Financial Crisis: Time to Manage Earnings?

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Abstract

Previous research on how financial crisis affects managers' earnings management behavior has resulted in different scenarios with inconclusive results. To address the ambiguity in the findings in the literature, the present study presents critical realism as an alternative to the positivist mainstream approach. The study argues against the existence of a causal law based on a constant conjunction model (i.e., whenever a financial crisis happens, earnings management happens) and concludes that financial crisis cannot be seen as the cause of earnings management. Finally, it suggests exploring other structures at work that might be responsible for earnings management.[2]

Keywords: Earnings quality, earnings management, causal law, financial crisis, critical realism, positivism

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1 INTRODUCTION

According to Lo (2008), 'earnings management has a lot in common with earnings quality' and 'highly managed [manipulated] earnings have low quality' (p. 351)[3]. Since earnings quality is essential to the decisions of anyone with a vested interest in a company (Dechow, Ge, & Schrand, 2010), discovering the causal factors or indicators associated with the use of earnings management is crucial to help detect and/or prevent the misreporting of a firm's business activities. Academics and regulators have strived to uncover the 'causal laws of a "constant conjunction" model (whenever A happens, B happens)' (Collier, 2005, p. 328) and have identified financial crisis as a major cause of earnings management. Warnings such as 'the financial crisis will exacerbate the increase in corporate fraud' (Levy, 2009, p. 11) and estimates of 'a potential projected global fraud loss of more than $4 trillion' (ACFE, 2018) are common.

Indeed, financial crises offer a unique opportunity to study the effects of crisis on financial reporting quality (Kousenidis, Ladas, & Negakis, 2013) since 'antecedently available cognitive resources are used to construct plausible models of the mechanisms producing identified patterns of phenomena' (Bhaskar, 2011, p. 90). While a constant conjunction model between financial crisis and earnings management may exist, what part of the model should be considered to be the cause and what part the effect remains to be understood[4].

Based on the foregoing, and since the task of science is 'to discover which hypothetical or imagined mechanisms are not imaginary but real; or, to put it the other way round, to discover what the real mechanisms are' (Bhaskar, 2008a, p. 136), this study examines whether the generative mechanism for managing earnings identified by previous research (i.e., financial crisis) is adequate. The purpose of this paper, therefore, is to tease out the problem and provide clarification where possible. In particular, the present study aims at advancing a critical analysis of the literature claiming that financial crises cause earnings management; in particular, it provides supporting arguments on the questionability of the mainstream approach and presents a critical realist (CR) perspective on the matter.

Previous research approached the question from a positivist philosophical perspective and investigated the impact of financial crisis on earnings management (Kousenidis et al., 2013; Vladu, 2013), the extent to which 'economic crisis affects companies' scope for earnings management' (Iatridis & Dimitras, 2013, p. 155), whether crisis leads 'to a significant decline in the information value of discretionary earnings' (Choi, Kim, & Lee, 2011, p. 184), and whether it has 'encouraged' (Ahmad-Zaluki, Campbell, & Goodacre, 2011; Choi et al., 2011), 'influenced' (Rusmin, Scully, & Tower, 2013), or 'incentivized' (Chia, Lapsley, & Lee, 2007) managers to engage in earnings management. The conclusions of these studies suggest that financial crisis may have both positive and negative effects on companies' earnings quality. Earnings quality may improve or diminish,

[3] Herein, earnings management is defined as 'a purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain' (Schipper, 1989, p. 92)

[4] By acknowledging that the question cannot be investigated in a closed system (laboratory) 'where other mechanisms that are not being tested will not affect the outcome' (Collier, 2005, p. 329), it is argued against the causal law of a constant conjunction model (whenever a financial crisis happens, earnings management happens), although one cannot *a priori* exclude the opposite (that earnings management causes financial crisis) nor the presence of other generative mechanisms that may cause financial crisis, or the absence of any causal law of a constant conjunction model type.

managers may adopt income-increasing or income-decreasing strategies, and reported earnings appear more or less timely, conditionally conservative, value-relevant, smoothed, managed, persistent, and predictable (Kousenidis et al., 2013). The results are made more confusing by the inconsistent use of terminology by previous authors. Therefore, in the present study, the search for predictive models has been set aside and other structures that might be responsible for managing earnings are explored.

