Discretionary Loan Loss Provisions, Earnings Management and Capital Management in Banks

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Abstract
The two past decades have been marked by a multitude of financial scandals (the Enron failure, WorldCom. etc.) mainly caused by the practices of earning management that have challenged the financial reporting quality disclosed. The purpose of this research is to study the determinants of discretionary loan loss provisions in banks. To achieve this objective, we selected a sample of the main Tunisian banks over the period from 2001 to 2014. The estimation results shows that the banks are opting for earnings management practices through the discretionary loan loss provisions in order to align with international standards, in particular with respect to regulatory capital. In opposition, we found a non-significant relationship between earnings before taxes and provisions and discretionary provisions.

Keywords: discretionary loan loss provisions, earnings management, capital management, Tunisian commercial banks

1. Introduction
The banking sector is characterized by the complexity of information asymmetry, strong regulation and the accentuation of agency problems and conflicts of interest between multiple stakeholders, which constitutes more favorable to earnings management than any other company. In fact, bank managers, who are the most knowledgeable about their situation, have the opportunity to use the manipulation or management of accounting figures to achieve the desired objectives. Such earnings management practices would allow executives to signal misleading prospects for future returns.

Otherwise, a thorough review of the financial literature on earnings management shows that there are two streams of research. The first trend is that earnings management could take accounting form. The accounting earnings management is first done either by choosing the accounting methods or by applying these methods (Holthausen, 1981; Cheng & Coulombe, 1993). It is then turned around the estimate of accruals that groups all the adjustments and can be calculated by the difference between the net profit and the cash flow. On the other hand, the second current supports the idea that the earnings management could take, rather, the real form. The real earnings management is based on the decisions made by the executive having a direct influence on the cash flows (Shayan-Nia et al., 2017). According to Schipper (1989), this decision is often difficult to detect because of the difficulty of distinguishing between the desire to manipulate the accounting figures and the optimal management decision.

Attacking the banking sector, some studies including those of Beatty et al. (1995), Beatty et al. (2002) and Cornett et al. (2009) showed that earnings management in banks is done through the realization of securities gains. However, Zhou and Chen (2004), Ahmed et al. (1999), Kanagaretnam (2004), Taktak and Mbarki (2014) and Ben Othmen and Mersni (2016), Zgarni et al. (2018) argue that managers generally use loan loss provisions as the main tool for earnings management. In fact, several factors can influence the recording of these provisions for doubtful debts, including: the level of earnings before taxes and provisions and the level of regulatory capital. Taktak et al. (2010a) and Ben Othmen and Mersni (2014), among others, have emphasized these two factors as important incentives for managing loan loss provisions in banks.

However, the literature review on this subject shows a lack of consensus on the relationship between loan loss provisions and the earnings management in banks. Indeed, some authors have shown that this relationship is
positive including Niswander and Swanson (2000), Shrieves and Dahl (2003), Dantas and al. (2012), Olson and Zoubi (2014) and Sheng et al. (2016). While some other studies, particularly those of Ahmed et al (1999) and Fernando and Ekanayake (2015), have denied this relationship. Similarly, studies of the effect of capital management on discretionary loan loss provisions show divergences. Indeed, Ahmed et al (1999), Anandarajan et al. (2007) and Abu El Sood, (2012), have demonstrated the negative effect of capital management on discretionary provisions. In addition, Collins and al. (1995) and Anandarajan and al. (2011) denied the use of discretionary provisions as a capital management tool in banks.

These arguments have prompted us to question the nature of discretionary practices in Tunisian banks, especially following the IMF report (2015) which ensures the publication of a poor quality of financial reporting by these banks.

The purpose of this paper is to study the discretionary behavior of Tunisian commercial banks in the earnings and capital management. Thus, the contributions of this work are therefore double. On the theoretical level, this work constitutes a contribution to the literature on earnings management in Tunisian banks. From an empirical point of view, we hope that our results can be of considerable interest to the various stakeholders, in particular the regulatory and standardization bodies as well as the financial market authorities. Indeed, our results provide an opportunity to question and review the regulatory requirements for banks' provisioning policies.

This work will be organized as follows: in a second section we will present the theoretical framework of earnings management in banks. In the third section, we will unveil the methodological framework of the research. The fourth section is devoted to analyzing and discussing the results. The conclusion, which is the subject of the fifth section, will take away the main lessons from the empirical study that has gone out in this paper.

