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Earnings Management During Financial Crises

Literature Review

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Abstract

In order to make informed decisions, stakeholders must rely on financial statement figures. However, under certain circumstances, managers have strong incentives to use accounting judgment in favor of their own interests, potentially at the expense of other stakeholders. This literature review examines how financial crises affect managers' incentives to engage in earnings management and whether those actions are more prevalent during crises or not. The results indicate that as the business environment changes, some factors incentivize management to report higher-than-actual results, while other factors encourage reporting lower-than-actual results. Simultaneously, several factors encourage leaders to be more transparent than usual. Although the prevalence of earnings management during financial crises has been addressed in numerous studies across the globe, research findings have been highly diverse. Factors like the degree of investor protection, the quality of audit, different crisis stages, and specific firm-related elements such as leverage levels could explain these varying results.

Keywords earnings management, financial crises, earnings management incentives

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1 INTRODUCTION

Numerous stakeholders rely on financial statement information to make informed decisions. Therefore, any factor that decreases the reliability or neutrality of reported results can have significant consequences for the credibility of the company. Due to its substantial consequences and high managers' incentives toward earnings management, the topic has been widely studied in accounting literature since the 1990's.

At the same time, intensification and widespread occurrence of financial crises have led several researchers to investigate how earnings behavior changes in economic turbulence. Although they have provided evidence that earnings management practices change significantly during financial crises, the results are highly varied, and some findings appear to be conflicting with each other. The aim of this study is to provide an overview of reported research findings and analyze the possible reasons for divergent results.

The research method is a literature review and the main research question for the study is: **Is earnings management more prevalent during financial crises?** In addition to that, the thesis will also look for answers to these secondary research questions: **How does financial crises affect managers' incentives on earnings management? What explains the varying findings in the previous literature?**

The rest of the study is organized as follows. Section two introduces the background on earnings management and financial crises. In section three, financial crises' impact on earnings management incentives will be identified. Section four provides a review of the key findings in the existing literature and section five will discuss the possible factors that have led to the divergent empirical findings. Finally, section 6 concludes the study.

2 BACKGROUND

Based on the fundamental idea of agency relationship between owners and managers, shareholder primacy theory suggests that a company's primary objective should be to maximize the wealth of its shareholders, typically measured by the value of the company's stock. Despite the ongoing debate about whether shareholder value maximization should be the sole objective of a corporation, the theory has been influential in shaping corporate governance practices since the 1970's. Prioritizing the shareholder interests is argued to be the most effective way to protect the private ownership and on the other hand it aims to ensure the control of the shareholders, who are the primary risk-bearers in the company. (Reberioux, 2007)

Hence, managers should aim to maximize the value of the share. According to the modern finance theory, the value of the share reflects the present value of future cash flows to the investor. To determine the present value, investors consider three components: The amount of future cash flows, time period in which they occur and the discount rate, which takes into account the level of risk associated with the cash flows (Knupfer and Puttonen, 2018). Under these circumstances, investors appreciate companies that can reliably generate high and non-volatile earnings. Dechow (1994) finds out that current earnings are even better predictors of future cash flows than current cash flows.

In addition to the value maximization goal, managers are also pressured by other reasons to report good financial results. Important stakeholders, such as employees and customers wish for the company's long-term survival to uphold commitments like pensions and warranties. Suppliers and creditors closely scrutinize the financial performance of the firm in order to assess its capacity to meet future financial obligations. On top of that, management bonuses are often aligned with internal earnings targets. Considering all these internal and external factors, managers have strong incentives to report high and stable earnings. (Albrecht et al., 2011)

2.1 Earnings management

Managers not only desire pleasant results, but they also have a lot of ways to influence the reported earnings. The main principle in preparing financial statements is that they should give "a true and fair view" of the particular company's performance and financial position (Ikäheimo et al., 2019) and therefore accounting standards, such as GAAP or IFRS, allow accountants to use a certain degree of discretion in their work. This is especially true in areas where accounting standards provide a wide range of acceptable methods or where there is some level of subjectivity involved – for example in determining when and how to recognize revenue in complex transactions or long-term contracts. However, the flexibility in accounting standards, which is intended to serve the user the of the financial statements, also gives managers an opportunity to manipulate the reported figures for their own benefit (Albrecht et al., 2011).

