The current issue and full text archive of this journal is available on Emerald Insight at:
https://www.emerald.com/insight/0025-1747.htm

MD
63,13

28

Governmental reforms and earnings management: examining their influence during a crisis

Riccardo Cimini, Lorenzo Coronella and Alessandro Mechelli
Department of Management and Law, University of Rome Tor Vergata, Rome, Italy

Received 31 October 2023
Revised 8 May 2024
24 July 2024
17 September 2024
Accepted 25 October 2024

Abstract

Purpose – This paper examines the ability of those governmental reforms adopted in response to the COVID-19 outbreak to affect earnings management (EM).

Design/methodology/approach – The paper focuses on the Italian decision to suspend the recapitalization obligation to guarantee the respect of the going concern's assumption. By analysing a sample of unlisted entities, this analysis uses different techniques to detect EM before and after the suspension of that obligation.

Findings – The results suggest that EM decreased after the decision to suspend recapitalization obligations.

Research limitations/implications – Accounting quality depends on not only accounting standards but also management practices in response to those government measures instituted during the COVID-19 outbreak.

Originality/value – The results are a novelty in the literature. In terms of the institutional theory, they provide evidence of EM decrease, thereby validating the assumption that regulation can enable and empower social actors – particularly their actions – despite the visions of repression and constraint conjured by that concept. Isomorphism theory supports the thesis and results that indicate that EM decreases not only in emerging markets, where corporate governance mechanisms are less able to obstruct EM, but also in the developed countries. Thus, insightful and novel conceptualizations can still be achieved by using institutional theory. Yet the findings also extend agency theory assumptions and demonstrate that also the issuance of less severe regulation can reduce agency costs and, in turn, also EM.

Keywords Earnings management, Agency theory, Institutional theory, COVID-19, Recapitalization obligation suspension, Italy

Paper type Research paper

1. Introduction

The increased complexity of today's economic, environmental and social systems can lead to crises, uncertainty, and risk becoming common issues worldwide (Guaita Martínez *et al.*, 2024). The COVID-19 outbreak was a never experienced and unexpected emergency that has exacerbated the complexity at all levels. Indeed, from March 2020 to May 2023, when that health emergency was officially declared over, the pandemic crisis produced negative effects for not only the whole economy, but also for business (Goodell, 2020; Hu and Zhang, 2021) and the quality of reporting (Hsu and Yang, 2022; Chen *et al.*, 2023). In response to these negative effects, several countries have tried implementing different policies to support enterprises. These include a combination of regulatory, monetary, and fiscal policies to mitigate the negative influence of COVID-19 (Zou *et al.*, 2024). Such policies have varied significantly and led to different outcomes (Tarkom, 2022; Iyer and Simkins, 2022). For instance, in the European Union, emergency countermeasures (such as lockdowns) led those governments (Piva and Guerini, 2023; Fasano *et al.*, 2022) to introduce, amongst others, policies to allow companies to maintain the "going concern" assumption. This paper investigates the potential effects that these policies might produce on the management decision

© Riccardo Cimini, Lorenzo Coronella and Alessandro Mechelli. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http://creativecommons.org/licences/by/4.0/legalcode

Conflict of interest declaration: We declare that we have no conflict of interest.

Management Decision
Vol. 63 No. 13, 2025
pp. 28-45
Emerald Publishing Limited
e-ISSN: 1758-6070
p-ISSN: 0025-1747
DOI 10.1108/MD-10-2023-2026

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

to practice accrual accounting earnings management (EM) to meet certain earnings targets (Schipper, 1989; Larcker and Richardson, 2004; Dechow *et al*., 2010; Beuselinck *et al*., 2019).

The motivation for this paper is framed using both institutional and agency theories. According to institutional theory, many types of regulation enable and empower the social actors — especially their actions, practices, and incentives (Ratu and Rahajeng, 2024) — by conferring licenses, special powers, and benefits, despite the visions of repression and constraint conjured up by the very concept of regulation (Scott, 2013, p. 61). Thus, this paper goes beyond agency theory, the most utilized theoretical lens used by scholars involved in the EM field (Naz *et al*., 2024). EM's opportunistic view suggests that managers depart from normal business activities with the desire to misinform financial statements (Habib *et al*., 2022), and theorizes that — in addition to those internal corporate governance mechanisms, which have been extensively investigated in the literature — less severe governmental policies can indeed reduce agency costs (Jensen, 2005) and, in turn, EM.

This paper also examines the effects on EM of one of these policies, that of the Italian legislation that allows companies to avoid having to recapitalize if their share capital falls below the statutory limit due to losses. This policy, as stated by Article 6, § 1 of Decree-Law (DL) No. 23 of 8 April 2020, suspended several articles of the Italian Civil Code. It was extended by DL No. 198 of 29 December 2022, with effects being evident on annual reports issued between 2020 and 2022. The policy objective was to minimize the pandemic's negative effects on business through, for example, the Italian policy to suspend depreciation (Mattei *et al*., 2023).

Based on the literature, during the pandemic, EM increased (da Silva Flores *et al*., 2023; Garfatta *et al*., 2023; Taylor *et al*., 2023; Ryu and Chae, 2022; Rahman *et al*., 2023; Yan *et al*., 2022), raising the likelihood of being able to overcome the negative effects produced by the pandemic. During the pandemic, by filling a gap in the literature, we expected to find decreased EM after the introduction of such specific Italian legislation. According to our reasoning, considering the strict correlation between the amount of equity and reported earnings, introducing a governmental measure, such as the suspension of recapitalization obligation to alleviate the severity of possible capital erosion in a crisis, should reduce EM practices. However, such practices are no longer enough to guarantee that firms survive after the introduction of such regulation.

To test this hypothesis, we adopted Larcker and Richardson's (2004) model. To test the robustness of our findings, we used ratio analysis and other regression models. The sample consisted of 14,404 unlisted Italian firms whose accounting amounts for 2018–2021 were downloaded from the AIDA database, where 2018–2019 is considered to be antecedent to the suspension of recapitalization requirements and 2020–2021 is considered to be after such suspension. The data from the regression models confirmed a decrease in the management decision to manipulate earnings after the introduction of the recapitalization suspension when compared to the pre-introduction period.

This paper contributes to the existing knowledge in at least two ways. First, when focusing on a pandemic setting, few papers, if any, have investigated the effect produced by a regulatory measure, such as the suspension of the recapitalization obligation in a developed country like Italy, on the management decisions to manipulate the reported earnings. A regulation's ability to affect EM (interpreted as management's action to misrepresent financial information) is not typical of emerging countries, where corporate governance mechanisms are less effective in obstructing EM than in developed countries (Almarayeh *et al*., 2022; Bao and Lewellyn, 2017). The isomorphism (DiMaggio and Powell, 1983), a fundamental concept of new institutional theory (Rudko *et al*., 2024), allowed this paper to extend the results achieved in emerging countries to the developed countries, thereby contributing to the literature and providing evidence that does not accept Alvesson and Spicer's (2018) conclusion that "neo-institutionalism is now facing a 'mid-life crisis'" or that, "while remaining one of the dominant paradigms of organizational studies, it can no longer produce insightful and novel conceptualizations" (Rudko *et al*., 2024).

