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Loan Loss Provisioning:

Exploring Earnings Management practices in the Banking context

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To my family,

my home.

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List of Acronyms

Acronym	Definition
2SLS	Two-Stage Least Squares
BBB	Bigger Bath Bank
BCBS	Basel Committee on Banking Supervision
BM	Business Model
CC	Control of Corruption
CEO	Chief Executive Officer
CG	Corporate Governance
DLLP	Discretionary Loan Loss Provision
DNCO	Discretionary Net Charge-Off
EBA	European Banking Authority
EBT	Earnings Before Taxes
EBTP	Earnings Before Taxes and Provisions
EC	European Commission
ECB	European Central Bank
ECL	Expected Credit Loss
ESRB	European Systemic Risk Board
EU	European Union
FASB	Financial Accounting Standards Board
FCIC	Financial Crisis Inquiry Commission
FSF	Financial Stability Forum
G20	Group of Twenty
GDP	Gross Domestic Product
GE	Government Effectiveness
GLS	Generalized Least Squares
GRWA	Gross Risk Weighted Assets
IAS	International Accounting Standard
IASB	International Accounting Standards Board
ICL	Incurred Credit Loss
IFRS	International Financial Reporting Standard

IV	Instrumental Variable
L&I QUALITY	Legal and Institutional Quality
LLA	Loan Loss Allowance
LLP	Loan Loss Provision
LLR	Loan Loss Reserve
NCO	Net Charge-Off
NDLLP	Negative Discretionary Loan Loss Provision
NDNCO	Negative Discretionary Net Charge-Off
NPL	Non-Performing Loan
OLS	Ordinary Least Squares
P&L	Profit and Loss
PDLLP	Positive Discretionary Loan Loss Provision
PDNCO	Positive Discretionary Net Charge-Off
PSAVT	Political Stability and Absence of Violence/Terrorism
RL	Rule of Law
ROA	Return on Assets
RQ	Regulatory Quality
SBB	Smaller Bath Bank
SICR	Significant Increase of Credit Risk
TCR	Total Capital Ratio
UK	United Kingdom
US	United States
US GAAP	United States Generally Accepted Accounting Principle
V&A	Voice and Accountability
WGI	World Governance Indicator

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Introduction

Earnings management is a broad topic in accounting literature. Generally speaking, the preparation of financial statements allows rooms for discretion to managers, offering the opportunity to manipulate income. Over time, academics have provided mixed argumentations about how the occurrence of such practices should be framed within accounting system.

Following the theoretical framework of *Economia Aziendale* by Zappa (1920-1929, 1927, 1957), the notion of income requires subjective arrangements, such as hypotheses and conjectures, on which evaluations of assets and liabilities - as components of capital - are based. Consequently, earnings management practices result from the discretionary nature of certain values that are included within financial statements (Amaduzzi, 1947; Onida, 1974). In other terms, since the accounting theory refuses the idea of rigid and objective valuations, especially for those ones referring to operations still in progress at balance sheet date, preparers have to evaluate discretionally the variety of business activities and market trends (Zappa, 1946).

Also, in light of *Economia Aziendale* framework, given that the firm is a continuous economic system, financial statements represent merely a conventional interruption of the ongoing flow of management in order to measure income. Thus, earnings management practices may be considered as the outcome of such unnatural fragmentation into financial periods.

Coherent with these arguments, some Italian scholars have highlighted that accounting practices may represent a prudent attempt to preserve firm's going concern.

For instance, the overvaluation of liabilities, if it does not falsify financial statements, is a recommended policy that creates tacit reserve to protect firm from future unexpected losses (Amodeo, 1994; Onida, 1974). Thus, under certain conditions, some Italian academics frame positively earnings management within accounting system.

Conversely, international literature has proposed an opposite view when examining accounting systems under International Accounting Standards/International Financial Reporting Standards (IASs/IFRSs) and United States Generally Accepted Accounting Principles (US GAAPs), respectively. One possible reason could be related to the major user-oriented approach, rather than a firm-oriented approach, of the aforementioned standards (Macchioni, 2016). Exactly, the Conceptual Framework of IASs/IFRSs and US GAAPs states that financial reporting aims to provide useful financial information, primarily to a certain category of stakeholders such as existing and potential investors, lenders and other creditors. Thus, under this theoretical paradigm, earnings management has been considered a threat for the usefulness of financial reporting by increasing information asymmetry (Burgstahler and Dichev, 1997; Chen *et al.*, 2007; Dechow and Dichev, 2002; Dechow and Skinner, 2000; McNichols, 2000; Schipper and Vincent, 2003).