2. Literature Review and Hypothesis Development

Among the most commonly used techniques of earnings management in banks are loan loss provisions (Ben Othmen and Mersni 2014, 2016) and realization of securities gains (Cornett et al., 2009; Taktak & Elleuch, 2010). Nevertheless, the review of the literature has allowed us to remember that bank managers most often use accruals accounting (specific accruals) to convey the information that best meet their objectives. (Kanagaratnam (2004), Anandarajan et al. (2007), Kwak et al. (2009), Taktak et al. (2010b), Taktak and Mbarki (2014), Ben Othmen and Mersni (2016), Fekri et al., (2015 ). In addition, the literature review reveals several factors that can influence the calculation of loan loss provisions in banks, namely: accounting standardization, external financing and the bank's economic visibility. However, two factors that have been unanimously supported by most research and empirical investigations, namely: the level of the earnings and the level of regulatory capital. Zhou and Chen, (2004) provided empirical evidence for the importance of these two incentives in managing loan loss provisions in US banks. By the same, and on various samples, other authors like Ben Othmen and Mersni (2014, 2016) as well as Taktak and Mbarki (2014) prove the primacy of these two factors in the incentive to the earnings management of banks.

a) earnings management and loan loss provisions

A careful scan of the literature suggests that loan loss provisions are an earnings management technique that bank managers rely heavily on. Cornett et al. (2006) found that bank managers appear to use discretionary provisions to increase revenues and, subsequently, their own personal wealth. This assumption is, by the same, certified by Bhat (1996) which confirms that banks tend to manipulate their earnings in case of a low market value of their assets and / or equity; a loan / deposit ratio or a high debt ratio or a low growth opportunity.

Thus, Collins et al. (1995), Kanagaratnam (2004), Anandarajan et al. (2007), Misman and Ahmed (2011), Ben Othman and Mersni (2014), Taktak and Mbarki (2014) and Ahmad et al. (2014), among others, have shown the positive relationship between loan loss provisions and bank earnings. Indeed, the low level of the result encourages the managers to record a lower level of loan loss provisions in order to increase their earnings.

However, Kwak et al. (2009) proved rather a negative and significant association between discretionary provisions and earnings before taxes and provisions. For their part, Fernando and Ekanayake (2015) found, on a sample of commercial banks in Sri Lanka, that earnings before taxes and provisions do not have a significant effect on provisions.

In our study, we will test, in the manner of these authors, the effect of earnings before taxes and provisions on discretionary loan loss provisions. Referring to the existing literature, we expect, like Ben Othman and Mersni (2014) that managers underestimate discretionary loan loss provisions if earnings before taxes and provisions is low and overestimate them if this result is high. We then propose the existence of a positive relationship between earnings before taxes and provisions and discretionary loan loss provisions.
Thus, we emit our first hypothesis (H1):

H1: earnings before taxes and provisions have a positive effect on discretionary provisions in Tunisian commercial banks.

b) capital management and loan loss provisions:

An in-depth review of the literature suggests that banking regulations that require a minimum level of capital adequacy ratio can lead some bank managers to opt for capital management practices. Indeed, when banks fail to meet this regulatory ratio, managers manage their capital through the handling of accruals, in order to escape the costs they can bear. Banks give a false image of its ability to cope with potential deficits. In fact, the capital adequacy ratio, expressed in terms of the accounting ratio, is a possible way for managers to manipulate the accounting part of this ratio in order to reach the required threshold. Severe penalties may be incurred as a result of non-compliance with this regulatory rate, thus constituting, according to Ahmed and al. (1999), a strong constraint for managers to manipulate their results for capital management purposes.

The use of loan loss provisions for capital management purposes has been proven by many authors including Kim and Kross, (1998), Collins, Shackelford and Wahlen, (1995), Moyer (1990) and Anandarajan (2007). In this regard, Anandarajan et al. (2005) and Lobo and Yang (2001) have shown that managers tend to increase provisions where the capital ratio is low, thus increasing the tier II capital.

In fact, the literature review in this area shows the existence of two groups of research: research carried out before the Basel agreement and research carried out after the Basel agreement. In this context, Moyer (1990), Scholes et al. (1990) and Beatty et al. (1995) proved the use of loan loss provisions by banks to manage their capital before the Basel Accord (1988), where loan loss provisions are a component of the numerator of the capital ratio, which encourages banks to act on provisions to improve their capital. However, after the Basel agreement, banks act directly on the result, which is a major component of equity. In fact following this agreement, only a maximum of 1.25% of provisions, is required at the level of own funds. This eliminated the costs associated with managing the results through bad debt provisions for the banks. This leads to the assumption that, under the Basel Accord, banks remain more aggressive in managing results through discretionary provisions.