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

Secondly, although academics have investigated monitoring activity's ability to reduce agency costs to align shareholders' and managers' interests and, in turn, avoid EM behaviours (Ghaleb *et al*., 2020) while focusing on corporate governance mechanisms (Gerged *et al*., 2023), this paper provides new insights that less severe governmental policies also matter, as they are able to reduce agency costs and, in turn, EM behaviour. To the best of our knowledge, the only paper that has yet investigated the relationships between EM and governmental policy is that by Ratu and Rahajeng (2024), but it focuses on the ability of the female presence in audit committee to affect EM in the presence of anti-corruption disclosure policies before the 2018 financial crisis.

In light of these considerations, it is not surprising that our findings contrast with the literature that indicates an increase in opportunistic behaviours during the pandemic (da Silva Flores *et al*., 2023; Taylor *et al*., 2023; Yan *et al*., 2022). To this extent, our results have implications for actual practice by showing that accounting quality (Barth *et al*., 2008) depends not only on accounting standards, but also governmental measures, such as the one investigated in this paper that affected Italian firms during the COVID-19 pandemic. To understand how, it is necessary to consider that less severe governmental policies on recapitalization obligation should avoid underestimating loan loss provisions and/or depreciations, thereby leading to a more conservative accounting. Conservatism is a dimension of accounting quality and plays an informational role, whereby the timely reporting of bad earnings news reduces the information asymmetry (Ball and Shivakumar, 2005) between debtholders and the firms, thereby facilitating access to capital and debt renegotiations (Biddle *et al*., 2022). In addition to conservatism, the same policies should increase earnings quality thanks to a reduction of opportunistic EM practices that are intended to inflate earnings and book value, which the literature has demonstrated to be very common in periods of crisis like the COVID-19 pandemic.

The remainder of this paper is thus organized as follows. Section 1 presents the context of the research and its relevance with a summary of the main findings, their contributions, and implications for theory and practice. Section 2 contains the related research and the hypothesis development. Section 3 presents the research design. Section 4 includes the sample selection and descriptive statistics. Section 5 summarizes the results. Finally, Section 6 presents the conclusions, limitations, and future developments for continued research.

2. Literature review and hypothesis development

2.1 Theoretical background

According to institutional theory (Meyer and Rowan, 1977), institutions are comprised of regulative, normative, and cultural-cognitive elements that, together with their associated activities and resources, provide stability and meaning to social life (Scott, 2013, p. 56). Through regulation, institutions not only provide prohibitions and constraints on the action being taken, but also support and empower activities and the actors (Scott, 2013, p. 58). Indeed, many types of regulation enable and empower social actors and their action, conferring licenses, special powers, and benefits despite the concept of regulation only conjuring up visions of repression and constraint (Scott, 2013, p. 58). From a theoretical perspective, this study is interested in the regulative elements and activities that provide stability to each organization. Thus, the suspension of the recapitalization requirement for Italian companies, the particular focus of this paper was introduced to guarantee stability to each organization throughout the COVID-19 pandemic. As institutional theory suggests, the introduction of such a regulation should have provided incentives to do or not to do certain activities. In particular, it can be explained through institutional theory that variations in institutional characteristics—such as values, norms, and solid governance monitoring—can be a source of pressure that can also affect managers' incentives (Ratu and Rahajeng, 2024, p. 350) and in particular EM.

This paper considers EM practices, the management actions taken to misrepresent financial information, that the literature frames within agency theory. Such theory, already extensively

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

adopted by academics (Naz *et al*., 2024), hypothesises the conflict of interest between managers and shareholders (Jensen and Meckling, 1976) that can lead the former to behave opportunistically against the latter. EM practices are a response to such conflict, and its magnitude, according to our arguments that are framed within the institutional theory, might be affected positively by the issuance of a less severe regulation such as the one this paper investigates.

The managerial actions to manipulate earnings can involve accrual accounting and/or real EM (Gaio *et al*., 2022), thereby producing "accrual accounting EM" and "real activity EM". The former refers to the manipulation of accruals (Cohen and Zarowin, 2010; Trueman and Titman, 1988; Zang, 2012) whereas the latter refers to the manipulation of real activities (Einhorn *et al*., 2018; Graham *et al*., 2005; Lee *et al*., 2024) and, therefore, also can influence cash flow.

As no studies have examined accrual accounting EM before and after the introduction of recapitalization suspension in Italy in response to the negative pandemic effects, this study analyses EM studies during a financial crisis and especially the COVID-19 pandemic. Indeed, the governmental policy of the suspending the recapitalization requirement was enacted in the context of a financial crisis, namely, during the pandemic, in response to its negative effects on the ability of firms to respect and understand the going concern assumption. Reviewing this literature, however will help to compare and contrast the results of this paper before and after the introduction of the regulation during the pandemic to the results from studies that focused on the same period but without considering the introduction of any new regulation.

2.2 EM during financial distress

Several scholars have questioned the effects of economic crises on EM. The topic has been extensively investigated, especially in family firms, and future research in this area was deemed to be essential (Naz *et al*., 2024).

The results achieved by academics do not always agree. A number of studies have demonstrated that crisis contexts provide incentives to managers to increase EM. Bornemann *et al*. (2012) found that, between 1997 and 2009, EM through 340f reserves became more relevant during financial crises by presenting a stable income stream, which is an important point to address during crises, particularly for commercial banks. Graham *et al*. (2005) conducted surveys and interviews with more than 400 executives to identify the factors that drive reported earnings and disclosure decisions and found that, among other results, that EM is more prevalent in bad times. Habib *et al*. (2013) examined managerial EM practices of financially distressed firms and considered a sample consisting of NZX-listed firms from 2000 to 2011. They found that managers of distressed firms engaged in more income-decreasing EM practices than did their healthy firm counterparts. Saleh and Ahmed (2005) considered similar issues for a sample of 153 firms listed on the KLSE during the Asian financial crisis.

Still, other studies have shown an inverse relationship between economic crises and EM. Cimini (2015) investigated the effects of the 2008 financial crisis on EM by sampling non-financial listed companies from 15 EU countries. His research found a decrease in EM since the beginning of that crisis. Filip and Raffournier (2014) achieved the same result and concluded that the reasons for this phenomenon could be found in "conservatism", in the monitoring conducted by auditors (Ming Chia *et al*., 2007), in the higher quality of reporting required in times of crisis, in a greater tolerance for negative operating results during economic crises, and in the increased risk of litigation. Such findings argue again the belief that managers increase opportunistic behaviours during crises to achieve certain goals (Iatridis and Dimitras, 2013), such as having a "big bath" to clean up their balance sheets in anticipation of having an earnings boost after the crisis. Ma and Song (2016) also observed that EM becomes weaker during times of crisis.

Strobl (2013) and Campa (2019) offered possible explanations for such contradictory findings. Strobl found a relationship that depends on multiple aspects by considering an

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

agency model of a multi-asset economy with risk-averse investors where managers can misstate companies' earnings, Strobl showed that "the manager's incentive to overstate a firm's earnings is inversely related to the correlation between that firm's earnings, and market: managers of firms whose earnings are more strongly correlated with the market during periods of economic expansion are more inclined to engage in manipulation during periods of recession, and vice versa". Campa (2019) studied the different gradations of EM between listed and unlisted firms and explained the different EM practices based on the level of firm indebtedness. In high levels of indebtedness, there was a more extensive use of income-increasing EM behaviours among listed firms than among unlisted ones (Campa, 2019).

Table 1 below summarizes the contradictory findings of scholars who have investigated the effects of financial crises on EM.