Research on earnings management is increased to the extent that, to date, the topic covers a critical issue in accounting literature. Due to the worldwide adoption of IASs/IFRSs, studies have strengthened the view of earnings management as threat for the usefulness of financial reporting. As result, related accounting practices are considered a negative indicator of accounting quality (Beatty and Liao, 2014; Beyer *et al.*, 2019;

Christensen *et al.*, 2022; Cohen *et al*., 2014; Macchioni *et al*., 2021; Dyreng *et al.*, 2022; Tran *et al*., 2020).

Following this stream of literature, a key issue concerns the occurrence of earnings management on banks' financial statements. This is mainly due to the crucial role of banking context within the economy (Barth *et al.*, 2013; Caldarelli *et al.*, 2014; Diamond and Rajan, 2001; Flannery *et al.*, 2004; Hegde and Kozlowski, 2021; Matousek *et al.*, 2015; Moenjak, 2014). As emphasized by Diamond and Rajan (2001), banks offer valuable services on both sides of their balance sheets, that are providing loans to borrowers (asset side of the balance sheet) and collecting liquidity across depositors (liability side of the balance sheet). However, despite these main activities, credit institutions remain black boxes (Morgan, 2002) meaning that, although simply "*money goes in, and money goes out*", their operations are hard to observe from outside. For this reason, financial statements represent the principal tool for investors, regulators, policy makers and other outside parties to monitor banks' performance (Bhat and Desai, 2020; Bushman and Williams, 2012; Chakraborty *et al.*, 2022; Demirgüç-Kunt and Detragiache, 2011; Lartey *et al.*, 2022; Nier and Baumann, 2006; Novotny-Farkas, 2016). In other terms, financial reporting plays a fundamental role in promoting market discipline as a complementary force in banks' supervision. Not only, but banks are also considered to be a relevant actor in order to preserve the worldwide financial stability (Garcia and Nieto, 2007; Moenjak, 2014).

At this stage, it should be (at least intuitively) clearer why investigation on earnings management in the banking context deserves a particular attention by researchers. More precisely, such practices interfere negatively with a) the external reporting, reducing the

transparency of provided information; b) the market discipline, increasing the likelihood to present misleading accounting numbers on which its participants rely to allocate resources; and c) the monitoring activities by authorities and capital regulatory, increasing the information asymmetry within the whole sector (Agénor and Zilberman, 2015; Balakrishnan and Ertan, 2019; Beatty and Liao, 2011; Boot *et al.*, 2016; Bouvatier and Lepetit, 2008; Bushman and Williams, 2012; Huizinga and Laeven, 2012; Lartey *et al.*, 2022; Liu and Ryan, 1996; Nier and Baumann, 2006; Tran *et al.*, 2020).

Under these underlying issues, most of researchers investigate earnings management through empirical models. In doing so, in fact, they are able to detect whether such opportunistic behaviour occurs within the preparation of financial statements. To date, loan loss provision has been the mean accounting item within these studies (Ahmed *et al.*, 1999; Beatty and Liao, 2014; Curcio *et al.*, 2017; Danisman *et al.*, 2021; Kanagaretnam *et al.*, 2004; Leventis *et al.*, 2011; Tran *et al.*, 2020). Its recognition concerns the assessment of loans at the reporting date. In particular, if managers presume partly or totally uncollectible these assets, they should estimate the corresponding loss by recognizing an expense burdening on the income for that reporting period[1]. The academic interest on such item as tool of earnings management may be related to two main reasons. First, based on an accounting point of view, it is subjected to a high degree of managerial

[1] Regarding loan loss provisions within the theoretical framework of *Economia Aziendale*, it has been emphasized how their recognition is finalized to the assessment of recognized loans for their effective value, based on the available information at the reporting date (Amodeo, 1994, p. 515). In this regard, Amodeo (1994) highlights two potential recognition procedures (pp. 410-411). On one hand, when preparers retain that loans have lost their value, loan loss may be directly measured, based on the income approach of *Economia Aziendale*, by the decreasing adjustment of such assets. However, this procedure is considered particularly critical when the credit right is kept totally preserved at the reporting date, although the presence of indicators making probable loans' value loss. For this reason, on the other one, the recognition of an allowance measuring loan loss provisions is considered a more adequate accounting procedure. In doing so, in fact, the nominal value of loans is preserved until the date of the event that makes certain the lost recoverability of loans.

judgment, leaving a major opportunity to manipulate earnings compared to other items within financial statements (Beatty and Liao, 2014; Kanagaretnam *et al.*, 2004, 2005; Wahlen, 1994). Second, since it is the largest accrual in banks' accounts, it has important implications on bank's lending, opacity and stability (Bhat *et al.*, 2021; Bushman and Williams, 2012; Iannotta and Kwan, 2014; Lartey *et al.*, 2022).