According to Beneish (2001), the concept of earnings management has been defined in academic research in a few different ways, which differ slightly from each other. In my opinion, the most comprehensive definition is shaped by Healy and Wahlen (1999) and I consider it the most useful in my own study:

> *"Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers."*

It's important to note that this interpretation excludes situations where accounting judgement has been used to *enhance* the informativeness of the financial reports. It also points out that earnings management encompasses not just accounting techniques, but also operational decisions made for similar motives. Differences and measurement of these two types of earnings management, real and accrual, will be discussed further in chapters 2.1.1. and 2.1.2.

While earnings management might help achieve certain short-term managerial goals in some instances, it can have adverse consequences for the long-term credibility and thus hamper the performance of the company (Iatridis and Kadorinis, 2009). As defined above, one of the main objectives of earnings management is to *mislead* stakeholders, so getting caught on such actions would naturally lead to mistrust towards the management and cause various difficulties

for the operations in the future. For example, Dechow et al. (1996) report that "firms manipulating earnings experience significant increases in their costs of capital when the manipulations are made public."

However, detecting earnings management from outside the company can be challenging, as it's not always clear-cut whether certain actions are deemed acceptable or not. While some forms of earnings management may be legal and within the bounds of accounting principles, others can be unethical or even fraudulent. Albrecht et al. (2011) illustrated this trait using the following five-level scale, where actions became increasingly unethical and illegal towards the right end:

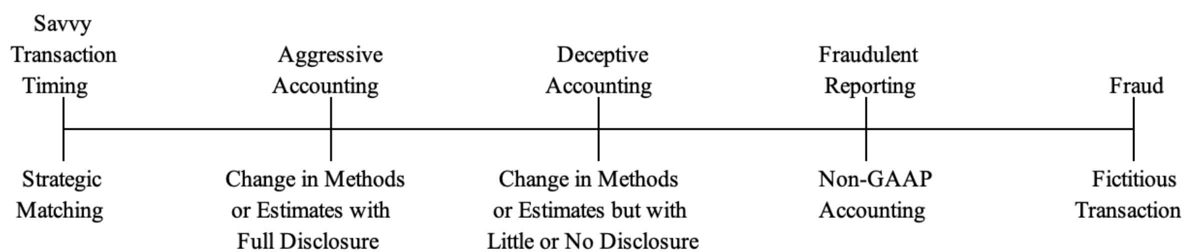

Figure 1. "The earnings management continuum"

Since earnings management is such a broad and multi-faceted concept, I will divide it into two categories to make it easier to discuss the topic: Real earnings management and accrual earnings management. The classification is based on whether the actions have a direct impact on the cash flows or not. Although these two areas differ in several aspects – e.g., measurement methods, stakeholder perceptions and effects on operations – the underlying intentions are similar.

2.1.1 Accrual earnings management

In academic research, studies on earnings management have mainly focused on accrual earnings management (Ali and Kamardin 2018). Accrual earnings management refers to the deliberate manipulation of accounting accruals by a company's management with the aim of portraying a more favorable picture of the financial performance of the company. This can involve altering the timing of revenue or expenses recognition, changing estimation methods, or adjusting other financial metrics that rely on accrual accounting principles. (Healy and Wahlen, 1998)

In the previous literature, there has been a lot of discussion about how to detect and measure earnings management. Beneish (2001) addresses two widely used approaches to evaluating accrual earnings management. The first approach, "aggregate accruals", is usually executed by relating the total accruals to the change in sales and the level of PPE. This method estimates expected and unexpected accruals using a regression model. However, aggregate accruals models do not distinguish between accruals resulting from managers' discretion and accruals resulting from changes in the firm's economic performance. Therefore, researchers have developed another approach which focuses on a specific accrual or sector, for example the claim loss reserve in the insurance industry (Beaver and McNichols, 1998).

2.1.2 Real earnings management

Although accrual earnings management has sparked significant academic interest, Ali and Kamardin (Ali and Kamardin, 2018) state that managers have increasingly shifted towards real earnings management in the 21st century due to the convenient execution of discretionary decisions in operations and a lower likelihood of detection by regulators and auditors.

Roychowdhury (2006) defines real earnings management as "departures from normal operational practices, motivated by managers' desire to mislead at least some stakeholders into believing certain financial reporting goals have been met in the normal course of operations. These departures do not necessarily contribute to firm value even though they enable managers to meet reporting goals".