However, Ahmed et al. (1999) did not find a strong relationship between loan loss provisions and earnings management in US banks following the 1990 reforms. In addition, they concluded that these banks use discretionary provisions to manage their capital even after the reforms of 1990. In the same vein, Kim and Kross (1998) showed in their study on a sample of American banks, that following the Basel agreement (1988), the management of loan loss provisions allows banks to deceive their regulatory capital. They proved that the banks that handle their provisions have low levels of capital.

All in all, studies of the relationship between bad debt provisions and capital management have mixed results. In this work, and in the same vein as Ahmed et al. (1999), Kanagaratnam (2004), Ben Othman and Mersni (2014) as well as Fekri et al. (2015), we estimate the existence of a negative relationship between the capital ratio and the discretionary loan loss provisions.

Thus, we emit second hypothesis H2:

H2: The capital ratio has a negative effect on discretionary provisions in Tunisian commercial banks.

3. Research Methodology

a) Presentation of the sample

The sample of our study is made up of ten Tunisian commercial banks that are listed on Tunis Stock Exchange. These banks hold the vast majority of assets of Tunisian banks, more than 80% of total assets of commercial banks. Also, they participate in 88% of the total credits granted.

b) Regression models

Loan loss provisions are used as the main tool for earnings management (Ahmed et al., 1999; Kanagaratnam, 2004; Taktak & Mbarki, 2014; Ben Othmen & Mersni, 2016; Zgarni et al., 2018). These provisions are broken down into two parts: a non-discretionary and a discretionary portion. Thus, in order to examine the determinants of discretionary provisions, we followed the Kanagaratnam (2004) approach, which is manifested in two stages. In the first step, we will estimate the total provisions by identifying the normal component of the provisions (non-discretionary provisions). The second step is to determine the discretionary portion of total provisions by calculating the difference between total and non-discretionary provisions (the residue of the first estimate).

Our first model is as follows:

First model:

\[ LLP_{it} = \alpha_0 + \alpha_1 NPL_{it} + \alpha_2 \Delta NPL_{it} + \alpha_3 \Delta \text{LOAN}_{it} + \epsilon_{it} \]  

With:

\( LLP_{it} \): Bank loan loss provisions at year \( t \) normalized by total loans of year \( t-1 \)

\( NPL_{it} \): The opening balance of non-performing loans of bank \( i \) at the date \( t-1 \) divided by the total loans of year \( t-1 \);

\( \Delta NPL_{it} \): The change in non-performing loans from bank \( i \) to year \( t \) divided by the total loans in year \( t-1 \);

\( \Delta \text{LOAN}_{it} \): The change in loans from bank \( i \) to year \( t \) divided by the total loans in year \( t-1 \);

\( \epsilon_{it} \): The residue of the equation that represents the discretionary part of the provisions of bank \( i \) to year \( t \).

First, the total provisions are estimated in order to obtain the \( \alpha_0, \alpha_1, \alpha_2 \), and \( \alpha_3 \) coefficient estimators. The obtained estimators \( (\hat{\alpha}_0, \hat{\alpha}_1, \hat{\alpha}_2, \hat{\alpha}_3) \) will allow us to calculate the non-discretionary provisions noted by \( LLP_{ND} \).

\[ LLP_{ND_{it}} = \hat{\alpha}_0 + \hat{\alpha}_1 NPL_{it} + \hat{\alpha}_2 \Delta NPL_{it} + \hat{\alpha}_3 \Delta \text{LOAN}_{it} \]  

The second step is to calculate Discretionary Provisions (LLPD):

\[ LLP_{D_{it}} = \epsilon_{it} = LLP_{it} - LLP_{ND_{it}} \]  

That is to say:

\[ LLP_{D_{it}} = LLP_{it} - [\hat{\alpha}_0 + \hat{\alpha}_1 NPL_{it} + \hat{\alpha}_2 \Delta NPL_{it} + \hat{\alpha}_3 \Delta \text{LOAN}_{it}] \]  

With:

\( LLP_{ND_{it}} \): Provisions for non-discretionary bad debt provisions for bank \( i \) in year \( t \);

\( LLP_{D_{it}} \): Provisions for discretionary bad debts for bank \( i \) in year \( t \);

Second model:

Like Ahmed et al. (1999), in the second model of our study we will introduce two variables of interest that seem to affect the discretionary provisions namely earnings before taxes and provisions (EBTP) and the capital ratio (CAR) and two control variables which are the return on assets (ROA) and the size of the bank (LASSET). The ultimate interest of this second model is to test our two research hypotheses. We will thus check whether Tunisian banks use discretionary provisions for profit and capital management purposes. Taking inspiration from the work of Kanagarealm (2004), Kwak et al. (2009), Taktab and Mbarki (2014), Ben Othman and Mersni (2014) and Fekri et al. (2015), we propose to estimate the following model:

\[ LLP_{D_{it}} = \beta_0 + \beta_1 EBTP_{it} + \beta_2 CAR_{it} + \beta_3 \Delta \text{LASSET}_{it} + \beta_3 \Delta \text{ROA}_{it} + \epsilon_{it} \]  

With:

\( LLP_{D_{it}} \): Provisions for discretionary bad debts for bank \( i \) in year \( t \);

\( EBTP_{it} \): The result before taxes and provisions of the bank reported to the total assets of bank \( i \) in year \( t \);

\( CAR_{it} \): capital ratio of bank \( i \) to year \( t \);

\( ROA_{it} \): return on assets of bank \( i \) in year \( t \);

\( \text{LASSET}_{it} \): size of bank \( i \) in year \( t \);

\( \epsilon_{it} \): The error term of the equation.

4. Empirical Results

a) Statistical Descriptions

The Table 1 below presents the descriptive statistics of our sample for all the variables used in our study.

Statistical results show that the ratio of loan loss provisions to total loans represents 2.7% on average with a maximum of 15.98%. Based on a standard deviation of 2.68%, we advance no differences between banks in loan losses provisioning practices. These results are similar to those found by Ozili (2015) who find an average value of loan loss provision equal to 2%. In addition, the mean of non-performing to total loans is 17.32% with a maximum of 64.60%. This table also shows that the Average of the change in non-performing loans 1.3% with a
maximum of 17.66%. Results show also that on average of change in the loan is 9.21% with a maximum of 30.66%

Table 1. Descriptive Statistics of Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>MIN</th>
<th>MAX</th>
<th>S.D</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLP</td>
<td>.027186</td>
<td>.0000167</td>
<td>.1598903</td>
<td>.0268898</td>
<td>140</td>
</tr>
<tr>
<td>NPL</td>
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<td>.0000802</td>
<td>.6460603</td>
<td>.1497344</td>
<td>140</td>
</tr>
<tr>
<td>∆NPL</td>
<td>.013004</td>
<td>-.1154509</td>
<td>.1766946</td>
<td>.0438628</td>
<td>140</td>
</tr>
<tr>
<td>∆LOAN</td>
<td>.0921152</td>
<td>.0270438</td>
<td>.3066719</td>
<td>.0600232</td>
<td>140</td>
</tr>
<tr>
<td>LLPD</td>
<td>-6.96e-12</td>
<td>-.0329875</td>
<td>.1301552</td>
<td>.0257245</td>
<td>140</td>
</tr>
<tr>
<td>EBTP</td>
<td>.0209971</td>
<td>.0040253</td>
<td>.0387311</td>
<td>.0078695</td>
<td>140</td>
</tr>
<tr>
<td>CAR</td>
<td>.0969434</td>
<td>-.0093675</td>
<td>.3051355</td>
<td>.0465889</td>
<td>140</td>
</tr>
<tr>
<td>LASSET</td>
<td>14.98996</td>
<td>13.81444</td>
<td>15.99403</td>
<td>.5575623</td>
<td>140</td>
</tr>
<tr>
<td>ROA</td>
<td>.0078196</td>
<td>-.0882665</td>
<td>.031</td>
<td>.0112917</td>
<td>140</td>
</tr>
</tbody>
</table>

LLP: Loan Loss Provisions; NPL: opening balance of non-performing loans divided total loans; ∆NPL: change in non-performing loans divided by total loans; ∆LOAN: change in loans divided by total loans. LLPD: discretionary loan loss provision; EBTP: earnings before taxes and provisions; CAR: capital ratio; LASSET: size of bank; ROA: return on assets

