Loan Loss Provisions in Large Publicly Quoted European Banks and Auditor Independence

Domenico Campa*

Professor of Accounting
International University of Monaco
Inseec U Research Center
2, Avenue Albert II, 98000 Monaco
E-mail: dcampa@inseec.com

Ray Donnelly

Senior Lecturer in Accounting & Finance
Department of Accounting, Finance and Information System
University College Cork
Western Road
Cork (Ireland)
E-mail: Rdonnelly@ucc.ie

** Corresponding author*

Acknowledgment

The authors acknowledge the extremely helpful comments, insights, and encouragement of the Editor, Divesh Sharma, and of two anonymous reviewers. The authors also gratefully acknowledge the financial support of the Institute of Certified Public Accountants in Ireland. They would also like to acknowledge the helpful comments of Mara Cameran; the suggestions of the participants at the VI Audit Quality Workshop (Florence – Italy), most especially the discussant, Ines Simac; Frank Collins and the insights of the participants at the Irish Accounting and Finance Association Conference (Waterford – Ireland) as well as the suggestions of the participants at the 40th European Accounting Association Annual Conference (Valencia – Spain). Any remaining errors are our own.

Loan Loss Provisions in Large Publicly Quoted European Banks and Auditor Independence

Abstract

The EU commission, citing deficiencies in the financial statements of banks during the financial crisis, has questioned the independence of the auditors of European banks at the onset of the crisis. We test for evidence of impaired auditor independence by examining if the economic bond between auditors and clients is associated with the audit quality of banks, controlling for the strength of banking regulation of the country in which a bank operates. We find no evidence of income-increasing loan loss provisions being positively associated with the auditor-client economic bond. There is no indication that auditor independence is impaired in EU banks. Stronger country regulation is associated with more conservative provisioning before and after the formation of the European Banking Authority. We also find that the strength of banking regulation mitigates any tendency of auditors' independence to be compromised by the auditor-client economic bond.

Keywords: Loan loss provisions, Auditor independence, European banks, Banking regulation.

JEL descriptors: M41, M42, G21, C23.

1. Introduction

Perceived threats to the independence of statutory auditors motivated the European Union (EU) to reform its regulation regarding the provision of statutory audits in member states (European Commission, 2016). The reforms were prompted by the global financial crisis when doubts pertaining to 'the credibility and reliability of the audited financial statements of banks, other financial institutions and listed companies' emerged (European Commission, 2016, p. 1). Memo 16/2244 of the Commission states that 'threats to the independence of statutory auditors' challenge their ability 'to exert thorough professional scepticism' (European Commission, 2016, p. 1). This paper tests for evidence of impaired auditor independence by examining if the economic bond between auditors and clients is associated with the audit (earnings) quality of large European banks (proxied by abnormal loan loss provisions), paying particular attention to the period of the financial crisis and taking into account the strength of banking regulation of the country in which a bank operates.

While EU's reforms pertain to all Public-Interest Entities (PIE), they are firmly rooted in the performance of banks over the period 2007-2009. The explanatory memorandum of the Proposal 2011/0359 "Regulation of the European parliament and of the council on specific requirements regarding statutory audit of public-interest entities" states that, given the losses of banks, 'it is difficult for many citizens and investors to understand how auditors could give clean audit reports to their clients (in particular banks) for those periods' (European Commission, 2011, p. 2). Notwithstanding the views of the EU Commission, Deumes, Knechel, Meuwissen, Schelleman, and Vanstraelen (2010) point

out that regulatory reforms implemented following a crisis are often motivated by political expediency and the need to take action.

The financial crisis of 2007-2009 was a very deep crisis. Haldane (2009, p. 2) states that 'some have suggested that it is the worst since the early 1970s; others, the worse since the Great Depression; others still, the worst in human history'. There is no doubt that it put many European banks under severe pressure (Detragiache, Tressel, & Turk-Ariss, 2018). The latter authors show that the average return on equity of EU banks fell from 16.3% immediately prior to the crisis to 2.2% during the crisis. In the regions of the EU hit hardest by the crisis, profitability fell to an even greater extent.[1] The general earnings management literature argues that companies are motivated to manage earnings when their stock price is under stress or their earnings are under pressure (Burghstahler & Dichev, 1997; Young, 2008). Thus, at the onset of the financial crisis, auditors would have needed to be especially vigilant with respect to opportunistic upward management of earnings.