According to his study, economic circumstances play a substantial role in determining which decisions are considered as real activities manipulation. For example, while price discounts may be an optimal and value creating choice in certain situations, it can be viewed as a form of earnings management under different economic circumstances. (Roychowdhury, 2006)

When evaluating whether real earnings management has been utilized, it is important to note that earnings manipulation methods may involve decisions related to operating activities, investments, and financing. Possible methods for manipulating earnings through operating activities are for instance overproduction or reducing discretionary costs. Timing the sale of a long-term asset is an example of investing decision as real earnings management. A financing decision in this context could be share repurchases with the intention to improve earnings per share (Ali and Kamardin, 2018).

2.1.3 Choice of earnings management method

The selection of an earnings management method matters, as it may affect the long-term value of the company. Several researchers have reported a negative effect of real earnings management on firm value in the long-term (Chi et al., 2011; Cohen and Zarowin, 2010; Cohen et al., 2008; Ewert & Wagenhofer, 2005; Roychowdhury, 2006), whereas Susanto (2017) discovered evidence suggesting that accrual earnings management has a positive impact on firm value. Moreover, Kim and Sohn (2013) provided evidence on real earnings management leading to higher cost of equity.

However, most managers prefer real earnings management, probably due to the lower risk of getting caught (Ali and Kamardin, 2018). Graham et al. (2005) conducted a survey among 401 executives and observed that 80% of them preferred to take decisions related to real activities, such as cutting discretionary costs despite the possible adverse long-term effect, rather than using accrual accounting methods to manage the earnings.

2.2. Financial crises – characteristics

Since the purpose of this thesis is to examine earnings management during financial crises, we need to understand what financial crises are and how they affect companies and the economy in a broader context.

In the global financial markets, various disruptions occur constantly, such as bubbles in asset prices or stock market crashes, which can have significant impacts on the economy. However, actual financial crises are unparalleled in their scope and impact, setting them apart from other disruptions. Usually, the term "financial crisis" refers to events, where the banking system faces widespread macro-level distress, a large fraction of the system is closed or suspended, and significant government interventions are needed to prevent the acute failure in the system. Each crisis is unique, and researchers have not reached a single definition for financial crises. Most of the definitions used in academic research combine both narrative and quantitative elements. (Sufi and Taylor, 2021)

Financial crises, and particularly the period of negative growth that usually follows them, have massive impacts on the real economy. Reinhart and Rogoff (2009) summarize in their study that severe financial crises in the last two centuries have been followed by a prolonged recession, where equity prices decreased by an average of 55 percent over the next three and a half years. At the same time, unemployment rates increased by an average of 7 percentage points and the GDP per capita declined 9 percentage points on average. A protracted economic downturn also leads to a decrease in tax revenues, which often appears as an increase in government debt. Chintrakarn and Jiraporn (2017) reported evidence on a severe decline in firm profitability during the financial crisis of 2008. According to Dimitras et al. (2015) financial crises are also associated with increasing lack of liquidity and an increase in the number of bankruptcies.

To conclude, financial crises can lead to significant harmful changes in the operating environment of companies in the big picture. After the burst of Global Financial Crisis in 2008, numerous studies have focused on how earnings management is utilized during these extraordinary events.

3 FINANCIAL CRISES' IMPACT ON MANAGEMENT INCENTIVES

One of the key responsibilities of corporate management is to monitor changes in the business environment. Financial crises represent an extreme example of a situation where the business landscape undergoes a radical transformation, demanding swift responses from managers. Since the purpose of earnings management is to present a misleading picture of the company's operations, it can be assumed that major changes in the company's actual operations will in some way impact earnings management practices.

There are several reasons to believe that earnings management would be more popular during financial crises, and on the other hand, many reasons that might make managers more reluctant to take such actions (Filip and Raffournier, 2014). Understanding these conflicting effects helps us address the main research question: Is earnings management more prevalent during crises or not? In this chapter, we take a closer look at how financial crises might affect company management's willingness to engage in earnings management.

3.1 Factors encouraging earnings management during financial crises

Earnings management actions can be either income-increasing or income-decreasing, depending on what specific goals are pursued in a particular situation. We will first discuss the factors that may lead to income-increasing earnings management during financial crises.