Following the aforementioned literature, this thesis aims to explore earnings management through loan loss provisioning in underexplored fields of research. In particular, it investigates whether banks adopt opportunistic behaviours within the preparation of financial statements in response to critical events that have significantly affected the sector and the recognition of loan loss provisions. The *fil rouge* of the open and unresolved issues, which will be examined in this manuscript, is explained below.

How do banks react to downturns? In the last decades, banking system has been significantly turmoiled by different crises, i.e. (chronologically) the Global Financial Crisis (2007-2009), the Sovereign Debt Crisis (2010-2012), which has particularly affected European Union (EU) entities, and the worldwide spread of Covid-19 pandemic in 2020 (whose effects are still ongoing at the time of writing). During the aforementioned crises, the recognition of loan loss provisions has primarily captured the reduction of borrowers' creditworthiness due to the contraction of economy. Although how banks have reacted to some of these downturns has been examined by scholars from an accounting practice point of view (Curcio *et al.*, 2017; Danisman *et al.*, 2021; Filip and Raffournier, 2014; Jin *et al.*, 2018; Kim, 2022), two key issues remain open. First, the empirical evidence is divided for each crisis, then there is a lack about a comprehensive overview of earnings management practices including all the downturns. Second, there

are specific kinds of manipulations that have not yet been adequately examined during crisis periods, so, to date, it is unknown whether they have been adopted within the preparation of financial statements. These are two critical aspects that need to be clarified in order to have a better understanding about how banks react to downturns from an earnings management point of view.

How do banks react to changes in accounting regulatory? In 2014 the International Accounting Standards Board (IASB) has published the new standard on financial instruments, i.e. IFRS 9 "*Financial Instruments*". It has replaced the previous IAS 39 "*Financial Instruments: Recognition and Measurement*" since 2018 reporting period. In doing so, the Board has stated a new impairment model based on expected credit losses (ECLs), exceeding the previous one based on incurred credit losses (ICLs). According to accounting literature (Capkun *et al.*, 2016; Liu *et al.*, 2014), preparers capture opportunities of earnings management deriving from changes in standards. Empirical evidence shows that such behaviour is particularly aggressive when more principle-based standards are endorsed (Fornaro and Huang, 2012; Sundivik, 2019). In this regard, although IFRS 9 has introduced a more discretional impairment based on a forward-looking approach in place of the prior backward-looking approach, to date, little is known on whether banks have been encouraged to enhance accounting practices due to the new disruptive discipline on financial instruments. This is an important issue to respond to the call for research by the standard setter (IASB, 2020) about the effects of the new standard on reporting entities and, in more general terms, to examine how changes in accounting regulatory affect bank managers' discretionary behaviour within the preparation of financial statements.

How do banks react to changes in accounting regulatory during downturns? The worldwide spread of Covid-19 virus since March 2020 has pursued global economy into a recession phase (Moody's, 2020). Within IASB's standards such crisis has represented the first test of the new impairment model under IFRS 9 during a crisis period. This has been a big challenge for banks for at least two main reasons. First, entities applied the new requirements when they had still a short reporting experience on it, given the year proximity from IFRS 9 mandatory adoption (i.e. 2018) to the beginning of virus spread (since March 2020). Second, since the new model is based on expected losses, it requires to include forecasts into the measurement of provisioning. However, making reliable predictions was exceedingly difficult at the time of a crisis from the unprecedent consequences for the whole globe (De Araujo *et al.*, 2021). To date, whether banks have adopted more aggressive accounting practices under ECL provisioning during Covid-19 crisis is an underexplored issue, then deserving further investigation. This is important not only to have a better knowledge on the effects of IFRS 9 at the varying of business cycle, but also to have a major awareness about how banks react in terms of accounting practices when the adoption of novel accounting requirements is turmoiled by the occurrence of crisis in external environment.

Following the aforementioned three issues, this thesis is structured as follows. The Chapter I is named "*Big Bath Accounting in Loan Loss Provisioning and Downturns: Empirical Evidence from the US and EU Banking context*". As outlined above, banking stability has been triggered by the occurrence of several crises. More specifically, the Global Financial Crisis of 2007-2009 had its epicentre in the United States (US) banking context. The burst of the credit bubble pursued institutions into the experience of huge whole-business disposals, run-offs, asset sales and write-downs. The high losses made