The question of whether the quality of the financial reports of large EU banks was compromised by a deficiency in auditor independence during the financial crisis is an important one. This is especially true in the light of the findings of Kanagaretnam, Krishnan, and Lobo (2010) that auditor independence is not compromised for large closely-regulated US banks but is for smaller banks. Our EU-base study also offers us the opportunity to study how cross-country differences in the strength of banking regulation impacts on auditor independence. The financial crisis motivated changes in EU regulation pertaining to banks. Prior to 2007 the strength of banking regulation varied substantially between countries in the EU. It is this variation that affords us the opportunity to study

the impact of different standards of banking regulation on auditor independence. After the financial crisis, regulation became much more uniform across the EU.[2] Thus, in addition, we have the opportunity to investigate the consequences of any changes in banking regulation occasioned by the financial crisis on the audit quality of EU banks.

The literature on the independence of auditors and its relation with the quality of the audit is extensive but it is largely US-based. Basioudis, Papakonstantinou, and Geiger (2008) assert that it is not correct to extrapolate the findings in one country even to countries that appear to be similar. Given that the US is subject to stricter enforcement and is a more litigious environment (Coffee, 2007; Li, Beekes, & Peasnell, 2009), the results of audit research there cannot simply be applied to the EU. Ferguson, Seow, and Young (2004), using UK data, suggest that auditor independence of mind is impaired by the provision of non-audit services (NAS) while the overwhelming result of the extensive US literature is that auditor independence of mind or fact is not impaired by the provision of NAS (DeFond & Zhang, 2014). The regulations governing auditing were changed after the accounting scandals (e.g., Enron, Parmalat etc.) at the turn of the century and there is little EU-based evidence since the post Enron regulations came into force. A notable exception is Campa and Donnelly (2016). However, that paper deals with large non-financial UK companies while the current paper aims to address the specific issue of the audit quality among EU banks which triggered the most recent revision in EU regulation.

We analyse a panel of data over the nine-year period 2006-2014 on large publicly quoted European banks using only accounts prepared under IFRS to aid comparability. Furthermore, we split the period covered by the sample into two sub-periods, 2006-2010 which includes the financial crisis and 2011-2014 which is a period during which banking

regulation in the EU became more uniform across countries following the foundation of the European Banking Authority (EBA) in late 2010. In the first sub-period we can test if the strength of banking regulation in a bank's country of origin impacts on auditor independence and by comparing both sub-periods we can also observe if the foundation of the EBA has any impact on the relation between auditor independence and banking regulation. We estimate abnormal loan loss provisions (ALLP) and unexpected fees paid to the auditors as well as the NAS fee ratio, as our primary measures of earnings quality and the economic bond with the auditor, respectively. Higher levels of earnings quality are taken to be indicative of higher audit quality. We pay particular attention to negative, or income-increasing, ALLP and their association with unexpected total fees, unexpected NAS fees and the NAS fee ratio. This is motivated by knowing, with the benefit of hindsight, that the loan loss provisions (LLP) of banks are considered to have been understated at the onset of the financial crisis. If unexpected NAS fees are positively related to the absolute value of negative ALLP we infer that auditor independence is compromised by the economic bond created by the fees.

Our results show that a deficiency in auditor independence does not underlie any under-provisioning by publicly quoted banks in the EU. We also report evidence of the influence of regulation in the banking industry mitigating any tendency of auditors' independence to be compromised by the economic bond created by fees paid by their clients. This finding is consistent with that of Kanagaretnam et al. (2010) for the US. There is also some evidence of spillover effects from the provision of NAS. They are evidenced by a negative relation between abnormal loan loss provisions, particularly income-increasing ALLP, and unexpected NAS fees, for banks operating in countries

where banking regulation is strong and only in the period prior to the formation of the EBA, i.e., when country specific regulation is more important.

The remainder of the paper is organized as follows. Section 2 frames the study in terms of the extant literature. Section 3 develops the main hypotheses, details the sample selection procedure, and describes the methodology. Section 4 discusses the empirical results. Finally, section 5 concludes by highlighting the study's main implications.

2. Literature Review

Audit quality is a fundamental but not directly observable input into financial reporting quality (Deumes et al., 2010). The latter demands that the financial reports of a company faithfully represent the company's underlying economics (DeFond & Zhang, 2014). The supply of audit quality is determined by the auditor's competence and independence (Watts & Zimmerman, 1981). Regulators are worried about the impact of NAS fees on auditor independence (Securities and Exchange Commission (SEC), 2000; Krishnan, Sami, & Zhang, 2005; EU Commission, 2011; 2016) and, thus, academic research has developed fee metrics to capture the economic bond between auditors and their clients.