Managers' personal interests can lead to income-increasing earnings management. Huge declines in stock prices is one of the main characteristics of financial crises, and that could negatively impact management compensation. To avoid this personal loss, managers may resort to earnings management techniques that increase the reported earnings (Charitou et al., 2008). Also, some part of management bonuses are often tied to firm's earnings, which can also encourage similar actions (Rahman et al., 2013) especially during crises when earnings tend to be lower.

Another possible personal factor for managers is the desire to safeguard the current high-level position (Rahman et al., 2013), as finding new opportunities can be particularly difficult during financial crises. Management's ability to perform in their role in the future is often evaluated based on the company's performance, creating a strong personal incentive for management to engage in upward earnings management. This is also supported by Rosner (2003), who observed that increased likelihood of bankruptcy causes low moral and high stress among managers of distressed companies, and can thereby lead to implementation of unethical earnings manipulation techniques.

In certain industries, tightening regulations can incentivize managers to engage in income-increasing earnings management. The detrimental impact of financial crises is often sought to be mitigated by increasing regulation, especially in the banking and insurance sectors. According to Rahman et al. (2013), regulation focuses on maintaining sufficient capital adequacy, and compliance with these requirements is assessed using accounting figures. They pointed out that banks have a tendency to, for example, overstate loan loss provisions if they are at risk of falling below minimum requirements.

Firm's may manipulate their earnings upwards to facilitate the acquisition of capital. An investigation on UK listed firms in 2009 obtained evidence that companies that manipulate their earnings tend to have higher leverage and lower liquidity. The same study showed that firms that are in need of equity or debt capital have higher tendecy to employ earnings management. (Iatridis and Kadorinis, 2009) During financial crises, an increasing number of companies suffer from these problems and desperate managers may view earnings management as a tool to attract capital providers. Empirical studies provide evidence that companies tend to overstate their earnings figures before initial public offerings (Teoh et al., 1998) and seasoned equity offerings (Rangan 1998).

Another factor that strongly encourages upwards earnings management is the aim to avoid debt covenant violations, as breaching these agreements can have very costly consequences for the firm (Dyreng et al., 2022). In times of financial crises most firms suffer from unusually low profitability and it can increase the probability of debt covenant violations, as Dichev and Skinner (2002) reported that those requirements are often tied to earnings. In addition to that, many firms rely on growing debt to survive the crises, which means that there is a growing number of firms struggling with debt covenants.

Next, we will discuss the factors that can motivate managers to income-reducing earnings management during financial crises. Even though it may not intuitively sound reasonable, there are many well-founded reasons why managers seek to present earnings as lower than they actually are. In these situations, the management does not try to conceal poor financial performance, but rather, emphasize it. Of course highlighting financial difficulties may be viewed as a bad signal to investors, but during financial crises this may not be very significant factor because the market has more tolerance for bad results (Ahmad-Zaluki et al., 2011).

At first, several studies have noted that managers of troubled firms tend to shift earnings downwards before declaring bankruptcy (eg. DeAngelo et al., 1994; Charitou et al., 2008) due to managers' fear of legal consequences (Dutzi and Rausch, 2016). Considering the fact that bankruptcies are more common during financial crises, it can be assumed that this increases income-reducing earnings management. However, it is worth noting that the issue is not unambiguous, as some studies have found contrary evidence suggesting that companies inflate their earnings prior to bankruptcy (Dutzi and Rausch, 2016).

In relation to increasing prevalence of bankruptcies and debt covenant violations, another reason for income-reducing actions is the aim to facilitate debt restructuring. Banks may view the company's difficult situation as a justification for special agreements or compromises. (Filip and Raffournier, 2014) Even though the banks have the right to call the loan when debt agreement is breached, Asquith et al. (1994) report that instead of demanding repayment banks prefer to be flexible with the terms of the debt.

During economic downturns, firms may engage in downward earnings management to achieve support from government. Governments seek to mitigate the harmful effects of financial crises on the economy by supporting struggling companies, which creates an incentive for managers to present poor results in order to achieve clear financial benefits. (Filip and Raffournier, 2014)

Tax avoidance is also a huge incentive for management to understate the reported earnings (Rahman et al., 2013). Tax planning is certainly done at all times, also with completely honest and legal means, but during financial crises, distressed firms may take bigger risks in tax planning decisions and employ methods that are more questionable than usual.