2.3 EM during COVID-19

Turning now to the COVID-19 pandemic, several specific studies have examined EM in different areas of the world, with the majority providing evidence of an EM increase. Šušak (2020) examined Croatian-listed companies and the effects of regulatory changes (introduced after the pandemic) on EM policies. That evidence indicated a positive relationship between financial statements' lack of timeliness and EM activities. In the Eastern world, Yan *et al*. (2022) analysed how the pandemic affected the EM of Chinese companies. These researchers reported how the companies that were surveyed developed an increase in both accrual-based and real EM policies. Rahman *et al*. (2023) achieved the same results by showing that both family-owned and non-family-owned listed companies were equally affected. Ryu and Chae (2022) observed the same phenomenon for the distribution and services sector in Korea. Yassin *et al*. (2022) observed how, during the pandemic, the revenue standard was used as a tool for EM at both IFRS and US GAAP levels. Khanchel and Lassoued (2022) investigated whether a difference in intensity emerged in EM between socially responsible companies (SRCs) and non-SRCs during the COVID-19 pandemic. They found that the observed phenomenon was more pronounced in SRCs during the pandemic. Garfatta *et al*. (2023) studied the implications for Tunisian-listed companies and showed that companies adopted both accrual EM and real EM on a large scale during the reporting period; thus, the pandemic provided fertile ground for this type of strategy. More recently, Taylor *et al*. (2023) studied a sample of European banks to validate the increase in EM found by the majority of scholars. In addition, da Silva Flores *et al*. (2023) compared and contrasted EM in U.S. and Brazilian listed companies during the pandemic and found that companies in both Brazil and the U.S. practised EM more during the pandemic than during other crises. The researchers identified this action as a trend reversal from previous crises and found its justification in the analysed companies' attempt to postpone the negative effects of the crisis on their balance sheets to the greatest extent possible.

While also studying the U.S., Liu and Sun (2022) focused on the impact of the COVID-19 pandemic on EM, but observed a decrease in discretionary accruals following an increase in absolute accruals between 2019 and 2020. The authors concluded that companies lowered their accruals to inflate their income in subsequent years. Uddin (2023) observed that non-financial companies listed in Bangladesh showed a lower incidence of EM policies. In terms of global observations, Ali *et al*. (2022) analysed a sample of companies from the G-12 countries and found that the incidence of EM decreased during the pandemic.

Despite some contradictory results, most of the previous studies have found that during the COVID-19 pandemic, companies increased EM practices to better weather the crisis period. Table 2 below summarizes the findings for the effect on EM produced by the pandemic crisis.

2.4 Hypothesis development

As previous research has indicated, the effects of financial crises on EM have shown contradictory results. Some studies have provided evidence that EM decreased during and

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

Table 1. EM during financial crises

Research product	EM behaviour	Motivations
Bornemann *et al.* (2012)	EM increased	To present a stable income stream
Graham *et al.* (2005)		To build credibility with the capital market; maintain or increase stock price; improve the external reputation of the management team; convey future growth prospect
Habib *et al.* (2013)		Compared to healthy firms, managers of distressed firms employ an income-decreasing EM technique. This finding is consistent with DeAngelo *et al.* (1994) who found that managers engage in downward EM via negative abnormal accruals and discretionary write-offs, rather than attempt to inflate reported income
Iatridis and Dimitras (2013)		Low-profitability companies increased opportunistic behaviours during crises to achieve certain goals (such as "big bath")
Saleh and Ahmed (2005)		Financially distressed firms' seeking debt restructuring are more likely to adopt income-reducing accruals than those firms that have not undertaken debt restructuring. Such large abnormal accruals may be related to the sample firms' ongoing difficulties. It is also possible that the magnitude of negative discretionary accruals have been accentuated due to the reversal of some past income-increasing discretionary accruals in the two and three years before debt defaults
Cimini (2015)	EM decreased	(1) Increase of conditional conservatism during the financial crisis; (2) Close monitoring activity of the auditor
Filip and Raffournier (2014)		(1) A possibility that managers have less incentive to manipulate earnings in crisis periods due to a higher market tolerance for poor performance; (2) litigation risk increases during crises, which should dissuade insiders from engaging in EM; (3) the change in the behavior of companies may also respond to a higher demand for more timely earnings during troubled periods
Ma and Song (2016)		Results consistent with diminished EM in a recession period as suggested, by among others, by Strobl (2013)
Strobl (2013), Campa (2019)	The relationship between EM and crisis depends on multiple aspects; under high levels of indebtedness, there is a more extensive use of income-increasing EM behaviours among listed firms when compared to unlisted ones	The manager's incentive to overstate a firm's earnings is inversely related to the correlation between that firm's earnings and the market: Managers of firms whose earnings more strongly correlate with the market during periods of economic expansion are more inclined to engage in manipulation during periods of recession, and vice versa

Note(s): The table summarizes the findings for the effect on EM produced by the financial crisis
Source(s): Table by authors

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

Table 2. EM during COVID-19

Research product	EM behaviour	Motivations
da Silva Flores *et al.* (2023)	EM increased	Attempts by the companies to postpone the negative effects of the crisis on their balance sheets
Garfatta *et al.* (2023)		Large scale accounting practices during the crisis period allow firms to report positive earnings in the post-crisis period
Liu and Sun (2022)		Significant decline in discretionary accruals from 2019 to 2020 suggest that firms engaged in more income-decreasing EM to take a big bath in reporting earnings in the pandemic year.
Khanchel and Lassoued (2022)		Three factors explain the relationship between CSR and EM: Pressure, opportunity and rationalization
Rahman *et al.* (2023)		Family owners have an incentive to manage earnings when the company's performance is poor. The managers of such companies have considered and taken certain measures to survive this sudden and large-scale pandemic
Šušak (2020)		Reporting delays after regulatory changes during the pandemic could be attributed to EM activities. Due to financial difficulties and uncertainty caused by the coronavirus, companies were more inclined to manipulate financial statement items
Taylor *et al.* (2023)		Banks are inclined to manage earnings during crises to reduce earnings volatility
Yan *et al.* (2022)		High degree of financial constraints increases EM. So, enterprises in industries and regions where COVID-19 is more severe are more affected by the suspension of work and production caused by the epidemic prevention policies choose accrual-based EM using accounting items rather than carrying out EM through real activities
Ryu and Chae (2022)		Although the distribution industry has enjoyed increased demand because many companies have been expanding their distribution channels, including online sales, companies in the industry have engaged in more EM since the pandemic began because their future prospects remain uncertain as the pandemic dragged on
Yassin *et al.* (2022)		Some actions provided by governments are deemed as channels for practicing EM, especially concerning the changes in the contracts with customers that companies have entered into under IFRS 15 in line with requirements of the COVID-19, which companies then exploited to practice EM
Ali *et al.* (2022)	EM decreased	Only firms in the countries that were less adversely affected due to the pandemic tended to engage less in EM practices, while among firms listed in countries that were more adversely affected by the pandemic, EM practices appeared not to be significantly less during the pandemic. These findings are unsurprising, as those firms listed in the most adversely affected countries were expected to engage in more EM practices to mitigate the negative effects of the pandemic on their operating performance and so report better performance, a result that was also in line with prior studies
Uddin (2023)		The COVID-19 pandemic had a moderating effect on the relationship between CEO traits and real EM

Note(s): The table summarizes the findings for the effect on EM produced by the pandemic crisis
Source(s): Table by authors

after crises, while other studies have shown evidence of an EM increase. For the recent pandemic, the literature seems to suggest a general increase in EM. When examining the motivations behind these findings, no studies have theorised on the impact on EM of government reforms that were adopted in the context of the COVID-19 pandemic. Most of the motivations were based on the intention to mitigate the negative effects of the pandemic on

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

their operating performance by reporting better performance (Ali *et al*., 2022) or, thanks to the so-called "big bath," to postpone the positive performance to the end of the crisis (Garfatta *et al*., 2023). To fill this gap in the literature, this paper studies the effects of a government measure that suspended the recapitalization obligation to maintain the going concern assumption for EM.