The SEC seems concerned with the level of NAS fees relative to total fees, i.e., the NAS fee ratio (SEC, 2000; Krishnan et al., 2005). However, Francis and Ke (2006) and Francis (2006) point out that the NAS fee ratio is affected by both NAS fees and total fees so it is not possible to be categorical about which of these is driving the ratio. Kinney and Libby (2002) argue that both the NAS fees and the audit fees are capable of creating an economic bond, with auditors primarily interested in their overall fees, being willing to trade-off either lower audit or NAS fees for an increase in total fees. They advocate that

the estimation of NAS fees and total fees different from the level that one would expect on the basis of the characteristics of their clients (defined as *unexpected* NAS fees and *unexpected* total fees) better captures the economic bond. Thus, Kanagaretnam et al. (2010), in their study of US banks, use unexpected total fees and unexpected non-audit fees as their primary measure of the economic bond which may compromise auditor independence. They place particular emphasis on the association of the unexpected total and NAS fees with income-increasing (i.e., negative) ALLP. The focus on NAS derives from the fact that such services have been perceived to underlie the loss of auditor independence that, in some extreme cases, has been instrumental in accounting scandals. In fact, despite differences between the US and Europe, the actions taken by regulators in both areas after the scandals have aimed to limit the NAS that audit firms can provide to their clients (Aschauer & Quick, 2018).

The financial crisis of 2007-2009 prompted additional scrutiny of the audit market in Europe. Despite the fact that new regulations included in the 8th EU Directive had not been fully implemented at the time of the financial crisis and that no empirical evidence pertaining to the effectiveness of these regulations was available, the EU Commission set about a major reform of the audit market as a response to the crisis (Deumes et al., 2010). The latter authors question whether the new regulations proposed by the commission were necessary. Nonetheless, the EU Regulation 537/2014 of the 16th April 2014 (European Commission, 2014) introduced significant changes to the audit market with the stated objective to 'improve audit quality and restore investor confidence in financial information' (European Commission, 2016, p. 1).

The general finding from the US literature is that auditor independence is not compromised by fee income. Ashbaugh, LaFond, and Maydew (2003) report that there is no relation between income-increasing discretionary accruals and the total audit fee or the fee ratio once the former are adjusted for firm performance. There is also no relation between the fee ratio or total fees and the likelihood of firms meeting or beating analysts' earnings forecasts. There is no positive relation between fees or the fee ratio and the likelihood of reporting small positive earnings. Finally, the market does not react to the magnitude of the fee ratio. In line with these findings, DeFond and Zhang (2014), based on a review of the archival auditing literature, point out that NAS fees are not associated with restatements, higher discretionary accruals, earnings management, earnings benchmarks, or conservatism. This US literature contrasts with evidence from the UK which does show signs of impairment of auditor independence in the presence of abnormal level of NAS fees (Ferguson et al., 2004; Campa & Donnelly, 2016). However, it is crucial to highlight that none of the above studies tests for auditor independence in the banking industry but, rather, they specifically exclude financial firms from their samples on the basis that their accounts are substantially different to those of other firms.

It is widely acknowledged that banks form a crucial sector of any economy (Fields, Fraser, & Wilkins, 2004) but, despite that, Köhler, Quick, and Willekens (2016) note that very little is known about the quality of auditing in the financial sector and the effect of audit regulation thereon. Further, it is noteworthy that banks are regulated and this can moderate the influence of fee income on auditor independence (Kanagaretnam et al., 2010). Both Fields et al. (2004) and Kanagaretnam et al. (2010) are US studies, thus the

impact of auditor independence on the auditing and, hence, financial reporting quality of banks in the EU is relatively unexplored.