In accordance with the ability-to-pay theory, employers may engage in income-reducing earnings management to gain advantages in labour contract negotiations. An empirical study in Spain obtained evidence that managers depress earnings prior to labour bargaining, probably to indicate the company's weak ability to pay high wages. (Mora and Sabater, 2008) This reason alone may not be a strong enough reason to justify presenting poor results, but in times when economic conditions are challenging anyways, it might be used to emphasize the weak performance. Succeeding in these negotiations is important, because favorable outcomes can help the company to navigate through the crisis.

3.2 Factors discouraging earnings management during financial crises

What makes earnings management during financial crises extremely interesting as a research topic is that, in contrast to all the factors above, there are also very strong arguments for why earnings might be less manipulated during those exceptional periods. There has been an extensive debate in the accounting literature on which of these effects is more dominant. Next, we will discuss the factors supporting the view of less biased earnings.

According to Habib et al. (2013), management incentives for earnings manipulation are lower in crises because investors generally view financial statements as less reliable, and therefore, they do not give them significant weight. Moreover, Johnson (1999) reported that accounting earnings are less value relevant during contraction years. Due to the temporary nature of crises, the earnings reported during such periods are less persistent over time, making them less useful for making predictions about the future performance (Filip and Raffournier, 2014). Considering these factors, the cost-benefit analysis may incline a manager towards exclusion of earnings management.

Cimini (2015) documented that high audit-quality during financial crises can decrease earnings management incentives. Chia et al. (2008) conducted a study regarding the Asian financial crisis in 1997 and found that auditors' increasing monitoring activity reduced earnings management during the crisis. Higher audit quality can also improve earnings quality indirectly through a higher level of conditional conservatism (Cimini, 2015).

As a result of increased monitoring from the firm's stakeholders, higher litigation risk during crises might be another factor that dissuade managers to earnings management actions (Filip and Raffournier, 2014). During financial crises, the media and regulators pay more attention to what companies are doing, and there is a greater chance of legal action. Companies are under more scrutiny from external parties, and managers are more likely to think they will get caught if they engage in risky financial practices. (Trombetta and Imperatore, 2014) Huang et al. (2020) provided evidence that litigation's deterrence effect can prevent not only accrual accounting manipulation but also earnings management through real activities.

Lastly, the management compensation theory suggests that managers try to improve their compensation by engaging in earnings management. They are motivated to increase earnings until they reach the maximum bonus level, and if earnings are above the maximum level, managers reduce them to shift compensation to the following periods (Rahman et al., 2013). During difficult times, many companies incur losses or at least are far from reaching the maximum compensation level, which may reduce the incentives for earnings management.

FACTORS INFLUENCING THE PREVALENCE OF EARNINGS MANAGEMENT DURING FINANCIAL CRISES

ENCOURAGING FACTORS	DISCOURAGING FACTORS
Income-increasing:	Earnings are less value relevant.
Maximise personal welfare.	Higher audit quality.
Meet stricter regulatory requirements.	Higher level of conditional conservatism.
Facilitate the acquisition of capital.	Higher litigation risk.
Avoid debt covenant violations.	Diminshed chances to influence compensation.
Income-reducing:	
Mitigate legal consequences in bankruptcy.	
Facilitate debt restructuring.	
Achieve support from government.	
Avoid taxes.	
Gain advantages in labour negotiations.	

Table 1: Encouraging and discouraging factors for earnings management during financial crises.

4 KEY FINDINGS IN THE EXISTING LITERATURE

The impact of financial crises on earnings management has been a widely studied topic over the last few decades. Given the potentially conflicting incentives and the significant importance of financial statement information to stakeholders, researchers have exerted a huge amount of effort to determine the actual effects in the real world. This section will provide a review of the key findings in the existing literature, bringing together studies from various financial crises around the world. We will focus on findings that can contribute to answering the research questions of this study.

Numerous studies indicate that earnings management has become more prevalent during financial crises. Iatridis and Dimitras (2013) examined how the financial crisis started in 2008 affected the scope for earnings management in Big-4 audited publicly listed companies in Portugal, Ireland, Italy, Greece and Spain. The empirical results of the study show increasing level of earnings management in Portugal, Italy and Greece. In contrast, results indicated the opposite for Ireland, where investor protection system is stronger. Findings for Spanish companies were contradictory.