The discretionary provisions represent an average value of -6.96e-12, with a maximum value of 13.01% and a minimum value of (-3.29%). This result is comparable to that of Zhou and Chen (2004) who found an average value of 0.000 in their sample of US banks. Likewise, this result is close to that found by Kwak et al. (2009) on a sample of Japanese banks: with an average LLPD value of 0.0000, a minimum value of -0.0261 and a maximum value of 0.0688. The standard deviation is 2.57% indicating low volatility of the banks in our sample. These results allow us to deduce the existence of discretionary practices regarding provisions at Tunisian banks throughout our study period (2001-2014). These practices tend both upwards and downwards. The results of the descriptive statistics also show that the average of the earnings before taxes and provisions (EBTP) is 2.09%. This ratio varies between 0, 40% and 3. 87% with standard deviation of 0. 78%. This shows a low volatility of this variable in our sample. This result is similar to that of Fernando and Ekanayake (2015). The average capital ratio (CAR) is 9.69%, with a standard deviation of 4.65%, a maximum value of 30.51% and a minimum value of -0.936%. Taktak et al. (2010b) Which is 20.04% on average in a context of Islamic banks. Considering the size of the bank (LASSET), measured by the logarithm of the total assets, our results indicate that this variable represents an average value of 14. 98% which varies between 15.99% and 13.81% with a standard deviation of 55.75%. This proves that the bank sizes of our sample have been scattered.

For the accounting performance variable (ROA), the latter presents an average of 0.78% with a minimum value of -8.8% and a maximum value of 3.10%. The standard deviation is 1.12%, indicating a very low volatility. These values are similar to those found by Lepetit (2006) in a context of European banks, which found an average value of return on assets equal to 0.61% and a maximum value of 3.09%.

b) Results and discussions

The results of the estimation of our two models by the GLS method (Panel corrected) are presented in Table 2 and 3.

• Regression results of the first model: The determinants of loan loss provisions

By performing the Hausman test, the fixed effects model is most appropriate for our study. Moreover, the results of the estimation of the first model by the GLS method (corrected-panel) show, as expected, the significant positive effect of non-performing loans as well as the variation of loans on total provisions (table 2).

Table 2. Results of the Regression of the First Model

| Variable | Coefficient. | Std. Err | z      | P>|z|   | [95% Conf. Interval] |
|----------|--------------|----------|--------|-------|-----------------|
| NPL      | .0396327     | .0146796 | 2.70   | 0.007***| .0108611       | .0684043        |
| ∆NPL     | .050814      | .0501121 | 1.01   | 0.311 | -.0474039       | .149032         |
| ∆LOAN    | .0711009     | .0362552 | 0.050  | 0.050**| .000042        | .1421597        |
| Constant | .0131109     | .0047612 | 2.75   | 0.006 | .0037792        | .0224426        |

NPL: opening balance of non-performing loans divided total loans; ∆NPL: change in non-performing loans divided by total loans; ∆LOAN: change in loans divided by total loans.

***Significant at 1%, **Significant at 5% and *Significant at 10%
Table 3. Results of the Regression of the Second Model

| Variable | Coefficient. | Std. Err | z     | P>|z| | [95% Conf. Interval] |
|----------|--------------|----------|-------|------|-----------------------|
| EBTP     | .2990678     | .2826665 | 1.06  | 0.290| -.2549484 .853084     |
| CAR      | -.1328809    | .0521253 | -2.55 | 0.011**| -.2350445 -.0307172   |
| LASSET   | -.0247416    | .003577  | -6.92 | 0.000***| -.0317523 -.0177308   |
| ROA      | -.290105     | .1904788 | -1.52 | 0.128| -.6634367 .0832267    |
| Constant | .4642297     | .038464  | 12.07 | 0.000| .3888416 .5396178     |

EBTP: earnings before taxes and provisions; CAR: capital ratio; LASSET: size of bank; ROA: return on asset.

***Significant at 1%, **Significant at 5% and *Significant at 10%

• Relationship between income before taxes and provisions and discretionary provisions

Regarding the effect of earnings before taxes and provisions on discretionary provisions, we note that the results obtained reject our first H1 research hypothesis. Indeed, we found a non-significant positive relationship between earnings before taxes and provisions (EBTP) and discretionary provisions (LLPD). This indicates that earnings management does not seem to be a determining factor for discretionary provisions in Tunisian commercial banks.

Our findings agree with those found by Ahmed et al. (1999), which shows that banks do not use discretionary provisions for earnings management purposes in the period following the regulation of sufficient capital in 1990. Similarly, our results are similar to those of Fernando and Ekanayake (2015) who consider that the earnings before taxes and provisions do not have a significant effect on provisions of Sri Lankan public banks over the period from 2003 to 2012.

However, our result was rejected by Kanagaretnam (2004), Taktak (2008), Kwak et al. (2009) Ben Othman and Mersni (2014) and Taktak and Mbarki (2014) who hold that provisions are an essential ingredient of earnings management.