Knowing this, we believe that the introduction of a policy to help firms maintain the going concern assumption in response to the pandemic might have reversed this EM trend, thereby leading to a reduction in management's decision to manipulate earnings. This trend is particularly evident if the policy reduced the agency costs and the severity of the legal requirements and, in particular, if the same policy regarded the minimum capitalization obligations to respect in case of losses. As the book value of equity is directly correlated with and dependent on the reported earnings, a governmental measure that can alleviate the severity of possible capital erosion in a crisis could have a positive impact on management's decision to manipulate earnings. After the introduction of such a governmental policy, it is far simpler to respect the going concern assumption and the minimum capital provisions required by law; therefore, management's decision to manipulate earnings should be less likely.

Isomorphism (DiMaggio and Powell, 1983), which is a fundamental concept of new institutional theory (Rudko *et al*., 2024), has enabled this paper to extend the results from emerging countries, where corporate governance mechanisms are less effective in obstructing EM, to the developed countries (Almarayeh *et al*., 2022; Bao and Lewellyn, 2017). The ability of a new regulation to reduce agency costs (Jensen, 2005) is still another factor that indicates that less severe governmental policies do matter, as they can reduce agency costs and, in turn, also EM behaviour.

Based on these arguments, our hypothesis for this paper is as follows:

H1. During the recent pandemic, EM should have decreased after the introduction of a governmental policy that reduced the severity of legal requirements and facilitates the respect for the going concern assumption.

3. Research design

To test the hypothesis, we focused on the Italian context, where the governmental measure of the suspension of recapitalization obligation was introduced. For the period analysed, EM was detected in 2018 and 2019 (the pre-suspension period) and also 2020 and 2021 (the post-suspension period). The year 2021 was selected as the cut-off year, as it is the last year with data available for all the selected companies. The historical series used 2018 as its starting point to maintain the appropriate balance between the selected observed periods.

EM was detected using non-listed companies as a reference; in our experience, these companies are more inclined to engage in manipulation during periods of recession when the choice to recapitalize is far more recurrent. For these entities, the internal audit function is less structured with respect to the listed entities and thus, given a weaker internal audit function, the EM practices are more common (Alzoubi, 2019; Ghaleb *et al*., 2020; Prawitt *et al*., 2009), as high-quality auditing has an inhibitory effect on accrual-based EM, but has no inhibitory effect on real EM (Yan *et al*., 2022).

To detect EM, we used Larcker and Richardson's (2004) model for the main analysis.

In our sensitivity analyses, several other approaches that are widely used in the literature (Leuz and Wysocki, 2016) were adopted to test the robustness of our findings.

The main model can thus be specified in the following equation:

$$\frac{TA_{it}}{A_{it-1}} = \alpha_1 \frac{1}{A_{it-1}} + \alpha_2 \frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}} + \alpha_3 \frac{PPE_{it}}{A_{it-1}} + \alpha_4 \frac{BM_{it}}{A_{it-1}} + \alpha_5 \frac{CFO_{it}}{A_{it-1}} + e_{it} \quad (1)$$

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

where:

TA_{it} *is the total accruals over the estimation period*;

A_{it-1} *is the lagged total asset of the firm i*;

ΔREV_{it} *is the change in firm* i *revenues during the event period*;

ΔREC_{it} *is the change in firm* i *receivables during the event period*;

PPE_{it} *is the gross property, plant, and equipment of firm i during the event period*;

BM_{it} *is the boot-to-market ratio represented by the book value of equity for the unlisted firms*; and

CFO_{it} *is the cash flow from operations.*

The residuals of these models were considered as our measure of abnormal accruals. Their absolute value is thus a measure of EM (Hribar and Craig Nichols, 2007; Larcker and Richardson, 2004). They were estimated for the period before (i.e. 2018–2019) and after (i.e. 2020–2021) the introduction of the suspension of recapitalization obligation. We expected to find lower average absolute values of abnormal accruals after the introduction of the suspension of recapitalization obligation than before that suspension. In such a case, the model would provide evidence of a decrease in management's decisions to manipulate earnings after the introduction of this transitory reform.

According to Callao and Jarne (2010, pp. 167–168), "this model starts from the modified version of the Jones (1991) model proposed by Dechow *et al*. (1995) and attempts to improve it by including BM and CFO. These variables are included because it is likely that incentives to manage earnings vary in response to growth opportunities (BM is included as a proxy for expected growth in the firm's operations) and current operating performance (measured by CFO)".

All the data necessary to implement our models were downloaded from the AIDA database, the Italian Digital Database of Companies and provided by Bureau van Dijk and commonly used in accounting and management studies (Calabrò *et al*., 2018). No data were hand-collected from the annual reports of the entities being analysed thus avoiding any bias in the data collection.

4. Sample selection and descriptive statistics

To build our sample using the AIDA database, we started with the legally active companies for a set of 1.5 million Italian companies. We then entered several filters. First, all companies that did not correspond to a legal form of a corporation were excluded (112,423 firms). For the core business nature, only non-financial companies were considered for our sample, a choice that excluded 62,583 financial entities. Such an exclusion is typical of EM research and was undertaken to make the sample more homogeneous and not biased by composition of the sample composition (Leuz *et al*., 2003). Minor companies (revenues under 8.8 million, assets under 4.4 million, and employees under 50 units) were not considered due to the lack of separation between ownership and control that is typical according to the agency theory that this paper sought extend. As a result, 1.3 million companies were excluded. Selecting only unlisted companies led to a sample of 14,410 companies. After excluding units for which there was no available data (6 companies), we arrived at a final sample of 14,404 companies. When considering fiscal years 2018–2019 for the period before and 2020–2021 for the period after the suspension of recapitalization obligation, our dataset included 57,616 firm-year observations. Table 3 below summarizes our sample selection strategy and provides further insights into the geographical distribution of the entities that were analysed.

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

Table 3. Sample selection strategy and geographical distribution

Panel a)

Strategy	No. of firms	No. of observations (2018–2021)
Number of firms available in the AIDA database	1,518,904	
Companies that did not correspond to the legal form of a corporation	−112,423	
Financial companies	−62,583	
Minor companies	−1,329,326	
Listed companies	−162	
Missing data	−6	
Final sample after the filters were adopted	14,404	57,616

Panel b)

	No. of firms	No. of observations (2018–2021)	%
Northern Italy	8,966	35,864	62.2%
Central Italy	4,048	16,192	28.1%
Southern Italy and Islands	1,390	5,560	9.7%
	14,404	57,616	100.0%

Note(s): Panel a) summarizes the sample's selection process. Our sample numbered 14,404 companies. Since there were 4 periods under investigation (2018–2019–2020–2021), the total number of observations was 57,616 Panel b) provides information about the geographical distribution of the entities that were analysed, distinguishing the entities that operate in Northern, Central, Southern Italy and Islands
Source(s): Table by authors

Once the sample was selected, we downloaded financial and other data for each company included in the sample for 2017–2021 (the period under study was 2018–2021) from the AIDA database. Table 4 below provides the main descriptive statistics of the variables that were used on the models to detect EM.