The question of the financial crisis–earnings management relation is approached from a CR philosophical perspective since a different approach can be complementary to research. It involves not getting caught up in philosophical debates about which is the best approach to research. From a CR perspective, previous 'theory-laden' (Sayer, 1992, p. 5) research has identified financial crisis as a plausible generative mechanism for earnings management although causal laws of a "constant conjunction" type do not occur in the social world (Ackroyd and Fleetwood 2005). By applying Fleetwood's (2011) conceptualization of tendencies, the present study suggests that financial crisis cannot be seen as the cause of earnings management, only an extrinsic enabling condition or, more likely, a stimulating or releasing condition for managing earnings. Further, it is argued that it is necessary to identify both the '*more, most*, or the *most important* intrinsic enabling conditions' (Fleetwood, 2011, p. 11) that must be satisfied to make a possessor of power manage earnings in this way and the intrinsic offsetting causes that 'may or may not directly interfere with the operation of the mechanism responsible for the satisfaction of these intrinsic enabling conditions' (Bhaskar, 2008a, p. 225). Specifically, this study posits that managers possess the power to manage earnings, while so-called 'earnings managers' have a tendency to do so.

To the best of my knowledge, this is one of the first studies in the earnings quality literature to use a CR philosophical position. The CR perspective casts light on managers' reasons for acting like an earnings manager and helps abandon the idea of financial crisis as a generative mechanism for managing earnings, thus contributing to the literature.

The remainder of the paper is organized as follows. Section 2 presents the theoretical background of the paper. Section 3 presents an overview of how previous research approached the financial crisis- earnings management relation. Section 4 abandons the assumption of system closure and argues against financial crisis serving as a generative mechanism for managing earnings. Section 5 discusses and concludes, including further research possibilities.

2 THEORETICAL BACKGROUND

According to Bhaskar (2011), 'social phenomena only ever occur in open systems' (p. 185), namely in systems 'where no constant conjunctions of events obtain' (Bhaskar, 1998, p. 10). By contrast, causal laws manifest themselves as constant conjunctions only in closed systems (Collier, 2005). Thus, when analyzing social phenomena, 'the assumption of systems closure and the expectation that events will follow deterministic and universally valid patterns need to be relaxed' (Modell, 2009, p. 212). CRs are akin to laborers in the way in which they are 'clearing the ground a little, and removing some of the rubbish that lies in the way to knowledge' (Locke, 1690 [1999], p. 13). Critical realism was chosen as the framework for this study of the earnings management–financial crisis relation since Bhaskar's retroductive scientific methodology allows researchers to 'take some unexplained phenomenon that is of interest to us and propose hypothetical mechanisms that, *if they existed*, would generate or cause that which is to be explained ' (Mingers, Mutch, & Willcocks, 2013, p. 797). Nonetheless, if the proposed hypothetical mechanisms are false or misleading, they will not exist and may have to be removed from blocking the path to knowledge.

According to Fleetwood (2001), 'abduction or retroduction is a mode of inference where one starts from some phenomenon of interest, and postulates a mechanism that, if it existed, might causally account for that phenomenon' (p. 210). Retroduction thereby consists of 'the movement, on the basis of analogy and metaphor amongst other things, from a conception of some phenomenon of interest to a conception of some totally different type of thing, mechanism, structure or condition that, at least in part, is responsible for the given phenomenon' (Lawson, 1997, p. 24). In this regard, Bhaskar's so-called DREI and RRRE schemata offer the opportunity for an endless theorizing process without passively accepting theoretical explanations that are broadly consistent with the received value systems, beliefs, and structures (Modell, 2014). According to Bhaskar (2009, p. 46), the 'DREI schema: i.e. *description* of law-like behaviour; *retroduction,* exploiting analogies with already known phenomena, to possible explanations of the behaviour; *elaboration* and elimination of alternative explanations; issuing (ideally) in the empirically-controlled *identification* of the causal mechanism(s) at work' works together with its complementary 'RRRE schema: viz. *resolution* of a complex event (situation, etc.) into its components; *redescription* of these components in theoretically significant terms; *retrodiction,* via independently validated normic or tendency statements, to possible antecedents of the components; and *elimination* of alternative possible causes.' Critical realism accepts that knowledge is always fallible and that competing or complementary explanations may be observed (Mingers et al., 2013). This exceptional character leads to 'a further stage within the methodology in which more research has to be carried out to try and eliminate some of the explanations and perhaps support others' (Mingers et al., 2013, p. 797).

Burgstahler and Dichev (1997) observed that transaction cost theory and prospect theory can plausibly be used to explain why earnings are managed. Transaction cost theory suggests that firms with higher earnings face lower costs in transactions with stakeholders (Burgstahler & Dichev, 1997), whereas firms that report earnings decreases or losses face higher transaction costs, thereby creating an incentive to report higher earnings. Prospect theory postulates that decision-makers have different risk preferences (Eisenhardt, 1989) and 'derive value from gains and losses with respect to a reference point' (Burgstahler & Dichev, 1997, p. 123). Nevertheless, while individuals might value losses and gains differently, they are generally more averse to losses than they are attracted to gains (Rusmin et al., 2013); hence, managers might overstate earnings.