banks unable to generate organically new capital. Furthermore, given banks' exposure to the global systemic shock, the collapse of US setting deteriorated the soundness of worldwide financial industry (Financial Crisis Inquiry Commission [FCIC], 2011). In particular, when the crisis extended to EU banks, governments adopted several measures of rescue, such as the increase of deposit insurance ceilings and guarantees for banking liabilities, the recapitalization through bailouts and capital injections, and the purchase of toxic assets (Anghel *et al.*, 2016; Becker and Ivashina, 2018; De Santis, 2012; European Commission [EC], 2013; Matousek *et al.*, 2015). The consequences of such initiatives were the rapid increase of public debt to the extent that some member states surfaced the default risk. The period of major uncertainty within EU, approximately since 2010 to 2012, was noted as Sovereign Debt Crisis. In that time, banks were particularly turmoiled due to the establishment of a "*deadly embrace*" with sovereigns (Farhi and Tirole, 2018). On one hand, part of the public debt held by banks increased their riskiness, making funding more costly and difficult to obtain, while, on the other one, the higher sovereign risk reduced the value of the collaterals that banks used to raise wholesale funding and central bank liquidity. Finally, the global banking contest experienced a new period of downturn due to the worldwide Covid-19 spread since March 2020. During the year the negative inversion of business cycle across countries was accelerated by the rapid increase of healthcare crisis and, in turn, by the several preventive measures endorsed by governments to limit disease outbreak. According to Moody's (2020) research, the Global Gross Domestic Product fell by 5.1% in 2020, almost three times more than the 1.8% decline recorded in 2009 during the Global Financial Crisis. Due to the collapse of economic activities, banks recognized huge losses and capital generation was strictly comprised (De Araujo *et al.*, 2021; Moody's, 2020).

During the aforementioned crises, the quality of loan portfolio was rapidly reduced given the deterioration of borrowers' creditworthiness. In this regard, the recognition of loan loss provisions has covered a crucial role by primarily reflecting the rapid increase of credit risk. Following this issue, the study assumes that, since provisions have been more likely to increase, preparers may have had incentives to overstate these expenses during downturns in order to disclose a better future performance in subsequent reporting years, exploiting the reversal effect of such accruals. This opportunistic practice is noted by earnings management literature as big bath accounting (Christensen *et al.*, 2008; Elliott and Shaw, 1988; Francis *et al.*, 1996; Moore, 1973). Coherent with such prediction, the main research question that this study aims to answer is: *Are bank preparers more likely to take a big bath through the recognition of higher loan loss provisions during downturns?*

In order to investigate such issue, the sample includes 1,430 banks from the EU countries and US for the 2007-2021 time horizon. Years are then divided into crisis and non-crisis periods based on historic events (European Central Bank, 2021; EC, 2013; FCIC, 2011). The research design, instead, bases on two-stage regression (Kanagaretnam *et al.*, 2003; Lobo and Yang, 2001; Tran *et al.*, 2020). In the first stage loan loss provision is defined in function of its non-discretionary determinants, such as the size of loan portfolio and non-performing loans, and their changes (Beatty and Liao, 2014; Beaver and Engel, 1996; Wahlen, 1994). Since the opportunistic behaviour cannot be directly estimated, the measure of big bath is estimated through positive first-stage residuals that capture the discretionary income-decreasing adjustments as positive difference between loan loss provisions recognized at balance sheet date and their expected values based on non-discretionary determinants. This proxy of big bath is then included as dependent

variable into the second-stage regression in order to test whether banks have adopted such accounting practice during crisis years compared to non-crisis years.

By examining unanimously three different downturns, this research is expected to offer a deeper understanding on the occurrence of earnings management through provisioning within crisis scenario. Also, since big bath accounting is underexplored in banking literature, it may be a unique opportunity to cover the related current literature gap. Furthermore, the study extends its main objective exploring the impact of provisions accounted during downturns on future net charge-offs and earnings. In doing so, it provides new insights about the informativeness of these accruals when business cycle is negatively reversed.

The Chapter II is named "*Bank Provisioning: New Challenges under the Expected Credit Loss model of IFRS 9*". The research motivations refer to the extended discretion of preparers in recognition of the impairment model under IFRS 9. In fact, while the previous IAS 39 provided a backward-looking approach, constraining the measurement of credit losses to the past and current information of the credit risk, IFRS 9, instead, requires, for the first time ever, to also include the evaluation of future events. However, such predictions are subjected to the judgment of managers who have to select the estimation model, the conditioning variables, the length of the forecast window, and the path of macroeconomic indicators. Thus, ECL model has not only made impairment recognition a more sophisticated procedure, but, more importantly, it has extensively increased preparers' discretion within the recognition of loan loss provisions compared to previous ICL model. For this reason, academics and practitioners expect that financial statements under IFRS 9 are subjected to a major risk of earnings management practices

through provisioning (Engelmann, 2021; Giner and Mora, 2019; Macchioni *et al.*, 2021; Restoy and Zamil, 2017).