Kanagaretnam et al. (2010) specifically address the influence of NAS fees on auditor independence in US banks. They report that for large banks which are subject to the additional regulatory scrutiny of the Federal Deposit Insurance Corporation Improvement Act (FDICIA), fees paid to the auditor are unrelated to earnings management using ALLP. However, they also report that there is a negative relation between ALLP and fees paid to auditors for smaller banks: income-increasing earnings management through lower ALLP is increasing in the level of fees and unexpected fees. Thus, while auditor independence is compromised by total fees and NAS fees, this attenuation of auditor independence is moderated by the level of regulatory oversight of the banks which differs in relation to their size. Regulatory oversight in the US and the EU is very different. For example, the US spends multiples of the amount spent by EU countries on public enforcement. When private enforcement is also considered the amount spent on enforcement in the US becomes rather an outlier in world terms (Coffee, 2007). It also must be recognised that the US is essentially one large country whereas the EU is a union of independent states. The EU country that is most similar to the US is the UK. However, Li et al. (2009) point out that the US is a far more litigious environment than the UK. Thus, it is not possible to extrapolate US results even to that part of the EU which most resembles it (Basioudis et al., 2008). Accordingly, the relationship between the economic bond of auditors with their clients and audit quality requires to be estimated for EU banks, particularly in light of the impetus that concerns regarding the independence of auditors from European banks have given to reform the EU audit market.

3. Hypothesis Development and Methodology

3.1 Hypothesis Development

Loan loss provisions are that part of accrual-accounting that are reported in the income statement of banks as expenses and increase the loan loss allowance in the balance sheet (Andreou, Cooper, Louca, & Philip, 2017). In hindsight it is clear that the provisions of EU banks were not satisfactory at the time of the financial crisis. What remains unclear is why such provisions were inadequate. The current research focuses on the EU commission's justification for the major overhaul of regulation of the audit market: a presumed deficit in the necessary independence of auditors from their client banks. Accordingly, we examine if the amount of fees paid to auditors (the economic bond) is a good explanation for under-provisioning in European banks. Our focus is to examine if the level of impairment of loans, i.e., loan loss provisions, and hence bank income, is affected by the extent of fee income paid to auditors, in particular unexpected total fees, unexpected NAS fees, and the NAS fee ratio. This is motivated by the strong emphasis on the independence of the auditor under the new EU regulatory regime which includes the prohibition of certain NAS by the auditor to the PIEs that they audit and imposing limitations and thresholds on the fees charged for NAS. We state our first hypothesis, in alternative form, as follows:

Hypothesis 1. *The economic bond between the auditor and its client is positively related to the level of income-increasing loan loss provisions of banks.*

Campa and Donnelly (2016) suggest that their and other UK results (e.g., Ferguson et al., 2004) differ from those in the US since the latter is a more litigious society. Thus the context in which the auditor is working moderates the influence of the economic bond created with the client by unexpected fees. Since banking is a regulated industry, the context is different to that of the general population of firms. The accounts of banks are also subject to the scrutiny of their regulators. This will ensure that strictly regulated banks will be unlikely to manage earnings egregiously and the auditors will be unlikely to allow earnings management behaviours (Kanagaretnam et al., 2010). On the basis of these arguments we state our second hypothesis, in alternative form, as follows:

Hypothesis 2. *The strength of banking regulation moderates the relation between the economic bond of the auditor with its client and the level of abnormal loan loss provisions of banks.*

3.2 Sample selection

Our hypotheses are tested on a sample of large financial institutions listed on the major European Union financial markets. We use data from annual reports prepared under IFRS for a nine-year period starting in 2006.[3] The exclusive use of observations from annual reports prepared under IFRS prevents the confounding of results by the use of accounting data prepared under different accounting standards. All data used in the analyses have been collected from Datastream®. We use Worldscope lists for fourteen countries in the EU and isolate banks on these lists. The lists are free from survivorship bias as they include companies that are no longer quoted on the markets. This yields an initial sample of 374 banks. We then exclude banks for which DataStream does not have data for non-

performing loans: this reduced the sample size to 177 banks. Our tests pertaining to auditor independence require data on audit fees, total fees, and fees paid to the auditor for NAS. Obtaining the requisite fee data proved impossible for most of the banks in our sample. After imposing all the necessary requirements to obtain the disaggregation of the value of total fees between audit and NAS fees and deleting all firm-year observations which do not have the required data to estimate unexpected fees, our final sample contains 60 unique financial institutions[4] and a total of 353 firm-year observations.[5] The market capitalisation of the banks in the sample constitutes over 79% of the total market capitalization of the population of banks listed in the countries included in our analysis, thus the sample is representative of the population of large quoted EU banks.

3.3 Loan loss provisions and the economic bond between auditors and clients

In order to test our first hypothesis, we need to estimate the level of ALLP of banks as well as the economic bond between auditors and clients. We outline how we estimate these variables below. We then explain how we measure the relative strength of banking regulation across countries. We require this measure in order to test our second hypothesis as well as a general control for differences in the strength of regulatory frameworks across countries.