Alternatively, when results provide evidence of earnings-decreasing behavior, the 'big bath' argument is often invoked. Big bath accounting is a managerial stratagem (Walsh, Craig, & Clarke, 1991) based on the assumptions that 'when circumstances are bad, making things just a little bit worse by cleaning out the rubbish does little harm to either reputation or prospects' and that 'little damage will ensue when the market is so depressed that nothing can hurt it more' (Walsh et al., 1991, p. 174). Under the big bath hypothesis, managers may undertake income-decreasing strategies in lean years, perhaps believing 'that one very poor performance report is not as harmful as several mediocre performance reports (Arya, Glover, & Sunder, 1998, p. 8).

Even firms not severely affected by financial crisis may engage in income-reducing activity to benefit from improved borrowing conditions or extract more government support (Saleh & Ahmed, 2005). Alternatively, according to Habib, Bhuiyan, and Islam (2013), 'managers may have recognized that the market tolerates poor performance during an external shock (crisis) environment, so they may have depressed earnings further, via accruals, to enable greater post-shock performance improvements to the benefit of managers' reputations' (p. 158). Thus, 'conventional wisdom suggests that an economic crisis should encourage managers to adopt big bath accounting' (Habib et al., 2013, p. 159).

Whatever direction earnings management takes, whether income increasing or decreasing, a theory is always ready to support the relevant results. However, theories are 'irreducible and mutable [...] always there and liable to change' (Bhaskar, 2008a, p. 178). Additionally, some[5] theories are imprecise and incomplete, making them 'logically nonfalsifiable' (Miller & Tsang, 2011, p. 141) and opening the door to discretion in model specification, notably 'opportunistic behavior by researchers who are intent on verification' (Miller & Tsang, 2011, p. 142). Indeed, researchers, to test theories in a rigorous manner, should endeavor, wherever possible and practicable, to avoid examining 'instances in which a theory is expected to hold' (Miller & Tsang, 2011, p. 143).

Specifically, researchers can adopt what Klayman and Ha (1987) defined as a 'positive test strategy' to test 'cases that are expected (or known) to have the property of interest rather than those expected (or known) to lack that property' (p. 211). The adoption of a positive test strategy not only 'leads to inflated confidence in a theory's corroborating evidence and generalizability; it also discourages [the] exploration of possible alternative explanations' (Miller & Tsang, 2011, p. 143). Considering that earnings decreases and losses are common during financial crisis, it is thus reasonable to assume that research on earnings quality could find a robust theoretical framework based on both transaction cost and prospect theories as well as a possible loophole in the big bath argument. Hence, examining whether financial crisis affects earnings quality means adopting a positive test strategy.

3 MAINSTREAM APPROACH TO THE FINANCIAL CRISIS- EARNINGS MANAGEMENT RELATION

Overall, previous studies (e.g. Mande, File, & Kwak, 2000; Saleh and Ahmed, 2005; Kim & Yi, 2006; Ahmed, Godfrey, & Saleh, 2008; Ahmad-Zaluki et al., 2011; Choi et al., 2011; Kousenidis, Ladas, & Negakis, 2013) approached the financial crisis–earnings management relation from a positivist philosophical perspective. By positive approach, researchers refer specifically to the procedures usually associated with hypothesis testing and inferential statistics. However, mainstream research has resulted in different scenarios with inconclusive results.

Table 1 shows that the 18 studies examined herein adopted a positive test strategy (Klayman and Ha 1987) to investigate earnings quality in times of crisis. Therefore, the studies are subject to confirmatory bias, namely the 'inappropriate bolstering of hypotheses or beliefs whose truth is in question' (Nickerson, 1998, p. 175).

[5] Miller & Tsang (2011) refer to strategic management and organization theories.