Table 4. Descriptive statistics

Variable	Obs	Mean	Std. Dev	Min	Max
Property, plant and equipment	57,616	27834.33	384531.60	0.00	3.59e+07
Asset	57,616	115503.30	818344.50	4401.00	5.30e+07
Cash	57,616	7383.77	34286.58	0.00	2356780.00
Equity	57,616	47852.60	493794.40	−1490758.00	3.99e+07
Revenues	57,616	93640.99	472200.10	8800.00	4.20e+07
Amortization intangible assets	57,616	1107.93	11611.45	0.00	948956.00
Depreciation	57,616	246.18	8422.59	0.00	1334132.00
Receivables write-down	57,616	319.25	4985.62	0.00	419721.00
Other depreciations	57,616	1176.02	90458.53	0.00	1.89e+07
Net income	57,616	3131.42	40420.63	−2440222.00	2638403.00
Cash flow	57,616	876.96	20552.20	−1012868.00	2340455.00
Indicator R_1	57,616	60.77	1997.33	0.00	279421.00
Indicator R_2	57,616	123.53	2069.45	0.00	220193.00
Change in revenues	57,616	4713.45	167576.00	−1.18e+07	2.90e+07
Change in receivables	57,616	604.48	23023.54	−1341534.00	2637588.00

Note(s): This table summarizes the descriptive statistics of the main variables that were downloaded from the AIDA database. These variables were used for the main analysis and the sensitivity analysis to test our hypothesis
Source(s): Table by authors

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

As Table 4 clearly demonstrates, the sample includes loss-making companies, as indicated by a negative minimum for both equity and net income. For the dimensions of the companies in the sample, the mean value of equity was 47852.60 and the total assets' mean value was 115503.30. Interestingly, the cash flow minimum mean was far below 0 (−1,012,868) while its mean value was only 876.96. This result could be due to the historical period under review that was marked by a deep crisis. Again, for this reason, receivables write-down (whose mean value was 319.25) and other depreciations (whose mean value was 1176.02) play an important role in the accruals' assessment, accounting for 47.75% of the net income (the mean value being 3131.42).

5. Results

Table 5 summarizes our findings by using Larcker and Richardson's (2004) model.

Assuming the absolute value of the residuals of our model, estimated both before and after the suspension of recapitalization obligation, our proxy of abnormal accruals (i.e. EM), the

Table 5. Main findings

Period: 2018–2019
Panel a1)

Obs	Mean abnormal accruals	St. Dev.	Min	Max	*R*-squared	Adj *R*-squared
28,808	−0.07	1.14	−151.64	106.19	0.91	0.91

Panel a2)

	Coef	Std. Err	*t*	P>|t|
$\frac{1}{A_{it-1}}$	1587.40	7.83	202.61	0.00
$\frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}}$	−0.004	0.0002	−21.06	0.00
$\frac{PPE_{it}}{A_{it-1}}$	−0.14	0.001	−130.94	0.00
$\frac{BM_{it}}{A_{it-1}}$	0.17	0.001	164.45	0.00
$\frac{CFO_{it}}{A_{it-1}}$	−1.18	0.01	−119.65	0.00

Period: 2020–2021
Panel b1)

Obs	Mean abnormal accruals	St. Dev.	Min	Max	*R*-squared	Adj *R*-squared
28,808	0.00	0.09	−2.21	3.49	0.50	0.50

Panel b2)

	Coef	Std. Err	*t*	P>|t|
$\frac{1}{A_{it-1}}$	101.21	12.06	8.39	0.00
$\frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}}$	0.15	0.0007	19.35	0.00
$\frac{PPE_{it}}{A_{it-1}}$	−0.07	0.002	−30.59	0.00
$\frac{BM_{it}}{A_{it-1}}$	0.12	0.001	82.13	0.00
$\frac{CFO_{it}}{A_{it-1}}$	−0.84	0.01	−158.33	0.00

Note(s): This table summarizes the results of the application of Larcker and Richardson's (2004) model. The period 2018–2019 was before the introduction of the reform analysed (Panel a). The period 2020–2021 is before the introduction of the reform analysed (Panel b). For each panel, we tabulated the mean value of abnormal accruals (our measure of EM) as well as the regression parameters that allowed us to estimate them
Source(s): Table by authors

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

results validated our research hypothesis. The absolute value reduction of the accruals can thus be envisaged from the absolute value of not only the mean (0.07 for 2018–2019 and 0.00 for 2020–2021), but also the median (0.06 for 2018–2019 and 0.01 for 2020–2021), offering evidence of a reduction in EM.

To test the robustness of these findings from the main analysis, we conducted several robustness checks. First, we tested the research hypothesis by using total accruals as a proxy of EM (Healy, 1985). Secondly, we adopted Jones's (1991) alternative modified model, as adopted by Dechow *et al*. (1995). Third, we used the ratio analysis commonly adopted to detect EM as an alternative to regression models (Leuz *et al*., 2003). In particular, we were able to calculate the following indexes:

$$R_1 = \frac{\sigma(OE_{it})}{\sigma(CF_{it})}$$

where:

$\sigma(OE_{it})$ *is the standard deviation of the operating earnings of entity* i *at the end of fiscal year t*; and

$\sigma(CF_{it})$ *is the standard deviation of cash flow from operations of entity* i *at the end of fiscal year t.*

$$R_2 = \frac{abs(TA_{it})}{abs(CF_{it})}$$

where:

$abs(TA_{it})$ *is the absolute value of total accruals of entity* i *at the end of fiscal year t*; and

$abs(CF_{it})$ *is the absolute value of cash flow from operations of entity* i *at the end of fiscal year t.*

Our hypothesis was thus validated if the first index increases and the second index decreases. In the first case (R_1), an index increase suggests less smoothed earnings and thus, less EM. In the second case (R_2), a decrease in the index suggests earnings with lower discretionary components and, thus, a decrease in EM. The findings of these tests are tabulated in Panels a), b), and c) of Table 6.

Table 6. Sensitivity analyses

Panels	Period	Obs	Mean	Std. Dev	Min	Max
a)	2018–2019	28,808	2885.70	38790.71	−1,837,894	2,009,581
	2020–2021	28,808	1623.22	47819.31	−2,425,568	2,520,722
b)	2018–2019	28,808	−0.08	1.63	−111.08	178.60
	2020–2021	28,808	0.01	0.12	−2.46	3.50
c.1)	2018–2019	28,808	58.71	1488.78	0.00	116723.00
$R_1 = \frac{\sigma(OE_{it})}{\sigma(CF_{it})}$	2020–2021	28,808	62.84	2400.48	0.00	279421.00
c.2)	2018–2019	28,808	125.91	1960.89	0.00	121896.00
$R_2 = \frac{abs(TA_{it})}{abs(CF_{it})}$	2020–2021	28,808	121.16	2172.63	0.00	220193.00

Note(s): This table summarizes the results of the sensitivity analyses that tested the validity of the results of the main analysis. Panel a) shows the results obtained using the Healy (1985) model. Panel b) shows the results from the application of the modified Jones (1991) model. Panel c.1) shows the results for Index R_1 and Panel c.2) shows the results for Index R_2

Source(s): Table by authors

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

These results suggest that our hypothesis is valid. In particular, Panel a) highlights a reduction in total accruals. Actually, their mean value decreased over the two periods analysed (from 2885.70 to 1623.22). As total accruals are considered a proxy of EM in this particular model (Healy, 1985), the results validated our hypothesis. In addition, the standard deviation value increased over the two periods (from 38790.71 to 47819.31), highlighting a reduction of earnings smoothing. Furthermore, Panel b) underscored a reduction in EM. Jones (1991) assumed abnormal accruals to be the discretionary components of total accruals. In particular, the absolute mean value of abnormal accruals decreased over the two periods (from 0.08 to 0.01), suggesting a decrease in EM. In terms of the indices, Panel c) suggests that the mean value of the first indicator (R_1) increased over the two periods, from 58.71 to 62.84, suggesting a decrease of EM.