To address such issue, the research focuses on two opportunistic behaviours, i.e. income smoothing and capital management. The first one consists in reducing provisions when gross profit (i.e. before taxes and loan loss provisions) is low and, conversely, increasing them when gross profit is high. The objective of such practice is to minimize volatility of earnings across years (Bouvatier *et al.*, 2014; Bushman and Williams, 2012; Curcio and Hasan, 2015; Liu and Ryan, 2006; Osma *et al.*, 2019). The second one concerns the management of loan loss provisions in order to align with capital requirements under Basel accord at a minor cost. Banking institutions, in fact, are subjected to a macroprudential regulation that requires to respect minimum capital buffers. Empirical evidence shows that the existence of such regulation affects preparers' choices in terms of provisioning (Anandarajan *et al.*, 2007; Bushman and Williams, 2012; Cummings and Durrani, 2016; Perez *et al.*, 2008; Jutasompakorn *et al*., 2021). Based on such concerns, the two main research questions underpinning the study are: 1. *Do bank preparers smooth more income under ECL provisioning compared to the previous ICL approach?* and 2. *Do bank preparers manage more capital under ECL provisioning compared to the previous ICL approach?*

The sample consists of 131 banks from the EU countries for the 2015-2020 period. Differently from the econometric model in Chapter I, in this Chapter the research design is based on a unique regression model of loan loss provisioning in which such expense is explained through several explanatory variables. In particular, following previous studies (Anandarajan *et al.*, 2007; Bouvatier *et al.*, 2014; Bushman and Williams, 2012;

Cummings and Durrani, 2016; Curcio and Hasan, 2015; Liu and Ryan, 2006; Osma *et al.*, 2019; Perez *et al.*, 2008), the association with the independent variable earnings before taxes and loan loss provisions allows to detect empirically the occurrence of income smoothing practices, while the relation with the independent variable Tier 1 allows to test the capital management practice. To answer the aforementioned research questions, such interest variables are both interacted with a dummy indicator that captures the adoption of ECL. In doing so, the model is able to show how these opportunistic behaviours change under IFRS 9 compared to previous years. Also, the study examines ECL impact from a policy point of view, exploring the association between the new forward-looking provisioning and business cycle. Then, overall, this research provides a comprehensive answer to IASB's (2020) demand to investigate on the effect of the new standard on reporting entities, offering broad evidence on its implication from an accounting practice point of view and a policy perspective.

The Chapter III is named "*Discretionary ECL Provisioning during Covid-19 pandemic: Empirical Evidence from the EU Banking context*". As stated before, the spread of Covid-19 pandemic provides a unique opportunity to test whether and how banks change their discretionary use of loan loss provisions within the new impairment model. In this regard, it should be noted that the latest worldwide crisis has required to re-evaluate the quality of loan portfolio under conditions of extreme uncertainty (De Araujo *et al.*, 2021). In doing so, banks adopted, for the first time ever within a crisis scenario, a new accounting standard (IFRS 9) that has radically broken rules with the previous regulatory discipline (IAS 39).

Following the two previous Chapters, this Chapter unifies their fundamental issues, which are the discretionary use of loan loss provisions during downturns and under ECL model, respectively, by developing a new research question, i.e.: *Are bank preparers more likely to recognize discretionary ECL provisioning after Covid-19 spread?*

The sample consists of 172 banks within EU context for the 2016-2021 period. This setting is selected for two main reasons. First, IASs/IFRSs are widely adopted across institutions after Regulation (EC) No. 1606/2002. Second, Covid-19 pandemic has had a huge impact on EU countries (EC, 2020). Similar to the econometric model in Chapter I, the research design is based on two-stage approach. Then, a first regression is employed to explain loan loss provision in function of its non-discretionary determinants. However, while in Chapter I, only income-decreasing adjustments have been considered in order to capture big bath, in this Chapter both income-increasing and income-decreasing adjustments are included in the main analysis to test hypotheses. In doing so, the study investigates a more comprehensive measure of earnings management, noted by previous literature as discretionary loan loss provisions (Hegde and Kozlowski, 2021; Kanagaretnam *et al.*, 2003; Lobo and Yang, 2001; Tran *et al.*, 2020). By splitting the sample between banks adopting and non-adopting ECL, the second-stage regression allows to explore whether banks recognize more discretionary loan loss provisions under the new impairment model. After that, a difference-in-differences approach is also employed to distinguish banks adopting ECL before and after the spread of Covid-19. Through such analysis, the study explores how banks have changed their discretionary ECL provisioning after the spread of the latest global pandemic.

This study contributes to both latest IFRS 9 and Covid-19 debates, investigating jointly the effect of ECL model and Covid-19 pandemic on earnings management practices through provisioning.

