al., 2012), as boards of directors and investors trust in high auditor quality, they should be aware of the opportunistic behaviour that managers could adopt in order to reach their benchmarks.

Additionally, the consequences at a macroeconomic level should also be considered as there is evidence showing that accruals could be taken in the definition of the corporate taxable income in an opportunistic way by the government (Goncharov & Jacob, 2014).

Finally, I have noted that earnings management remains a controversial topic even it has been widely investigated. Thus, I suggest that detailed research is needed in some of the new lines that researchers are just addressing. For instance, it is surprising that the link between multinational enterprises and earnings management has received only modest attention. However, some authors have come to show some insights on it (e.g., Dyreng et al., 2012; Fan, 2008; Prencipe, 2012; Bonacchi, Cipollini & Zarowin, 2014; Beuselinck, Cascino, Deloof & Vanstraelen, 2016), and it seems to be one of the new directions for earnings management. In this case, future contributions could be focused on multinational enterprises and some issues not addressed yet, such as bankruptcy or cultural factors. On the other hand, and related to regulation issues, I suggest that it would be attractive for future research to address earnings management around the possible adoption of the CCCTB –common consolidated corporate tax base-, and possible ways to combat it. Finally, in a wider view it seems useful to determine the common characteristics of the companies that usually engage in earnings management, in order to predict future manipulation.

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