3.3.1 Estimation of abnormal loan loss provisions

A certain level of loan loss provisions must be included in the annual reports of banks to meet the matching principle of expense recognition. Thus, in accordance with previous studies on this topic (e.g., Kanagaretnam et al., 2010), we will not use the raw amount of

loan loss provisions but, rather, the abnormal level of loan loss provisions (ALLP). As in Kanageretnam et al. (2010), we pay particular attention to negative ALLP since these are used to increase income. In addition, it is clearly the under provisioning by banks that motivated the changes in the regulation of the European statutory audit market.

Since we are using data from several countries, we extend the model used by Kanagaretnam et al. (2010) to explain LLP. In particular, we augment their model by including a country-specific variable, growth of GDP per capita, as well as the net income before LLP and extraordinary items (EBP) (Laeven & Majnoni, 2003). The Kanagaretnam et al. (2010) model estimates the normal component of LLP by regressing the latter on beginning loan loss allowance, beginning non-performing loans, change in non-performing loans, net loan charge-offs, change in total loans outstanding, net income before extraordinary items and LLP as well as total loans outstanding. These variables have been used in several prior studies to estimate the normal component of LLP (e.g., Wahlen, 1994; Laeven & Majnoni, 2003; Kanagaretnam, Lobo, & Mathieu, 2003). Our model also includes year fixed effects. It is described by equation (1) below. To remove potential bias due to the presence of outliers, when estimating this equation, continuous variables are winsorised at the 1st and the 99th percentile.

$$LLP_{it} = \alpha + \beta_1 BEGLLA_{it} + \beta_2 BEGNPL_{it} + \beta_3 CHNPL_{it} + \beta_4 LCO_{it} + \beta_5 CHLOAN_{it} + \beta_6 EBP_{it} + \beta_7 LOANS_{it} + \beta_8 GDPGROWTH_{it} + \varepsilon_{it} \quad (1)$$

Variables are defined in Appendix A. The residuals are the abnormal component of LLP, referred to as ALLP. These ALLP are the measure of accounting (audit) quality used in the paper.

3.3.2 Estimation of the economic bond between auditors and clients

Studies that focus on auditor independence measure the auditor-client economic bond using two main proxies: the level of unexpected fees and the NAS fee ratio. In relation to the former, Kinney and Libby (2002) state that it is the unexpected level of the total fees and the NAS fees that reflects the 'abnormal' profitability of a client. For completeness, however, we also estimate the unexpected level of audit fees while acknowledging that this variable is often used in audit research as an indication of the thoroughness of the audit.

We estimate the level of unexpected fees as the residuals of a model where auditor fees are regressed on a set of firm characteristics as indicated in model (2) below. The model is derived from Fields et al. (2004), Kanagaretnam et al. (2010), and Campa and Donnelly (2016) and reflects the fact that, in accordance with previous research, auditor fees are related to audit complexity (*MTB, GROWTH*), audit risk (*LOSS, RESTAT, ROA, CGSCORE*) (Firth, 1997; Ashbaugh et al., 2003), client size (*SIZE*), bank's credit risk (*SNPL, SLCO*), operating risk (*EFFICIENCY*), liquidity risk (*SECURITIES*), and capital risk (*INTANG, CAPRATIO*). It also includes country and year fixed effects. This model, as well as all the other models in the paper, do not control for Big 4 audit firms because all firms in the sample are audited by a Big 4 firm. Because audit and NAS fees may be determined simultaneously, we estimated model (2) with total fees, audit fees and NAS

fees as dependent variables using simultaneous equations.[6] All continuous variables in equation (2) are winsorised at the 1st and 99th percentiles.

$$FEE_{it} = \alpha + \beta_1 SIZE_{it} + \beta_2 SNPL_{it} + \beta_3 LOSS_{it} + \beta_4 INTANG_{it} + \beta_5 EFFICIENCY_{it} + \beta_6 SLCO_{it} + \beta_7 CAPRATIO_{it} + \beta_8 CGSCORE_{it} + \beta_9 RESTAT_{it} + \beta_{10} GROWTH_{it} + \beta_{11} SECURITIES_{it} + \beta_{12} MTB_{it} + \beta_{13} ROA_{it} + \varepsilon_{it} \quad (2)$$

Variables are defined in Appendix A. The residuals of equation (2) are the unexpected level of the different fees paid to auditors.