This result is highly interesting for our research. Actually, earnings smoothing can be used to avoid recapitalization (in a system with a recapitalization obligation). Without this kind of obligation, companies are less encouraged to ensure minimum capital through smoothed earnings. In the second case (R_2), the value of the index decreased from 125.91 in the first period to 121.16 in the second period, suggesting a reduction of EM.

As the main analysis and sensitivity test results clearly indicate, the empirical evidence suggests that the EM decreased in 2020–2021 compared to 2018–2019. Each of the main methods for identifying EM also yielded coherent results in our research, despite the fact that the literature has shown that EM increased during the pandemic crisis (da Silva Flores *et al*., 2023; Garfatta *et al*., 2023; Rahman *et al*., 2023; Ryu and Chae, 2022; Taylor *et al*., 2023; Yan *et al*., 2022). This reduction might be due to the less severe restrictions placed on recapitalization requirements that overcame the main motivations provided by the literature to support the increase of EM, that is, the management intention to mitigate the negative effects of the pandemic by reporting a better performance (Ali *et al*., 2022) or to postpone the positive performance to the end of the crisis, thanks to the so-called "big bath" (Garfatta *et al*., 2023).

6. Discussion and concluding remarks

Although there is no homogeneity for the results of studies on EM during financial crises in general, studies that have specifically concerned the COVID-19 crisis seem to show that EM practices increased during the pandemic. This article thus analysed how the introduction of the suspension of the recapitalization obligation reversed this situation, leading to a decrease in EM practices. An analysis of a sample of 14,404 unlisted non-financial Italian companies in 2018–2021 validated the hypothesis that during the pandemic, EM decreased after the introduction of a governmental policy to reduce the severity of legal requirements and facilitated the going concern assumption. The conviction that the EM decrease mainly stemmed from the fact that the obligation to have a certain level of capital was a major reason for manipulating earnings, disappeared with the suspension of the recapitalization obligation.

These results are absolutely coherent with the assumption of institutional theory, according to which regulative elements and activities (i.e. EM in our case) are useful for delivering stability to each organization. From an institutional perspective, variations in institutional characteristics, such as values, norms, and solid governance monitoring, can be a source of pressure that can affect managers' incentives (Ratu and Rahajeng, 2024, p. 350), and in particular EM, to guarantee a firm's stability. The introduction of less severe governmental policies on recapitalization obligation reduces the governance monitoring, so managers may have an incentive to avoid underestimating loan loss provisions and/or depreciations and amortizations of expenses, thereby reducing EM with respect to the period before their introduction. These results also provide clear insights that EM behaviour is affected by the issuance of a new regulation that can obstruct EM, to the extent that it is able to reduce agency costs (Jensen, 2005) and empower activities and actors (Scott, 2013, p. 58). This conclusion extends the results of the latest research that investigated this ability, particularly in emerging countries (Almarayeh *et al*., 2022; Bao and Lewellyn, 2017). These results further show how

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

EM is influenced by not only the quality of accounting standards, but also by government activities and decisions. This paper thereby contributes to actual business practice by identifying how management practices, like accounting standards, affect the quality of financial reporting.

Still this paper is not free of limitations. The most intrusive limitation is that there have been many government measures, so one cannot exclude *a priori* the potential "combined effects" of them. Also at the regional level, there were different measures adopted by different countries. Another limitation regards the focus of this paper on a single dimension of accounting quality, that is, EM. Future studies might control for these "combined effects" or expand the topic further by studying the impact of government measures on other dimension of accounting quality, such as conservatism, by considering the effects that those policies might have at regional levels or more generally on other countries or listed companies.

References

Ali, H., Amin, H.M., Mostafa, D. and Mohamed, E.K. (2022), "Earnings management and investor protection during the COVID-19 pandemic: evidence from G-12 countries", *Managerial Auditing Journal*, Vol. 37 No. 7, pp. 775-797, doi: 10.1108/maj-07-2021-3232.

Almarayeh, T., Abdullatif, M. and Aibar-Guzmán, B. (2022), "The role of audit committees in mitigating earnings management: evidence from Jordan", *Journal of Accounting in Emerging Economies*, Vol. 12 No. 5, pp. 882-907, doi: 10.1108/jaee-09-2020-0235.

Alvesson, M. and Spicer, A. (2018), "Neo-institutional theory and organization studies: a mid-life crisis?", *Organization Studies*, Vol. 40 No. 2, pp. 199-218, doi: 10.1177/0170840618772610.

Alzoubi, E.S.S. (2019), "Audit committee, internal audit function and earnings management: evidence from Jordan", *Meditari Accountancy Research*, Vol. 27 No. 1, pp. 72-90, doi: 10.1108/medar-06-2017-0160.

Ball, R. and Shivakumar, L. (2005), "Earnings quality in UK private firms: comparative loss recognition timeliness", *Journal of Accounting and Economics*, Vol. 39 No. 1, pp. 83-128, doi: 10.1016/j.jacceco.2004.04.001.

Bao, S.R. and Lewellyn, K.B. (2017), "Ownership structure and earnings management in emerging markets-an institutionalized agency perspective", *International Business Review*, Vol. 26 No. 5, pp. 828-838, doi: 10.1016/j.ibusrev.2017.02.002.

Barth, M.E., Landsman, W.R. and Lang, M.H. (2008), "International accounting standards and accounting quality", *Journal of Accounting Research*, Vol. 46 No. 3, pp. 467-498, doi: 10.1111/j.1475-679x.2008.00287.x.

Beuselinck, C., Cascino, S., Deloof, M. and Vanstraelen, A. (2019), "Earnings management within multinational corporations", *The Accounting Review*, Vol. 94 No. 4, pp. 45-76, doi: 10.2308/accr-52274.

Biddle, G.C., Ma, M.L. and Song, F.M. (2022), "Accounting conservatism and bankruptcy risk", *Journal of Accounting, Auditing and Finance*, Vol. 37 No. 2, pp. 295-323, doi: 10.1177/0148558x20934244.

Bornemann, S., Kick, T., Memmel, C. and Pfingsten, A. (2012), "Are banks using hidden reserves to beat earnings benchmarks? Evidence from Germany", *Journal of Banking and Finance*, Vol. 36 No. 8, pp. 2403-2415, doi: 10.1016/j.jbankfin.2012.05.001.

Calabrò, A., Minichilli, A., Amore, M.D. and Brogi, M. (2018), "The courage to choose! Primogeniture and leadership succession in family firms", *Strategic Management Journal*, Vol. 39 No. 7, pp. 2014-2035, doi: 10.1002/smj.2760.

Callao, S. and Jarne, J.I. (2010), "Have IFRS affected earnings management in the European Union?", *Accounting in Europe*, Vol. 7 No. 2, pp. 159-189, doi: 10.1080/17449480.2010.511896.