By investigating three underexplored fields of research, this thesis adds new insights to the existent debate on earnings management through loan loss provisioning in the banking context.

More precisely, the Chapter I offers an extensive evidence about the adoption of earnings management through provisioning during downturns examining unanimously the Global Financial Crisis, the Sovereign Debt Crisis and the Covid-19 pandemic. In doing so, it contributes to previous crisis research that (conversely) has explored similar issues focusing on a single downturn (Barth and Landsman, 2010; Brunnermeier, 2009; Cohen *et al.*, 2014; Curcio *et al.*, 2017; Filip and Raffournier, 2014; Huizinga and Laeven, 2012; Kim, 2022; Kothari and Lester, 2012; Laux and Leuz, 2010; Matousek *et al.*, 2015; Mehran *et al.*, 2011). Also, since big bath accounting has been few explored in the banking context compared to other sectors, the Chapter I adds new insights about this specific kind of earnings management within the existent limited debate (Barth *et al.*, 2017; Kim *et al.*, 2021; Kwon and Lee, 2019).

By exploring the impact of ECL provisioning on accounting practices of reporting banks, the Chapter II, instead, may be added to previous research that has examined how changes in accounting regulatory affect earnings management. Within literature that has investigated this issue regarding the mandatory adoption of IASB's standards in EU setting or the endorsement of a new IAS/IFRS (Gebhardt and Novotny-Farkas, 2011; Leventis *et al.*, 2011; Ozili, 2019), the Chapter II provides novel insights about how

opportunistic behaviours through provisioning have been changed after the establishment, for the first time ever under IASs/IFRSs, of a new impairment model based on a forward-looking approach. This issue is particularly important given that IFRS 9 has introduced a new disruptive discipline on financial instruments compared to previous accounting standard (IAS 39).

Finally, by focusing on the adoption of ECL model during Covid-19 crisis, the Chapter III contributes to both crisis literature and studies on accounting regulatory changes that have explored opportunistic behaviours of bank preparers (Ahmed *et al.*, 1999; Anandarajan *et al.*, 2007; Barth and Landsman, 2010; Brunnermeier, 2009; Cohen *et al.*, 2014; Curcio *et al.*, 2017; Filip and Raffournier, 2014; Huizinga and Laeven, 2012; Kim, 2022; Kothari and Lester, 2012; Laux and Leuz, 2010; Leventis *et al.*, 2011; Matousek *et al.*, 2015; Mehran *et al.*, 2011). Specifically, the Chapter III extends existent research providing a timely picture about earnings management practices through provisioning during the first test of IFRS 9 within a crisis scenario. It offers to the academic debate an answer about how banks use the new ECL provisioning to face conditions of extreme uncertainty caused by the latest global downturn.

Thus, taken together all the Chapters, this manuscript allows a better understanding about how banks have reacted to the aforementioned events in terms of earnings management through provisioning, covering literature gaps and extending the borders of existent research.

Compared to prior literature on loan loss provisions (Beatty and Liao, 2014; Bhat *et al.*, 2021; Hegde and Kozlowski, 2021; Kim, 2022; Tran *et al.*, 2020; Zhang and McIntyre, 2021), this manuscript argues how managers may use such accruals through

different kinds of manipulations. Accordingly, the Chapter I examines the practice of big bath accounting to investigate whether banks overestimate provisions during downturns in order to disclose a higher future performance during subsequent non-crisis periods. The Chapter II explores whether ECL model has encouraged banks to adopt two different kinds of manipulation, i.e. the income smoothing, providing of fixing the value of provisions in a manner to reduce income variability over time, and the capital management, providing of measuring provisions in order to have a better (less costly) alignment with capital regulatory adequacy. Finally, the Chapter III investigates whether banks exploit impairment discretion under IFRS 9 during Covid-19 crisis to recognize both income-increasing and income-decreasing adjustments within the preparation of financial statements. Thus, by looking at multiple accounting practices, this manuscript offers a better understanding about possible opportunistic behaviours that may occur through provisioning recognition. In other terms, it offers the opportunity to collect into a single research work an extensive knowledge about different kinds of earnings management through loan loss provisions in the banking context.

Furthermore, this thesis provides insightful practical implications. First, considering that one key concern for investors is to have a clear picture of banking performance to support their decisions on resources' allocation, the manuscript highlights about multiple ways through which managers recognize discretionally loan loss provisions to manage earnings. Thus, it may be useful for these users to have a better interpretation of such accruals and, consequently, be more informed within their investment decision-making process. This is crucial to approach a *quasi-efficient* resource allocation.