The second measure of the auditor-client economic bond is the NAS fee ratio (*NASFEERATIO*) calculated as total NAS fees divided by total fees (e.g., Koh, Rajgopal, & Srinivasan, 2013).

3.3.3 Estimation of the relative strength of a country's banking regulation

To investigate the association between the auditor-client bond and the audit quality of banks, taking account of the strength of banking regulation of the country in which a bank operates, we estimate a variable, *REG*, that represents the latter feature. *REG* is an indicator variable derived from an index, *OFFICIAL*, which is increasing in the influence of the banking supervisory agency and devised by Caprio, Laeven, and Levine (2007). It is coded 1 for strong regulation countries (i.e., countries with an index above the median of the sample) and 0 for countries with weaker bank supervision, in accordance with Gebhardt and Novotny-Farkas (2011).

3.4 Loan loss provisions and economic bond between auditors and clients: the model

To test our hypotheses, we develop a model where the dependent variable is the level of ALLP while measures of unexpected fees paid to the auditor and the NAS fee ratio are included, in turn, as independent variables. We also use our proxy for the strength of banking regulation of the country in which a bank operates, *REG*. We interact *REG* with the unexpected fees or economic bond (*AUDCLIBOND)* to investigate if and how it moderates the relationship between ALLP and the economic bond between auditors and their clients. In accordance with Kanagaretnam et al. (2010) and Campa and Donnelly (2016), our model also controls for additional factors that previous research has documented to be associated with earnings management measures, such as firm size, market-to-book ratio, firm growth and performance, corporate governance quality as well as other control variables that take into account the reversal of accruals over time (past LLP) and capital management incentives (tier 1 capital ratio and total capital ratio). The model also includes year and country dummy variables. It is represented by equation (3). All continuous variables in this equation, with the exception of *ALLP* and *AUDCLIBOND* based on unexpected fees, are winsorized at the 1st and 99th percentiles.

$$ALLP_{it} = \alpha + \beta_1 AUDCLIBOND_{it} + \beta_2 CAPRATIO_{it} + \beta_3 CGSCORE_{it} + \beta_4 GROWTH_{it} + \beta_5 MTB_{it} + \beta_6 EBP_{it} + \beta_7 LOSS + \beta_8 LMVE_{it} + \beta_9 TIER1_{it} + \beta_{10} PASTLLP + \beta_{11} REG_{it} + \beta_{12} AUDCLIBOND*REG_{it} + \varepsilon_{it} \quad (3)$$

Variables are defined in Appendix A.

We estimate the model separately for negative (i.e., income-increasing) ALLP (*NEGALLP*) and positive (i.e., income-decreasing) ALLP (*POSALLP*), in accordance with Kanagaretnam et al. (2010). Negative (i.e., income-increasing) ALLP are transformed into their absolute value to make the interpretation of the regression coefficients easier.

The relevant coefficients for testing our first hypothesis, in model (3), are β_1 as well as the sum of β_1 and β_{12} which represent the relation between ALLP and the auditor-client economic bond for banks operating, respectively, in countries with weak and strong bank regulation. In particular, for negative (i.e., income-increasing) *ALLP*, positive coefficients on unexpected total fees, unexpected NAS fees, and the NAS fee ratio indicate that a tighter auditor-client bond is associated with greater income-increasing *ALLP* (i.e., since ALLP are in absolute value terms). For positive (i.e., income-decreasing) *ALLP*, positive coefficients would suggest that a tighter auditor-client bond is related to more conservative provisioning (Kanagaretnam et al., 2010) and negative coefficients would suggest that a closer bond is related to less income-reducing provisions.

If our second hypothesis is supported we would expect a negative and significant β_{12} when negative ALLP is the dependent variable. This would indicate that the strength of bank regulation attenuates any positive relation between the absolute value of negative ALLP (income-increasing) and the economic bond between auditors and clients. When positive ALLP is the dependent variable a positive value for β_{12} would suggest that strengthening the bond between auditor and client is associated with more conservative provisioning in tightly regulated countries.

All models presented above are estimated using OLS. Significance levels are calculated using t-statistics from robust standard errors clustered by unique bank.

4. Results

4.1 Estimation of abnormal loan loss provision and unexpected fees

Our first task is to determine the normal level of ALLP. Table 1 outlines the results of estimating equation (1).