• Relationship between regulatory capital and discretionary allowances:

Regarding the assumption of capital management, it turns out that our regression results are in line with our expectations (H2). Indeed, we are in compliance with our second research hypothesis, a negative and significant relationship at the 5% threshold between the Capital Ratio (CAR) and the Discretionary loan loss Provisions (LLPD). This indicates that at the moment when the Tunisian commercial banks reach the regulatory limit, the managers manipulate the discretionary provisions upwards in order to increase the total provisions which will improve the tier II of the capital and consequently improve the level of their capital regulatory. In other words, the weakness in the capital ratio pushes managers to adjust their balance sheet to the regulatory limit while engaging more and more in risky activities. On the other hand, banks with sufficient regulatory capital choose to engage in less risky activities.

Like Boudriga et al. (2009), El Sood, (2012) and Liu et al. (2012), it seems to be accepted that the discretionary behavior of Tunisian banks is justified by the desire to reach the regulatory capital ratio. Taktak and Mbarki (2014) and Fernando and Ekanayake (2015) reinforce this idea. Indeed, at the end of their empirical study, they find that any increase in the capital ratio leads to a significant decrease in the loan loss provision. However, it is important to note that our results differ from those of Collins et al. (1995) and Anandarajan et al. (2011) who deny the use of discretionary provisions as a capital management tool in banks.

For the control variables, the results obtained testify par excellence the role that could play the size of the bank in determining the amount of provisions. Indeed, the size allows to mitigate the discretionary provisions and consequently the discretionary behavior of the Tunisian banker. Any increase in the size of the firm generates a significant drop in discretionary provisions. This can be attributed to the inverse relationship between information asymmetry and size. Thus, any increase in size generates a decrease in information asymmetry and consequently a decrease in discretionary provisions. For the second control variable, just as Baccouche et al. (2013) and Ittonenn et al. (2015), the results certify that the return on assets has no impact on discretionary provisions.

5. Conclusion

At the end of this study, we showed, in accordance with the work of Kanagaretnam (2004) and Fekri et al. (2015), the dependence of total provisions on the opening balance of non-performing loans and the variation in loans. In addition, and in order to better understand the behavior of leaders in the earnings management, like Kanagaretnam (2004), Taktak (2008), Taktak and Elleuch (2010), Taktak and Mbarki (2014) and Ben Othmen
and Mersni (2014, 2016), we noted the importance of the level of discretionary provisions in Tunisian banks. Faced with this empirical observation, which can hurt the shareholders enormously, and referring to the pioneering academic research of Kanagaretnam (2004), Kwak et al. (2009), Ben Othmen and Mersni (2014) and Fekri et al. (2015), we moved, in the second model, towards a new direction in order to decipher the earnings management, measured by the discretionary provisions. The latter were explained by two variables of interest namely, capital ratio and earnings before taxes and provisions and two control variables commonly tested in the empirical literature on earnings management in banks. The empirical results obtained, which corroborate those of Ahmed et al. (1999) and Fernando and Ekanayake (2015), and reject those of Collins et al. (1995) and Anandarajan et al. (2011), refer to the idea that discretionary provisions depend on the level of regulatory capital of banks. Thus, when the bank reaches the limit of the regulatory capital ratio, the earnings management practices tend to increase so as to improve the Tier II capital, and thus improve the ratio of regulatory capital. In view of these results, it is also surprisingly that the earnings management in Tunisian banks does not depend on the level of earnings before taxes and provisions. This last result goes against the works of Fekri et al. (2015), Ben Othmen and Mersni (2014) and Kwak et al. (2009) but joins those of Ahmed and al (1999) in the American context and Fernando and Ekanayake (2015) in the context of Sri's public banks.

Since the financial reporting quality is the driving force behind the decision-making process of the various stakeholders, we believe that our results aspire to contribute in the Tunisian context to the literature dealing with the earnings management in banks, which is still abundant. Empirically, these results provide regulators and financial market authorities with an opportunity to challenge and compete with regulatory requirements when it comes to provisioning policies. Indeed, the proven significant relationships between capital management and discretionary provisions can be an appeal to regulatory authorities to strengthen their regulation to improve the quality of published accounting information and thereby avoid critical situations that may be prejudicial for the economy in general. Our results are also intended for auditors, who, by their responsibility for the regularity and soundness of financial statements, can find incentives for more in-depth controls and appropriate provisioning policies in banks, with a view to limiting accounting manipulations and possible opportunistic practices.

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