Additionally, Ntokozi et al. (2022) documented that family-controlled Greek firms were likely to engage in accrual earnings management after the burst of financial crisis in the beginning of 2010's. The study also observed a negative relation between discretionary accruals and cash-lows from operations, due to efforts to conceal poor financial performance. They believe that low reporting quality in Greek is a consequence of weak legal enforcement and investor protection combined with challenging economic circumstances. Surprisingly, the research revealed that having a Big-4 firm as an auditor did not reduce accrual earnings management compared to smaller auditing firms (Ntokozi et al., 2022).

That finding clearly differs from Chia et al. (2007) conclusions, as they report that merely companies that were audited by a Big-6 auditor showed statistically significant reduce in earnings management activities during the Asian financial crisis in 1997. Their study focus on service-oriented listed companies in Singapore, and provide evidence that firms, other than Big-6 audited, were likely to use income-reducing earnings management techniques. Similarly, Mollik et al. (2013) showed that firms in Australia tended to manipulate their earnings downwards more than usual during the financial crisis in 2008 and 2009.

Furthermore, Xi and Ji (2015) complemented the previous literature by finding that similar effect has also occurred in developing country, as they reported increasing earnings management among top listed firms in China during the same period. Both accrual and real earnings management measures were involved. What is interesting, they observed that the sign of earnings manipulations varied across industries. In most industries, firms engaged in income-increasing earnings management, while the government's stimulus packages prompted income-decreasing actions in certain sectors.

Lisboa and Kacharava (2018) compared earnings behaviour of listed firms in UK and Portugal and observed increasing earnings management during financial crises, despite the relatively high accounting quality in both countries. They did not find a significant country effect between UK and Portugal. However, they noted that firm-size affects earnings behaviour differently in these countries. In Portugal, larger companies are more likely to manipulate earnings, as they have a wide range of accounting techniques to use. In UK, large companies are less motivated to earnings management in comparison with smaller companies, due to reputational risks.

Moreover, Lisboa and Kacharava (2018) suggests that firms with high leverage had fewer opportunities for earnings management because the companies are controlled by creditors. In contrast, Iatridis and Kadorinis (2009) observed a positive relation between high leverage and earnings management among the UK listed firms. Different results might be explained by different time periods. Lisboa and Kacharava collected data from 2004 to 2014, while Iatridis and Kadorinis focused only on 2007. It seems that leveraged companies wanted to conceal their weak performance, particularly during the period of strong economic growth before the financial crisis. When the crisis is on, firms may be more reluctant to take the risk of getting caught.

This interpretation is also supported by Filip and Raffournier (2014), who reported a significant drop in earnings management activity in Europe during the 2008 financial crisis, compared to pre-crisis period. They explained the varying intensity of earnings management between European countries with national characteristics, for example "law enforcement, corporate governance quality and importance of financial markets".

Cimini (2015) found similar results in a large majority of European countries in 2006 – 2012. Cimini believes that findings reflect manager's efforts to enhance reporting quality and attract potential investors. He utilized the "aggregate accrual" approach and noted that the gap between expected accruals and the reported accruals increased after the burst of the financial crisis.

An Indian study by Kumar and Vij (2017) examined the earnings management behaviour of Indian companies before, during, and after the financial crisis in 2008. Similar to Filip and Raffournier (2014) as well as Cimini (2015) they reported a substantial decrease in the accrual earnings management activity during the crisis. Furthermore, when they tracked companies' earnings behavior post-crisis until 2012, they observed a clear increase in earnings manipulation after the crisis was over. However, the level of such actions did not return to pre-crisis levels, providing intriguing insights into the lasting effects of financial crises on earnings management incentives.

Chintrakarn and Jiraporn (2017) took a longer time perspective, from 1996 to 2010, and examined the extent of earnings management in the United States. They not only documented a remarkable decrease in earnings management during the Global Financial Crisis in 2008, but also found similar results regarding the Dot-com crisis in 2001 and the Asian Financial Crisis in 1997 – 1998. In the same study, they found a significant decline in firm values and profitability, and believe that managers had less incentives to earnings management because the results were so poor that manipulating them could not have changed the picture. Chintrakarn and Jiraporn also argumented that managers "can simply blame the crisis for the poor performance", and hence will be personally less responsible for the bad financial situation of the company.

Finally, Persakis and Iatridis (2015) conducted a very thorough study that focuses on earnings management in 18 largest economies of the world during Global Financial Crises in 2008. The findings of the study can be considered as a relatively strong evidence, as these countries in total covered 55 % of the global market capitalization. In addition to that, they used 10 different measures, such as three accruals quality measures, earnings smoothness and value relevance, to create as comprehensive picture of the reality as possible. They observed that earnings quality declined significantly as a result of aggressive earnings management during the financial crisis.