[Insert Table 1 here]

We find that the model works well and explains over 80% of the variation in LLP. The coefficients are generally of the predicted sign. Loan loss provisions are decreasing in the profitability of the banks and are increasing in *CHNPL*, *CHLOAN* and *LOANS* as might be predicted. The coefficient on *BEGLLA* is also positive which is indicative of persistence in provisioning and hence under-provisioning in prior years. This is consistent with Gebhardt and Novotny-Farkas (2011). The negative coefficient on *EBP* contrasts with the results of Laeven and Majnoni (2003) and suggests that European banks were not income smoothing over the period studied. This avoidance of income smoothing behavior is an outcome desired by the IASB when IAS 39 was designed. The residuals of the model are our measure of ALLP.

Table 2 outlines the estimation of equation (2) which is used to estimate unexpected fees.

[Insert Table 2 here]

We find that size, intangibles, efficiency, and ROA are significantly positively related to both total fees and audit fees. We observe that size and intangibles are also significantly positively related to NAS fees. These relationships are consistent with prior research. For example, the coefficient on *INTANG* is positive and consistent with Fields et al. (2004) since more intangibles suggest more complex, acquisitive, and risk taking banks. We also find a negative relationship between audit fees and the presence of restatements, evidence that higher audit fees are related to better quality audits. While our model explains most of the cross-sectional variation in total and audit fees, it only explains about one third of the variation in NAS fees. The residuals of the models are our measure of unexpected fee levels.

4.2 Descriptive statistics and univariate analysis

The descriptive statistics are outlined in Table 3.

[Insert Table 3 here]

This table reveals that 54% of the ALLP over the period are negative (income-increasing). On average, NAS fees account for about 22% of total fees paid to the auditors but it is clear that they are much higher for some banks.

The correlation matrix is reported in Table 4.

[Insert Table 4 here]

This table shows insignificant correlations between *ALLP* and our measures of auditor-client bond. *EBP* is significantly negatively related to both negative (absolute values) and positive ALLP. This suggests that some firms with low earnings before

provisions tend to have extreme levels of positive ALLP while others have extremely negative ALLP. However, firms with high *EBP* have low levels of abnormal provisions in absolute terms. This is suggestive of banks with low levels of *EBP* managing earnings more than those with high levels. It is a similar story for the loss dummy which has a positive relation with both negative and positive ALLP. This is consistent with the earnings management literature pertaining to discontinuities around benchmarks with not all firms electing to manage earnings in the same direction when close to a benchmark (Gore, Pope, & Singh, 2007). Past LLP are positively related to *ALLP*, regardless of whether the latter are positive or negative suggesting some persistence in provisioning. Larger banks have less positive and less negative ALLP. Unexpected audit fees and unexpected total fees are very strongly related. Similarly, the NAS fee ratio is strongly positively correlated with unexpected NAS fees while it is negatively but not as strongly correlated with unexpected audit fees. These findings confirm that, while the NAS fee ratio is mainly driven by NAS fees, it is also influenced by the level of audit fee. It is also noteworthy that *EBP* is strongly negatively correlated with past LLP indicating that there is some anticipation of problems with loan portfolios. *CAPRATIO* and *TIER1* are very closely related as would be expected. *LOSS* and *EBP* are also highly correlated. We perform a diagnostic test for multicollinearity by estimating the Variance Inflation Factor (VIF) coefficients for our regression models, which is always significantly below the threshold of 10 (Kennedy, 2008), suggesting that multicollinearity does not affect our analyses.[7]

4.3 Multivariate analysis

4.3.1 Auditor-client economic bond and level of loan loss provisions of banks

Table 5 outlines the results of the main tests of our hypotheses 1 and 2 which are designed to establish if the economic bond (unexpected fees and the NAS fee ratio) between auditors and clients is related to the accounting quality of banks (abnormal loan loss provisions) and if the standard of banking regulation in a country moderates this relation.