Campa, D. (2019), "Earnings management strategies during financial difficulties: a comparison between listed and unlisted French companies", *Research in International Business and Finance*, Vol. 50, pp. 457-471, doi: 10.1016/j.ribaf.2019.07.001.

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

Chen, H.C., Chiang, H.T. and Voren, D. (2023), "The impact of the COVID-19 pandemic on quality of financial reports", *Journal of Applied Finance and Banking*, Vol. 13 No. 4, pp. 1-29, doi: 10.47260/jafb/1341.

Cimini, R. (2015), "How has the financial crisis affected earnings management? A European study", *Applied Economics*, Vol. 47 No. 3, pp. 302-317, doi: 10.1080/00036846.2014.969828.

Cohen, D.A. and Zarowin, P. (2010), "Accrual-based and real earnings management activities around seasoned equity offerings", *Journal of Accounting and Economics*, Vol. 50 No. 1, pp. 2-19, doi: 10.1016/j.jacceco.2010.01.002.

da Silva Flores, E., Sampaio, J.O., Beiruth, A.X. and Brugni, T.V. (2023), "Earnings management during the COVID-19 crisis: evidence from the Brazilian and American capital markets", *Journal of Accounting in Emerging Economies*, Vol. 13 No. 4, pp. 760-783, doi: 10.1108/jaee-10-2021-0317.

Dechow, P.M., Sloan, R.G. and Sweeney, A.P. (1995), "Detecting earnings management", *The Accounting Review*, Vol. 70 No. 2, pp. 193-225.

DeAngelo, H., DeAngelo, L. and Skinner, D.J. (1994), "Accounting choice in troubled companies", *Journal of Accounting and Economics*, Vol. 17 No. 12, pp. 113-143, doi: 10.1016/0165-4101(94)90007-8.

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

DiMaggio, P.J. and Powell, W.W. (1983), "The iron cage revisited: institutional isomorphism and collective rationality in organizational fields", *American Sociological Review*, Vol. 48 No. 2, pp. 147-160, doi: 10.2307/2095101.

Einhorn, E., Langberg, N. and Versano, T. (2018), "Cross-firm real earnings management", *Journal of Accounting Research*, Vol. 56 No. 3, pp. 883-911, doi: 10.1111/1475-679x.12188.

Fasano, F., Sánchez-Vidal, F.J. and La Rocca, M. (2022), "The role of government policies for Italian firms during the COVID-19 crisis", *Finance Research Letters*, Vol. 50, 103273, doi: 10.1016/j.frl.2022.103273.

Filip, A. and Raffournier, B. (2014), "Financial crisis and earnings management: the European evidence", *The International Journal of Accounting*, Vol. 49 No. 4, pp. 455-478, doi: 10.1016/j.intacc.2014.10.004.

Gaio, C., Goncalves, T. and Sousa, M.V. (2022), "Does corporate social responsibility mitigate earnings management?", *Management Decision*, Vol. 60 No. 11, pp. 2972-2989, doi: 10.1108/md-05-2021-0719.

Garfatta, R., Hamza, M. and Zorgati, I. (2023), "COVID-19 outbreak and earnings management practice: case of Tunisia", *Asian Journal of Accounting Research*, Vol. 8 No. 3, pp. 307-318, doi: 10.1108/ajar-04-2022-0129.

Gerged, A.M., Albitar, K. and Al-Haddad, L. (2023), "Corporate environmental disclosure and earnings management-the moderating role of corporate governance structures", *International Journal of Finance and Economics*, Vol. 28 No. 3, pp. 2789-2810, doi: 10.1002/ijfe.2564.

Ghaleb, B.A.A., Kamardin, H. and Al-Qadasi, A.A. (2020), "Internal audit function and real earnings management practices in an emerging market", *Meditari Accountancy Research*, Vol. 28 No. 6, pp. 1209-1230, doi: 10.1108/medar-02-2020-0713.

Goodell, J.W. (2020), "COVID-19 and finance: agendas for future research", *Finance Research Letters*, Vol. 35, 101512, doi: 10.1016/j.frl.2020.101512.

Graham, J.R., Harvey, C.R. and Rajgopal, S. (2005), "The economic implications of corporate financial reporting", *Journal of Accounting and Economics*, Vol. 40 Nos 1-3, pp. 3-73, doi: 10.1016/j.jacceco.2005.01.002.

Guaita Martínez, J.M., Martín Martín, J.M. and Huarng, K.H. (2024), "Guest editorial: the futures of management: crisis as a norm", *Management Decision*, Vol. 62 No. 7, pp. 2057-2063, doi: 10.1108/md-07-2024-218.

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

Habib, A., Uddin Bhuiyan, B. and Islam, A. (2013), "Financial distress, earnings management and market pricing of accruals during the global financial crisis", *Managerial Finance*, Vol. 39 No. 2, pp. 155-180, doi: 10.1108/03074351311294007.

Habib, A., Ranasinghe, D., Wu, J.Y., Biswas, P.K. and Ahmad, F. (2022), "Real earnings management: a review of the international literature", *Accounting and Finance*, Vol. 62 No. 4, pp. 4279-4344, doi: 10.1111/acfi.12968.

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

Hribar, P. and Craig Nichols, D. (2007), "The use of unsigned earnings quality measures in tests of earnings management", *Journal of Accounting Research*, Vol. 45 No. 5, pp. 1017-1053, doi: 10.1111/j.1475-679x.2007.00259.x.

Hsu, Y.L. and Yang, Y.C. (2022), "Corporate governance and financial reporting quality during the COVID-19 pandemic", *Finance Research Letters*, Vol. 47, 102778, doi: 10.1016/j.frl.2022.102778.

Hu, S. and Zhang, Y. (2021), "COVID-19 pandemic and firm performance: cross-country evidence", *International Review of Economics and Finance*, Vol. 74, pp. 365-372, doi: 10.1016/j.iref.2021.03.016.

Iatridis, G. and Dimitras, A.I. (2013), "Financial crisis and accounting quality: evidence from five European countries", *Advances in Accounting*, Vol. 29 No. 1, pp. 154-160, doi: 10.1016/j.adiac.2013.03.001.

Iyer, S.R. and Simkins, B.J. (2022), "COVID-19 and the economy: summary of research and future directions", *Finance Research Letters*, Vol. 47, 102801, doi: 10.1016/j.frl.2022.102801.

Jensen, M.C. (2005), "Agency costs of overvalued equity", *Financial Management*, Vol. 34 No. 1, pp. 5-19, doi: 10.1111/j.1755-053x.2005.tb00090.x.

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

Jones, J.J. (1991), "Earnings management during import relief investigations", *Journal of Accounting Research*, Vol. 29 No. 2, pp. 193-228, doi: 10.2307/2491047.

Khanchel, I. and Lassoued, N. (2022), "Is it hard to be different during the COVID-19 crisis? Investigating the relationship between corporate social responsibility and earnings management", *International Journal of Ethics and Systems*, Vol. 40 No. 1, pp. 17-44, doi: 10.1108/ijoes-05-2022-0102.

Larcker, D.F. and Richardson, S.A. (2004), "Fees paid to audit firms, accrual choices, and corporate governance", *Journal of Accounting Research*, Vol. 42 No. 3, pp. 625-658, doi: 10.1111/j.1475-679x.2004.t01-1-00143.x.

Lee, H., Choi, D. and Lee, H.Y. (2024), "The impact of COVID-19 on earnings management: an international investigation", *Applied Economics Letters*, Vol. 31 No. 4, pp. 353-361, doi: 10.1080/13504851.2023.2167913.