Table 1. Summary of previous research

No.	Author(s) and year	Crisis/recession*	Investigation period
1	Ahmad-Zaluki et al. (2011)	AFC	1990–2003
2	Ahmed, Godfrey, & Saleh (2008)	AFC	1997–2001
3	Charoenwong & Jiraporn (2009)	AFC	1975–2003
4	Choi et al. (2011)	AFC	1995–2000
5	Goh, Lee, & Lee (2013)	AFC	1991–2007
6	Jaggi & Tsui (2007)	AFC	1995–1999
7	Kim & Yi (2006)	AFC	1992–2000
8	Lee & Seo (2010)	AFC	1993–2006
9	Chia et al. (2007)	AFC	1995–1998
10	Masruki & Azizan (2010)	AFC	1999–2002
11	Saleh & Ahmed (2005)	AFC	1994–2000
12	Rusmin et al. (2013)	GFC	2006–2009
13	Habib et al. (2013)	GFC	2000–2010
14	Vladu (2013)	GFC-EUFC	2005–2012
15	Iatridis & Dimitras (2013)	GFC-EUFC	2005–2011
16	Kousenidis et al. (2013)	GFC- EUDC	2008–2011
17	Mande, File, & Kwak (2000)	JR	1987–1994
18	Smith, Kestel, & Robinson (2001)	AUSMC	1987–1988

*AFC stands for the Asian financial crisis (1997–1998); GFC stands for the ongoing global financial crisis; GFC-EUFC stands for the ongoing global financial crisis-European financial crisis; GFC-EUDC stands for the ongoing global financial crisis-European debt crisis; JR stands for the Japanese recession (1991); AUSMC stands for the Australian stock market crash, which happened in October 1987.

Table 1. (continued)

No.	Starting year**	Firm context/type and/or database***
1	1997	IPOs
2	1997	Listed: renegotiated debt
3	1998	Listed
4	1997	Datastream & Worldscope data
5	1997	Listed
6	1997	Listed: Inside Trade Asia data
7	1998	Public & private: KIS data
8	1997	Listed: KIS data
9	1998	Listed: PACAP & Worldscope data
10	1998	Listed
11	1998	Kuala Lumpur Stock Exchange Research Information Systems
12	2007	Listed: One Source data

13	2008	Listed: financially distressed
14	2008	Listed
15	2009	Listed
16	2010	Listed
17	1991	Listed: Japan Company Handbook data
18	1987	Listed: West Australian Division of the ASC data

Financial crisis starting year adopted in the research design; * Database information is provided only if disclosed by authors.

Although non-financial listed firms are mainly selected to be part of empirical research (e.g. Charoenwong and Jiraporn, 2009; Goh, Lee, & Lee, 2013; Lee and Seo, 2010; Chia et al., 2007; Masruki and Azizan, 2010; Rusmin et al., 2013; Smith, Kestel, & Robinson, 2001), some studies that use positive test strategies have looked for instances of earnings management during financial crisis periods in predetermined firm contexts/types, thereby transforming the research strategy from a 'theory testing' to a purely 'theory confirming' strategy (Greenwald, Pratkanis, Leippe, & Baumgardner, 1986). Strong 'myside bias' (Stanovich & West, 2007) influences researchers when looking for evidence of earnings management in firms that undertook debt renegotiation (Saleh & Ahmed, 2005; Ahmed et al., 2008), in firms associated with insider trading (Jaggi & Tsui, 2007), in initial public offering (IPO) companies (Ahmad-Zaluki et al., 2011), in financially distressed firms (Habib et al., 2013), and in firms in the most global financial crisis (GFC)-affected countries (Iatridis & Dimitras, 2013; Kousenidis et al., 2013; Vladu, 2013).

The results of Saleh and Ahmed (2005) showed that firms that undertake debt restructuring during a crisis period manipulate earnings downwards and 'have significantly more negative discretionary accruals than their other poorly performing counterparts' (p. 84) that have not renegotiated debt. Ahmed et al. (2008) concluded 'that both debt renegotiating and non-renegotiating firms exhibit large negative discretionary accruals during economic recession' (p. 136).

Jaggi and Tsui (2007) looked for instances of earnings management in firms associated with insider trading. Insider trading firms tend to manage earnings upwards in crisis as well as pre-crisis periods, but the positive association between insider trading and income-increasing techniques is especially perceptible in the latter. Ahmad-Zaluki et al. (2011), using a sample of Malaysian IPOs, provided evidence of income-increasing earnings management in the IPO year. More specifically, their results showed income-increasing choices, primarily for IPOs, during economic crisis. Similarly, Habib et al. (2013) found that managers of financially distressed firms employ income-decreasing earnings management techniques more frequently than healthy firms in times of crisis. Nevertheless, firms that have particular characteristics tend to engage in certain earnings management practices.