To add more value to the findings, Persakis and Iatridis (2015) categorized 18 sample countries into three clusters, based on the level of shareholder protection in each country. Detailed analysis revealed that the extent of earnings management is negatively related to the strength of the investor protection system. It indicates that countries with high-level shareholder protection exhibit higher quality of earnings, which is a noteworthy matter for investors when allocating their funds during financial crises.

To conclude, previous literature has deeply examined the impact of financial crises on the earnings management activity and provided mixed evidence of the effects. Some studies report more aggressive earnings management during crises (Iatridis and Dimitras, 2013; Ntokozi et al., 2022; Chia et al., 2007; Mollik et al., 2013; Xi and Ji, 2015; Lisboa and Kacharava, 2018) while others provide evidence of decreasing earnings management (Filip and Raffournier, 2014; Cimini, 2015; Kumar and Vij, 2017; Chintrakarn and Jiraporn, 2017). Moreover, it seems that financial crises have affected both income-increasing and income-decreasing earnings management, depending on the circumstances. In fact, there are also studies that found no difference in the earnings management behaviour during crises compared to pre-crisis periods (Franceschetti, 2017; Habib et al., 2013). Despite the conflicting views, compiling the studies together can reveal factors that explain the differences and thereby help us to understand the impact of financial crises more profoundly.

5 EXPLAINING THE CONFLICTING FINDINGS

Previous literature has provided a lot of empirical evidence on the impact of financial crises on earnings management. The topic has attracted significant interest in accounting research, especially after the Global Financial Crisis in 2008. Studies have been conducted using various methods, in different areas, and over different time periods. In light of divergent research results, it is evident that there is no simple answer to the question of whether earnings management is more prevalent during financial crises.

However, few papers discuss the reasons behind the differences. Therefore, it is useful to analyse the conflicting findings more closely to understand the underlying drivers of the results. This section will discuss the possible factors that have led to mixed results.

5.1. Investor protection

Level of shareholder protection in a country appears to be negatively associated with the impact of financial crises on earnings management. In other words, earnings manipulation in economies with strong legal enforcement tend to be less affected than economies with weaker investor protection.

This is view is supported by Persakis and Iatridis (2015), who examined the effect on 18 largest economies of the world in 2008. They found that, despite the location, firms engaged increasingly in earnings management during the crisis, but fluctuations in earnings quality were higher in countries with weaker investor protection system.

Similarly, Iatridis and Dimitras (2013) provided evidence that while earnings management increased in Portugal, Italy and Greece, the opposite effect was observed in Ireland, which is a common-law country with better shareholder protection. The sample in their study is quite small but it seems that common-law and code-law countries are differently affected in this case. Ntokozi et al. (2022) findings support this view, as they reported significant increase in earnings management in Greece during the financial crisis. Xi and Ji (2015) also documented increasing earnings management in China which follows a code-law system.

High investor protection is expected to cause lower earnings management, because it limits managers' ability to pursue their own interest (Leuz et al., 2003). This cause-and-effect relationship has been widely recognized for a long time. However, it is interesting to note that investor protection not only mitigates the impact of financial crises on earnings management but can also make earnings management even less prevalent during crises, as observed in Ireland.

5.2. Audit quality

Another interpretation that can be made from the results is that the quality of auditing might affects how earnings behaviour changes in financial crises. It appears that firms that have some of the biggest auditing firms as an auditor, are likely to decrease earnings management during financial crises.

Chia et al. (2007) investigated earnings management in publicly listed service sector firms in Singapore during the Asian financial crisis in 1997. They observed that while other firms were more likely to engage in earnings management in the crisis, companies that were audited by a Big-6 auditor showed statistically significant reduce in earnings management activities. This is supported by the fact that most of the listed entities in EU are audited by Big-4 and earnings management decreased in the majority of European countries during the financial crisis in 2008 (Cimini, 2015; Filip and Raffournier, 2014). Nevertheless, Ntokozi et al. (2022) suggested that having a Big-4 auditor did not reduce earnings management in Greek firms. It might be due to an extremely poor financial conditions and weak legal enforcement in Greece.