Second, the IASB wonders how the new standard on financial instruments has affected reporting entities. This thesis is an opportunity to examine ECL implications on accounting practices of income smoothing, capital management and discretionary income-increasing and income-decreasing adjustments. Additionally, it is also important to notice that IFRS 9 results from a long project of the Board to improve financial instruments' accountability. Following such concern, this manuscript helps to evaluate unintended consequences of regulatory accounting changes through an earnings management point of view.

Third, this thesis may be of interest for regulators. Banking sector is opaquer compared to non-financial industries because of the higher information asymmetries associated with credit institutions. As explained above, banks are black boxes and, for this reason, financial reports represent fundamental supervisory tools for regulators. Having a better knowledge on the possible kinds of accounting manipulations is then important to assess the level of transparency of the whole sector and the potential implications of such practices on the macroprudential regulation governing the international banking system. In this regard, such manuscript offers a timely state of art about the occurrence of earnings management through loan loss provisioning based on a large sample of cross-country banks.

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Concluding Remarks

Earnings management literature argues that preparers use discretion in accordance with accounting requirements to manipulate income. In particular, in the banking context, academics find that managers take into account discretionary loan loss provisions within the preparation of financial statements. Following this stream of research, this thesis has explored several accounting practices of earnings management through provisioning at the occurrence of critical events that have significantly impacted on credit institutions and the recognition of these accruals. They are:

1) the set of three different downturns, i.e. the Global Financial Crisis, the Sovereign Debt Crisis and the Covid-19 pandemic, that have significantly turmoiled the stability of banking system across countries requiring a more adequate provisioning to face the higher credit and default risks;

2) the adoption of ECL provisioning under IFRS 9, that has introduced a disruptive discipline on the impairment of financial instruments, affecting significantly banking sector due to the relevance of these items in banks' accounts; and

3) the adoption of ECL provisioning under IFRS 9 during Covid-19 pandemic, that has represented the first test of the new impairment model within a downturn scenario, providing a big challenge for banks that were called to recognize reliable expected losses during a period of extreme uncertainty caused by a crisis from the unprecedent consequences.

In particular, the Chapter I has addressed whether banks take a big bath during downturns. Based on a sample of 1,430 banks from United States and European Union countries over the 2007-2021 period, including the Global Financial Crisis, the Sovereign Debt Crisis and the Covid-19 pandemic, results show that banks adopt big bath accounting through loan loss provisions during the aforementioned crisis periods. This allows to understand that credit institutions underestimate income during downturns in order to disclose a better future performance when business cycle is positively inverted.

This finding is particularly relevant to analyse the "contribution" of banks to crises. In fact, encouraged to take a big bath, banks manage earnings reducing transparency of the financial reporting during downturns. Thus, in place of a mere recognition of events, credit institutions adopt discretionary accounting practices that increase information asymmetry within the sector.

This study also shows that bigger bath banks, i.e. entities taking into account a more aggressive manipulation, recognize less predictive loan loss provisions of net loans' future charge-offs and earnings compared to smaller bath banks, i.e. entities taking into account a more limited manipulation. In this way, findings highlight that a higher manipulation is associated with a lower informativeness of such accruals.

Relative to the contribution to previous literature, in showing the opportunistic behaviour of overprovisioning during downturns, this study covers the lack of research on big bath accounting in the banking context. To date, in fact, scholars have mainly focused on different kinds of manipulations. Additionally, in author's view, it is expected to be the first empirical study that investigates banks' accounting practices during all the aforementioned crises.

The Chapter II has examined how the establishment of the ECL model under IFRS 9 has affected the accounting practices of income smoothing and capital management. By introducing a more principle-based and forward-looking approach, in fact, the new standard has significantly changed the recognition of provisions compared to the previous backward-looking approach. Based on a sample of 131 banks from European Union countries over the 2015-2020 period, results show that banks smooth more income and manage more capital through ECL provisioning compared to the previous impairment model. This finding is particularly interesting to conclude about how banks exploit opportunities deriving from changes in accounting regulatory to enhance the accountability of discretionary behaviours within the preparation of financial statements. Furthermore, the research shows that the new forward-looking approach results in a minor procyclical provisioning compared to the previous backward-looking approach.

Overall, this study adds new insights to the latest IFRS 9 debate, providing empirical evidence about the impact of the standard on banks' accounting practices and provisioning cyclicality. In doing so, it answers to the call of research by the IASB that has invited academic community to investigate the effect of IFRS 9 on reporting entities.