Finally, Table 1 shows the lack of consensus on the starting years of the Asian financial crisis (AFC) and GFC. Some researchers (Ahmad-Zaluki et al., 2011; Ahmed et al., 2008; Choi et al., 2011; Goh et al., 2013; Jaggi & Tsui, 2007; Lee & Seo, 2010) have used 1997 as the starting year of the AFC, while others (Kim & Yi, 2006; Chia et al., 2007; Charoenwong & Jiraporn, 2009; Masruki & Azizan, 2010; Saleh & Ahmed, 2005) have used 1998. There is doubt about which year can be considered to be the first year of the GFC as well. Rusmin et al. (2013) chose 2007, while

Habib et al. (2013) chose 2008. When considering only the Eurozone, three cut-off years have been used by academics: 2008 (Vladu, 2013), 2009 (Iatridis & Dimitras, 2013), and 2010 (Kousenidis et al., 2013).

The choice of the start of financial crisis could affect the subsequent empirical results opening the door to discretion in model specification. For example, with respect to AFC studies using a cut-off of 1997, the firms examined in Ahmed et al. (2008) exhibit large negative discretionary accruals, while Ahmad-Zaluki et al.'s (2011) results provide evidence of income-increasing earnings management techniques during crisis years. By contrast, the results of Goh et al. (2013) show that companies practice upward real earnings management to avoid losses in the pre-economic crisis period, while Jaggi and Tsui (2007) found that firms tend to manage earnings upwards in crisis as well as in pre-crisis periods. Choi et al. (2011) argued that the AFC 'encouraged managers to engage in opportunistic earnings management' (p. 170) and Lee and Seo (2010) concluded that the financial sector reforms initiated by the Korean government after the crisis period 'reduced the opacity of Korean firms' earnings reports' (p. 51).

Similarly, AFC studies that have used 1998 as the starting year have provided evidence of both income-decreasing (Chia et al., 2007) and income-increasing (Masruki & Azizan, 2013) behavior during the crisis. Charoenwong and Jiraporn (2009) showed evidence of earnings management in Singaporean and Thai non-financial companies, although found that the latter stopped managing their earnings after the crisis. Likewise, Kim and Yi (2006) concluded that Korean firms managed earnings more aggressively during the post-crisis period than they did during the pre-crisis period.

Regarding GFC studies, Rusmin et al. (2013) showed that in periods of economic downturn, managers engage in a 'less aggressive income-increasing discretionary accruals strategy' (p. 7), while Habib et al. (2013) found evidence of income-decreasing earnings management techniques and that negative discretionary accruals reduced during the GFC. Lastly, by considering only the Eurozone, Vladu (2013), using 2008 as the starting year, showed a decrease in income smoothing in times of crisis, while Iatridis and Dimitras (2013), who used 2009, focused on how the recent financial crisis 'affects the scope for earnings manipulation for companies that are audited by a big 4 auditor' (p. 160), although to a different extent in different countries. Kousenidis et al. (2013) focused on the ongoing European debt crisis and found that firms reported earnings with higher quality in 2010 and 2011 as the GFC turned into a sovereign debt crisis. These results suggest that when financial history is divided by using different financial crisis starting cut-off points, contradictory conclusions are reached, which can hamper comparability.

In summary, previous positivist research on the impact of financial crisis on managers' earnings management behavior has shown ambiguous results, depicting different scenarios depending on the choice of firm context/type, and on the financial crisis starting date. These contradictory conclusions could be due to the openness of the system in which the phenomena occur. Specifically, the lack of consensus on the direction and magnitude of earnings management in times of recession could depend on the impracticability of replication since the question cannot be investigated in a closed system (laboratory) 'where other mechanisms that are not being tested will not affect the outcome' (Collier, 2005, p. 329). Since a constant conjunction model (whenever a financial crisis happens, earnings management happens) cannot be obtained in an open system we should endeavor, wherever possible and practicable, to avoid examining the financial crisis-earnings management relation only from a positivist or behaviorist perspective. If done, the results should be expressed in terms of tendencies (Collier, 2005), and will provide evidence of a 'probabilistic truth' rather than an 'absolute truth' (Bisman, 2010) view of the presence/absence of the effects on earnings quality of financial crisis.

4 CR APPROACH TO THE FINANCIAL CRISIS- EARNINGS MANAGEMENT RELATION

This section presents the CR approach to the research question since a different approach can be complementary to research. It abandons the search for a predictive model, the assumption of system closure and adopts a CR perspective to search for the underlying mechanisms of earnings management. By presenting a CR perspective as an alternative, it is argued against financial crisis serving as a generative mechanism for managing earnings from an etymological point of view. Further, retroductive reasoning is used to explore other potential generative mechanisms for earnings management by applying Fleetwood's (2011) CR conceptualization of tendencies.