High-quality auditor can reduce earnings management because of its deterrent effect. High-quality auditors adhere strictly to auditing standards and regulations. They follow established procedures, which helps identify any inconsistencies or irregularities in financial statements, making it harder for companies to manipulate earnings.

5.3. Different phases of crises

Another reason that may partially explain variations in research findings is that earnings behavior appears to differ significantly at different phases of a crisis. Therefore, the choice of the measurement period can have a significant impact on the final result.

Kumar and Vij (2017) observed that earnings management in Indian companies decreased substantially during the crisis in 2008, but increased right after the crisis was over. However, the extent of earnings management did not reach the pre-crisis level, indicating that the crisis also had some lasting effects on the management incentives.

Trombetta and Imperatore (2014) went even further in analysing the changes at different stages of the crisis. They stated that "earnings quality improves during moderate periods of crisis and worsens as financial crisis becomes extreme". They explained that during the moderate stage, the growing threat of bankruptcy makes managers more reluctant to take risks, leading to a decrease in earnings management. As the crisis intensifies, managers are more likely to resort to earnings management despite the associated risks, because it may be necessary for survival.

5.4. Firm characteristics

Lastly, the firm-specific characteristics of the chosen sample of companies can impact the research results. Xi and Ji (2015) observed that the sign of earnings management varied across industries in Chinese companies during the financial crisis. Governments usually aim to mitigate adverse effects by providing support to firms in certain industries. Consequently, companies have an incentive to report weak results to qualify for assistance, while managers in other industries have incentives to manipulate earnings upwards.

Earnings behaviour of highly leveraged firms might differs from other firms. An investigation on UK listed firms in 2009 showed that firms that are in need of capital have higher tendecy to employ earnings management (Iatridis and Kadorinis, 2009). On the other hand, firms with higher leverage are more controlled by creditors and therefore might have fewer opportunities for earnings management (Lisboa and Kacharava, 2018)

6 CONCLUSION

This thesis has reviewed literature regarding earnings management during financial crises. The study focuses specifically on examining whether financial crises make earnings management more prevalent or not. At first, the study identifies factors that support or oppose the hypothesis that earnings management increases during financial crises. Next, the key findings from existing literature are presented. Finally, potential explanations for conflicting research results are analyzed. The aim is to better understand the obtained results which is crucial for assessing how managerial incentives and economic circumstances may impact the quality of financial reporting in the future.

There are several reasons that could be expected to amplify income-increasing earnings management during financial crises, such as managers' incentives to maximize compensation and retain their jobs, stricter regulatory environment, and the necessity for favorable financial results to facilitate acquisition of capital and prevent costly debt covenant violations. On the other hand, various reasons can contribute to the growing prevalence of income-decreasing earnings management. These reasons include the fear of legal consequences in the event of bankruptcy, the necessity for excessively poor results to facilitate debt restructuring, achieve support from the government, and gain advantages in labour negotiations. Additionally, there is an increasing inclination toward risk-taking in tax planning.

However, the radical change in the business environment brings along several factors that support the hypothesis that earnings management decreases during financial crises, for example higher audit quality, higher level of conditional conservatism, higher litigation risk, diminished chances to influence compensation and the lower value relevance of earnings.

The literature review revealed that the results of empirical studies are widely distributed, and there is no simple answer to whether earnings management is more or less prevalent during financial crises. In some studies, a significant increase in earnings management has been observed, while other documented a notable decrease. Both income-increasing and income-decreasing effects have been reported. Despite the divergent results, it appears to be quite clear that earnings behaviour undergoes some kind of change during crises.

Based on the research findings, it seems that earnings management decisions are influenced by the audit quality and legal environment, in particular the level of shareholder protection. In addition to that, firm-specific characteristics, such as industry and the level of leverage might partially explain the differences between findings. Moreover, closer analysis has shown that earnings behaviour also changes during different phases of the crisis, which is why the choice of the examination period can affect the research results.

To conclude, earnings management decisions are shaped by the incentives of the particular firm in each financial situation and business environment. Similar to any other business decision-making, management evaluates potential costs and benefits of earnings management. Understanding the underlying factors behind these decisions is useful for investors when assessing the reliability of financial statements and for regulatory authorities when establishing standards to enhance the quality of financial statement information during financial crises. Future research should investigate how real and accrual earnings management are affected by financial crises. Additionally, it would be interesting to further examine the impact of capital structure on earnings management decisions during financial turbulence.

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