The Chapter III has investigated the effect of Covid-19 pandemic on discretionary ECL provisioning. Based on a sample of 172 banks from European Union countries over the 2016-2021 period, results show that banks recognize more aggressive income-increasing and income-decreasing adjustments. This may be due at least for two mean reasons. First, ECL model, *per se*, allows a discretionary procedure of impairment to the extent that managers may have opportunistically taken into account provisions during downturn. Second, the latest crisis may have encouraged preparers to manage more

earnings through two possible behaviours. On one hand, the lower levels of earnings caused by the downturn may have pursued preparers to adjust upward income for compensation purposes. On the other one, the lower levels of earnings caused by the downturn may have incentivized a practice of overprovisioning in order to disclose a better future performance when business cycle will be positively inverted.

In synthesis, this finding allows a better knowledge about how banks react in terms of earnings management when a more principle-based impairment is adopted within a crisis scenario. In particular, it highlights that bank preparers enhance their accounting practices through the recognition of the new accounting requirements exploiting the major uncertainty of the external environment.

Also, this research provides a valuable contribution to the latest IFRS 9 and Covid-19 debate, providing, to author's knowledge, the first empirical evidence about the impact of the pandemic emergency on discretionary ECL provisioning. This issue, in fact, is still unexplored at the time of writing.

Looking at the manuscript as a whole, this thesis contributes to previous banking literature that explores accounting opportunistic behaviours through provisioning, highlighting how bank preparers enhance the discretionary use of loan loss provisions during downturns and when more principle-based accounting requirements are established. In doing so, it also allows a clearer picture about different kinds of accounting practices through provisions, which are the income-increasing and income-decreasing adjustments, the big bath accounting, the income smoothing and the capital management.

Furthermore, this thesis provides insightful practical implications. First, a key concern for investors is to have an adequate understanding of bank's performance to

support their decisions about existing and potential investments. Based on the empirical results of this manuscript, preparers manage earnings in several manners through loan loss provisions. This means at least two main things. First, overall, investors should posit a red fleg on such accruals given that multiple opportunistic behaviours may be adopted through their recognition. Second, since empirical evidence provides a timely state of art of current manipulations, they should interpret with major caution latest earnings on banks' financial statements within European Union and United States context. In other terms, the results of such thesis may be particularly relevant for investors to increase their awareness about banks' accounts. This is important considering that, if investors have a better knowledge of accounting numbers, information asymmetry within the sector is more likely to be reduced and, consequently, the resource allocation should approach a *quasi-efficient* distribution into the capital market.

Second, this manuscript may be also of interest for the IASB for two main reasons. First, given that empirical research on IFRS 9 is still limited, the Board has addressed the need to enhance studies on this topic in order to support the ongoing *Post-Implement Review* of the standard. In this regard, this thesis offers a comprehensive answer to the Board from an accounting practice point of view, by showing that banks use ECL provisioning to smooth income, manage capital and, overall, take into account income-increasing and income-decreasing adjustments. Second, since all the kinds of investigated opportunistic behaviours refer to the so-called *accounting earnings management*, empirical evidence is particularly useful for the IASB since it has the levers to mitigate the occurrence of such accounting practices. Exactly, since preparers adopt such opportunistic behaviours exploiting reporting discretion allowed by accounting standards, the Board may intervene through the standard setting process in order to

compress the areas of discretion within the preparation of financial statements, thus reducing the opportunities of earnings management.

Third, this manuscript has also important insights for regulators. In this regard, it should be noted that understanding how banking accounting quality changes across time is essential for them. This is because the information on financial statements is an input to calculate banks' capital buffers to safeguard financial stability. Since this thesis shows the occurrence of earnings management practices through provisioning across banks, it highlights implicitly about the need to employ more efficient policies by regulators in order to enhance the supervisory and monitoring activities on financial information reported by banks, increase the reporting transparency and preserve the soundness of the entire banking system.

Finally, since this thesis has addressed unexplored research questions, such manuscript can represent a starting point for further studies within earnings management literature in the banking context. In this regard, it is useful to address that the empirical evidence related to the recent ECL adoption and Covid-19 pandemic is based necessary on the data available at the time of writing. Although results provide a timely state of art of earnings management practices, it is too early to draw definitive conclusions. Then, scholars may continue to investigate on this topic extending the time horizon of investigation and examining potential differences between short-term and long-term period.

Last but not least, in author's view, it is important to underline that, although earnings management is a well-investigated topic in accounting literature, it will remain a dominant issue in future research. This is for two mean reasons. First, it is affected by

managerial incentives that may simply change due to the appointment of new preparers. Second, such practices are strongly contextual, meaning they are significantly affected by the environment in which financial statements are prepared. As result, earnings management practices modify over time at the varying of the external factors surrounding them. Taken together these two aspects, the occurrence of opportunistic accounting practices is subjected to the continuous change of preparers and external environment. Consequently, "*Are bank preparers more or less likely to manage earnings?*" will always remain an open and timely issue.