4.1 Against the causal law of a constant conjunction model: An etymological perspective

The word 'crisis' originates from a Latinized form of the Greek *krisis* ('decision'), from *krinein* ('to decide'). One of its meanings is that of the 'turning point in a disease' (Oxford Dictionaries, n.d.), namely when a change occurs, leading either to recovery or to death[6]. Crisis is thus the point at which the disease takes a direction. The only consequence of a crisis is that a patient, suffering from a pre-existing disease, either starts to get better or worse suddenly. From this perspective, financial crisis can be seen as the turning point of a disease that affects financial markets, after which they either go up or go down. Thus, etymologically speaking, a cause of earnings management is hard to find in financial crisis. It therefore remains unclear how and why financial crisis might affect companies' earnings behavior.

Of course, managers and financial markets may suffer from some kind of disease and reach a turning point; both may or may not interact, but they remain distinct entities. Only a pre-existing disease that affects a manager or financial market can lead to crisis, at which point we observe a certain behavior of the disease itself and the patient's conditions either improve or worsen suddenly.

4.2 A new CR conceptualization of tendencies applied to earnings management

From a transcendental realist ontology, 'structures and generative mechanisms must be analysed as the tendencies and powers of enduring and transfactually acting things' (Bhaskar, 2008a, p. 221). Fleetwood (2011) stated that a tendency is the 'transfactual way of acting of a thing' (p. 3) and that power and tendency are synonymous and thus interchangeable. Powers or tendencies, depending on the satisfaction of extrinsic and intrinsic enabling, stimulating, or releasing

[6] *Lucius* Annaeus Seneca used the word '*crisin*' in Epistulae Morales ad Lucilium, Liber X, 83, in which he reflects upon his advancing years: 'Hic quidem ait nos eandem crisin habere, quia utrique dentes cadunt' (Seneca, 1920 [C. 62–65 AD], p. 258).

conditions,[7] belong to distinct moments in the causal chain (Bhaskar, 2010), denoted tendency_1 to tendency_8 (Fleetwood, 2011)[8].

A tendency_1 or tendency_a (Bhaskar, 2010) is ‘a power which may be exercised unrealized, a power normically qualified’ (Bhaskar, 2008a, p. 221) or ‘a transfactually efficacious (or normically qualified) power’ (Bhaskar, 2010, p 61). A tendency_2 is ‘a power whose intrinsic enabling conditions were satisfied, i.e. a power ready to be exercised’ (Bhaskar, 2008b: 72). In Bhaskar’s thoughts, a tendency_2 is a stronger notion of tendency since the intrinsic enabling conditions are satisfied. The distinctiveness of these two concepts of tendency is conveyed by using the following well-known example: ‘All men (living in certain kinds of societies) possess the power to steal; kleptomaniacs possess the tendency to do so’ (Bhaskar, 2008a, p. 222). In other words, kleptomaniacs are predisposed or oriented towards stealing (Bhaskar, 2008a).

A tendency_3 is a power whose intrinsic and extrinsic enabling conditions are satisfied and thus ‘prone to be exercised’ (Bhaskar, 2008b, p. 72). A tendency_3 ‘plus the satisfaction of intrinsic stimulating or releasing conditions’ (Bhaskar, 2008b, p. 72) gives a tendency_4, which Bhaskar called ‘motivated,’ while a tendency_3 plus the satisfaction of extrinsic, but not intrinsic, stimulating or releasing conditions gives a tendency_5, i.e., ‘lapsed, lagged or late’ (Bhaskar, 2008b, p. 72). Accordingly, there is a shortcoming in CR conceptualization of tendencies since ‘it does not make sense to conceive of an exercised tendency_1 as a tendency that has no intrinsic enabling conditions satisfied’ (Fleetwood, 2011, p. 10). Fleetwood (2011) further suggested that the difference between tendency_1 and tendency_2 is related to the ‘difference *within* the intrinsic enabling conditions themselves’ (p. 11) and that the intrinsic enabling conditions are continuous rather than being ‘of an either/or, discrete, dichotomous or *discontinuous* nature’ (p. 14). Fleetwood (2011) clarified:

‘Of any thing, there is a set of intrinsic properties or intrinsic enabling conditions—denoted ic_w and ic_x—that must be satisfied if it is to have an *exercised* tendency_1 to do ø; and if it does not have ic_w
and ic_x, then it does not have this *exercised* tendency_1 to do ø. Of anything, there may be a further set of intrinsic properties or intrinsic enabling conditions—denoted ic_y and ic_z—that must be satisfied if it is to have an *actualised* tendency_2 to do ø; and if it does not have ic_y and ic_z, then it does not have this *actualised* tendency_2 to do ø.’ (p. 11)