Leuz, C. and Wysocki, P.D. (2016), "The economics of disclosure and financial reporting regulation: evidence and suggestions for future research", *Journal of Accounting Research*, Vol. 54 No. 2, pp. 525-622, doi: 10.1111/1475-679x.12115.

Leuz, C., Nanda, D. and Wysocki, P.D. (2003), "Earnings management and investor protection: an international comparison", *Journal of Financial Economics*, Vol. 69 No. 3, pp. 505-527, doi: 10.1016/s0304-405x(03)00121-1.

Liu, G. and Sun, J. (2022), "The impact of COVID-19 pandemic on earnings management and the value relevance of earnings: US evidence", *Managerial Auditing Journal*, Vol. 37 No. 7, pp. 850-868, doi: 10.1108/maj-05-2021-3149.

Ma, M.L. and Song, V. (2016), "Discretionary loan loss provisions and systemic risk in the banking industry", *Accounting Perspectives*, Vol. 15 No. 2, pp. 89-130, doi: 10.1111/1911-3838.12091.

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

Mattei, M.M., Merlo, M. and Monaco, E. (2023), "The Italian depreciation suspension policy during the COVID-19 pandemic: consequences on private firms' borrowing capacity", *Accounting in Europe*, Vol. 20 No. 2, pp. 1-28, doi: 10.1080/17449480.2023.2174444.

Meyer, J.W. and Rowan, B. (1977), "Institutionalized organizations: formal structure as myth and ceremony", *American Journal of Sociology*, Vol. 83 No. 2, pp. 340-363, doi: 10.1086/226550.

Ming Chia, Y., Lapsley, I. and Lee, H.W. (2007), "Choice of auditors and earnings management during the Asian financial crisis", *Managerial Auditing Journal*, Vol. 22 No. 2, pp. 177-196, doi: 10.1108/02686900710718672.

Naz, A., Sheikh, N.A., Khatib, S.F., Al Amosh, H. and Ananzeh, H. (2024), "Illuminating the shadows: a systematic review of earnings management practices in family-owned enterprises and future research directions", *Journal of Business and Socio-economic Development*, Vol. 4 No. 4, pp. 340-358, doi: 10.1108/jbsed-07-2023-0051.

Piva, E. and Guerini, M. (2023), "The impact of the COVID-19 pandemic and pandemic-related policies on new firm creation: an analysis of the Italian case", *Small Business Economics*, Vol. 60 No. 3, pp. 1009-1031, doi: 10.1007/s11187-022-00621-w.

Prawitt, D.F., Smith, J.L. and Wood, D.A. (2009), "Internal audit quality and earnings management", *The Accounting Review*, Vol. 84 No. 4, pp. 1255-1280, doi: 10.2308/accr.2009.84.4.1255.

Rahman, M.J., Ding, J., Hossain, M.M. and Khan, E.A. (2023), "COVID-19 and earnings management: a comparison between Chinese family and non-family enterprises", *Journal of Family Business Management*, Vol. 13 No. 2, pp. 229-246, doi: 10.1108/jfbm-01-2022-0011.

Ratu, D.M. and Rahajeng, D.K. (2024), "Anti-corruption policy and earnings management: do women in monitoring roles matter?", *Asian Journal of Accounting Research*, Vol. 9 No. 4, pp. 340-357, doi: 10.1108/ajar-09-2023-0327.

Rudko, I., Bashirpour Bonab, A., Fedele, M. and Formisano, A.V. (2024), "New institutional theory and AI: Roward rethinking of artificial intelligence in organizations", *Journal of Management History*, pp. 1-24.

Ryu, H. and Chae, S.J. (2022), "The impact of COVID-19 on earnings management in the distribution and service industries", *Journal of Distribution Science*, Vol. 20 No. 4, pp. 95-100.

Saleh, N.M. and Ahmed, K. (2005), "Earnings management of distressed firms during debt renegotiation", *Accounting and Business Research*, Vol. 35 No. 1, pp. 69-86, doi: 10.1080/00014788.2005.9729663.

Schipper, K. (1989), "Earnings management", *Accounting Horizons*, Vol. 3 No. 4, p. 91.

Scott, W.R. (2013), *Institutions and Organizations: Ideas, Interests, and Identities*, Sage Publications, London.

Strobl, G. (2013), "Earnings manipulation and the cost of capital", *Journal of Accounting Research*, Vol. 51 No. 2, pp. 449-473, doi: 10.1111/1475-679x.12008.

Šušak, T. (2020), "Utjecaj regulativnih promjena na odnos upravljanja zaradom i pravovremenosti financijskog izvještavanja: slučaj pandemije COVID-19 (The effect of regulatory changes on relationship between earnings management and financial reporting timeliness: the case of COVID-19 pandemic)", *Zbornik Radova Ekonomskog Fakulteta U. Rijeci: Časopis Za Ekonomsku Teoriju I Praksu*, Vol. 38 No. 2, pp. 453-473.

Tarkom, A. (2022), "Impact of COVID-19 exposure on working capital management: the moderating effect of investment opportunities and government incentives", *Finance Research Letters*, Vol. 47, 102666, doi: 10.1016/j.frl.2021.102666.

Taylor, D., Awuye, I.S. and Cudjoe, E.Y. (2023), "Covid-19 pandemic, a catalyst for aggressive earnings management by banks?", *Journal of Accounting and Public Policy*, Vol. 42 No. 1, 107032, doi: 10.1016/j.jaccpubpol.2022.107032.

Trueman, B. and Titman, S. (1988), "An explanation for accounting income smoothing", *Journal of Accounting Research*, Vol. 26, pp. 127-139, doi: 10.2307/2491184.

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026

Uddin, M.H. (2023), "The moderating role of COVID-19 pandemic on the relationship between CEO characteristics and earnings management: evidence from Bangladesh", *Cogent Business and Management*, Vol. 10 No. 1, 2190196, doi: 10.1080/23311975.2023.2190196.

Yan, H., Liu, Z., Wang, H., Zhang, X. and Zheng, X. (2022), "How does the COVID-19 affect earnings management", *Empirical Evidence from China. Research in International Business and Finance*, Vol. 63, 101772, doi: 10.1016/j.ribaf.2022.101772.

Yassin, M.M., Shaban, O.S., Al-Sraheen, D.A.D. and Al Daoud, K.A. (2022), "Revenue standard and earnings management during the Covid-19 pandemic: a comparison between IFRS and GAAP", *Journal of Governance and Regulation/Volume*, Vol. 11 No. 2, pp. 80-93, doi: 10.22495/jgrv11i2art7.

Zang, A.Y. (2012), "Evidence on the trade-off between real activities manipulation and accrual-based earnings management", *The Accounting Review*, Vol. 87 No. 2, pp. 675-703, doi: 10.2308/accr-10196.

Zou, Q., Wang, Y. and Modi, S. (2024), "Linking government interventions to firm performance: the influence of stringency and support during the COVID-19 pandemic", *International Journal of Operations and Production Management*, Vol. 44 No. 2, pp. 393-423, doi: 10.1108/ijopm-01-2023-0032.

Corresponding author
Riccardo Cimini can be contacted at: riccardo.cimini@uniroma2.it

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: **permissions@emeraldinsight.com**

Downloaded from http://ftp.nowpublishers.com/md/article-pdf/63/13/28/10048344/md-10-2023-2026en.pdf by guest on 01 June 2026