Restating Bhaskar’s (2008a) previous example with the help of Fleetwood’s terminology, all men (living in certain kinds of societies) possess the power to steal (tendency_1). Being a human being and living in certain kinds of societies satisfy the first set of intrinsic properties or intrinsic enabling conditions (ic_w and ic_x); stealing belongs to the class of actions possible for human beings that live in certain societies. However, when a further set of intrinsic properties or intrinsic enabling conditions (ic_y and ic_z) are satisfied, the subject becomes a kleptomaniac, a ‘thing distinct

[7] Pinkstone’s (2007) entry on ‘tendencies’ in the *Dictionary of Critical Realism* defined enabling conditions as ‘the positive form of causality possessed by a causal power or powers (as distinct from the negative form of a constraint) or the generative mechanisms that give rise to a tendency. Moreover, it defined stimulating conditions as ‘all those factors that trigger, facilitate or reinforce the exercise of a tendency, some of which may involve an element of contingency’ and releasing conditions as ‘the circumstances in which countervailing factors are either absent or weak—there are few or no impediments to the exercise of a tendency.’

[8] Only the first five tendencies are presented in this section.

from others of its kind' (Bhaskar, 2008a, p. 222). He/she then has a tendency$_2$, ready to be exercised.

Hence, in the context of the present study, all managers (working for certain kinds of companies) possess the power to manage earnings but only earnings managers possess the tendency to do so. Here, some of the (least important) intrinsic properties or intrinsic enabling conditions of a manager working in a certain company are satisfied; thus, he/she has the exercised power or the exercised tendency (tendency$_1$) to manage earnings. However, being an earnings manager means going further in the causal chain: an earnings manager has an actualized tendency (tendency$_2$); in other words, the '*more, most*, or the *most important* intrinsic enabling conditions' (Fleetwood, 2011, p. 11) are satisfied.

To illustrate this point, a pragmatic example often used by CRs (Harre & Madden, 1975; Bhaskar, 2008a; Fleetwood, 2011) is adapted to show the difference between managers and earnings managers. A manager is like 'a car with the engine running and the gear in neutral' (Fleetwood, 2011, p. 7). Specifically, the thing (car or manager) 'has a set of intrinsic enabling conditions—denoted i_{cw} and i_{cx}—satisfied, giving it an *exercised* tendency$_1$ to transport its passengers' (Fleetwood, 2011, p. 12) or to manage earnings. An earnings manager is 'this same car with its engine running *and* first gear selected' (Fleetwood, 2011, p. 7). Here, the thing (car or manager) 'has a further set of intrinsic enabling conditions—denoted i_{cy} and i_{cz}—satisfied, giving it, in addition to the *exercised* tendency$_1$, the *actualised* tendency$_2$ to transport its passengers' (Fleetwood, 2011, p. 12) or to manage earnings.

However, a tendency$_2$ is no longer possessed by a thing if its intrinsic offsetting interferes 'with the operation of the mechanism responsible for the satisfaction of the intrinsic enabling conditions' (Bhaskar, 2008a, p. 225)[9]. At this point in the continuum, extrinsic enabling conditions have to be satisfied for a tendency$_2$ to become a tendency$_3$, i.e., 'prone to be exercised' (Bhaskar, 2008b, p. 72). For a car, 'the presence of the driver is an extrinsic condition. A car does not cease to be properly a car when the driver steps out. The actions performed by the driver to set the car in motion are extrinsic stimuli' (Harre & Madden, 1975, p. 88). Further, intrinsic and extrinsic stimulating or releasing conditions may or may not set the earnings manager in motion. In the causal chain, this corresponds to either tendency$_4$, namely 'motivated' (Bhaskar, 2008b, p. 72) when the intrinsic stimulating/releasing conditions are satisfied, or tendency$_5$, namely 'lapsed, lagged or late' (Bhaskar, 2008b, p. 72) where only extrinsic, and no intrinsic, stimulating or releasing conditions are satisfied. For an earnings manager, the presence of financial crisis can thus only be seen as an extrinsic condition, not as the cause of earnings management.

[9] Bhaskar (2008a) observed: 'Offsetting causes are often assumed to be always extrinsic. But the cause of a failure of a car to move when the gear is in neutral is not something distinct from and extraneous to the mechanism responsible for its normal motion. [...]. Now intrinsic offsetting causes may or may not directly interfere with the operation of the mechanism responsible for the satisfaction of the intrinsic enabling conditions. If they do then we must say that the tendency$_2$ is no longer possessed.' (p. 225).

According to previous research, rather than the extrinsic enabling conditions or extrinsic stimulating/releasing conditions, namely the 'extrinsic motivations'[10] (Ryan & Deci, 2000, p. 56) and incentives behind a tendency$_2$, the interesting factors are the intrinsic enabling conditions and intrinsic offsetting causes (countervailing causes). The accounting literature pullulates with extrinsic motivations, such as stock market, contracting, and regulatory motivations (Healy & Wahlen, 1999) as well as with other extraneous incentives—to which financial crisis belongs—for earnings management. When the extrinsic enabling conditions and extrinsic stimulating/releasing conditions, also known as the 'external prods, pressures, or rewards' (Ryan & Deci, 2000, p. 56), are removed, he/she does not cease to be an earnings manager. However, an earnings manager does cease to be so when the '*more, most*, or the *most important* intrinsic enabling conditions' (Fleetwood, 2011, p. 11) are not satisfied or, although satisfied, when intrinsic offsetting causes interference.

5 DISCUSSION AND CONCLUSION

By assuming the existence of causal laws of a 'constant conjunction' type, previous research on how financial crisis affects managers' earnings management behavior has resulted in different scenarios with inconclusive results. The ambiguity in the findings in the literature, suggest abandoning the idea of 'discovering [the] causal laws of a "constant conjunction" model' (Collier, 2005, p. 328) since the research question cannot be investigated in the context of a closed system. While limited by the openness of the system, further research might try to isolate the mechanism (financial crisis) from the other driving forces (poor performances, insider trading, debt renegotiation, IPOs, financial distress, etc.) that might affect the outcome. For instance, choosing financially healthy high earnings quality firms (in which earnings management, the property of interest, should be absent) might partially transform the mainstream research design from theory confirming into theory testing.

As an alternative, future researchers might aim to explore other structures or generative mechanisms responsible for the given phenomenon (Lawson, 1997) and analyze them 'as the tendencies and powers of enduring and transfactually acting things' (Bhaskar, 2008a, p. 221). Further, despite critically arguing against the causal law based on a constant conjunction model, the present study cannot exclude the opposite causal relation or the presence of other generative mechanisms that may cause financial crisis. Indeed, one cannot exclude the absence of any causal law based on a constant conjunction model.

This study did not set out to demonstrate whether previous research may have mistook the cause for the effect. Fleetwood's (2011) conceptualization of tendencies suggests that financial crisis is not the cause of earnings management, only an extrinsic enabling condition or, more likely, a stimulating or releasing condition for managing earnings, i.e. financial crisis contributes either to make from a tendency$_2$ a tendency$_3$, 'prone to be exercised' (Bhaskar, 2008b, p. 72) or from a tendency$_3$ a tendency$_5$, 'lapsed, lagged or late' (Bhaskar, 2008b, p. 72). Extrinsic enabling conditions or extrinsic stimulating or releasing conditions, if removed, will not change an earnings

[10] 'Extrinsic motivation' is a construct that pertains to whenever an activity is carried out in order to attain some separable outcome. It thus contrasts with intrinsic motivation, which refers to carrying out an activity simply for the enjoyment of the activity itself, rather than its instrumental value (Ryan & Deci, 2000, p. 60).

manager: he/she will still have an actualized tendency (tendency$_2$) to manage earnings. Future research could aim to investigate intrinsic enabling and offsetting causes rather than extrinsic enabling conditions or intrinsic/extrinsic stimulating or releasing conditions.

To sum up, managers working in certain kinds of companies have the power to manage earnings. In this respect, earnings managers are predisposed or oriented towards managing earnings, but no intrinsic offsetting causes must interfere in this process (Bhaskar, 2008a). Like a kleptomaniac or a car with its engine running and first gear selected, earnings managers are only one species in the genus *manager* by displaying, in addition to the *exercised* tendency, the *actualized* tendency to manage earnings. Nevertheless, 'the attribution of tendency$_2$ requires more about things to be known' (Bhaskar, 2008a, p. 224), such as that a set of intrinsic enabling conditions (ic_w and ic_x) as well as a further set of intrinsic enabling conditions (ic_y and ic_z) are satisfied (Fleetwood, 2011, p. 11) and that intrinsic offsetting causes may cause interference.

The interesting scientific perspective is not whether an earnings manager really manages earnings, but why this behavior may occur (Bhaskar, 2008a). Understanding the intrinsic enabling conditions and intrinsic offsetting causes that may excite or suppress their tendency to manage earnings thus remains an unanswered question. Indeed, although the sets of intrinsic enabling conditions and offsetting factors may remain under-researched because 'there is a level of [intrinsic] activity, perhaps unknown, […] that is predisposed to perform an action of a certain type' (Bhaskar, 2008a, p. 227), it is clear that they exist.

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