[Insert Table 5 here]

Panel A focuses on negative (i.e., income-increasing) ALLP. None of the coefficients on unexpected fees or the NAS fee ratio (β_1) is significantly positive. We infer that, even in weakly regulated countries, auditor independence is not impaired sufficiently by the economic bond to tolerate abnormally low loan loss provisions. The sum of β_1 and β_{12} is negative and significant when we measure the auditor-client economic bond by the level of unexpected total and NAS fees. This is the opposite of what we would expect in the event of impairment of auditor independence. The interaction term is significantly negative for unexpected total fees and unexpected NAS fees and, especially the latter relation, is particularly strong leading one to conclude that it is mainly spillover effects from NAS in strongly regulated countries that underlie the negative sum of β_1 and β_{12} in both scenarios. Thus, our results indicate that the strength of banking regulation of countries significantly limits the impairment of auditor independence in the presence of high levels of total and NAS fees. Indeed, provided auditor independence is bolstered by strong banking regulation, we observe a spillover associated with NAS. It is clear that, if there were any tendency on the part of auditor independence to be compromised by the economic bond created by unexpected NAS fees, it would be swamped by the influence

of stronger regulation that helps ensure that auditor independence is not compromised. *REG* itself is not significantly related to negative ALLP.

Banks with relatively high growth and market-to-book ratios have high levels of negative ALLP. This is consistent with the general finding in the earnings management literature that growth stocks generally manage earnings upward more than value stocks. The underlying reason for this is that the price of growth stocks, being more dependent on future expectations of earnings than value stocks, are punished more severely when they announce disappointing earnings (Skinner & Sloan, 2002; Donnelly, 2014). The indicator variable *LOSS* is positively related to income-increasing ALLP in column A and C. This suggests that banks use their income increasing ALLP to reduce or even eliminate losses before provisions.

Table 5 Panel B reports the estimation of model (3) for positive (i.e., income-decreasing) ALLP. All of the fee variables and the NAS fee ratio are insignificant here for banks in weakly regulated countries (i.e., the coefficient β_1 is insignificant in all columns). The sum of β_1 and β_{12} is negative and significant when we measure the auditor-client economic bond using the level of NAS fees. Accordingly, *UNEXPNASFEE*REG* is also negative and significant which suggests that there is a more negative relation between unexpected NAS fees and income-decreasing ALLP in strongly regulated countries relative to weakly regulated countries, i.e., there is greater tendency for spillovers in strongly regulated countries which limits also the recognition of abnormal income-decreasing ALLP. *REG* itself is significantly positive suggesting that there are greater abnormal income-decreasing provisions where banking regulation is strong: provisions are more conservative.

EBP is negatively related to income-decreasing ALLP but *LOSS* is never significant here. It would appear that banks with high EBP have less income-decreasing provisions which is not indicative of using provisions for income smoothing. This is in accordance with the aims of IAS 39. *GROWTH* is significantly positive for income-decreasing ALLP just as it is for income-decreasing ALLP. The fact that these stocks suffer particularly when their earnings disappoint may motivate the income-increasing ALLP while a desire to shift income into years where it is needed may underlie the relation between *GROWTH* and income-reducing ALLP. *LMVE* is positively related to income-reducing ALLP so larger banks take steps to reduce income. This is consistent with a political cost explanation with the largest banks in Europe not wishing to appear to be too profitable.

It is clear from the results discussed above that fees, particularly unexpected total fees and unexpected NAS fees, and the NAS fee ratio are not associated with provisioning in a manner that would suggest any compromise of auditor independence for large European banks. This contrasts with the rationale of the EU Commission for tightening regulation of the audit market and the results of Campa and Donnelly (2016) who report that auditor independence is compromised by higher NAS fees for firms outside the financial services sector. The significant results pertaining to fees point to unexpected NAS fees providing spillover effects in strongly regulated countries relative to weakly regulated countries.

4.3.3 Auditor-client economic bond and level of loan loss provisions of banks: the impact of the financial crisis

We now evaluate whether the financial crisis impacts on the above results and if the relationships documented above are maintained across the period of the crisis. We split

our sample into two periods and we estimate our model (3) for each of them. The first period runs from 2006-2010, thus including the financial crisis, while the second period covers 2011-2014 which is the period immediately after the formation of the EBA in late 2010. We focus specifically on negative ALLP, since they increase income and cause an overestimation of the performance of banks. Results are presented in Table 6. Panel A of Table 6 reports the results for *NEGALLP* up to 2010 and Panel B contains the results for *NEGALLP* for the later period.

[Insert Table 6 here]

The results for the period up to and including the financial crisis reveal no positive relation between all of our abnormal fee variables and *NEGALLP*. This finding is unaffected by the strength of banking regulation in individual countries. It is precisely the same story after the formation of the EBA (Panel B).

REG is significantly negative in the period that includes the financial crisis (Panel A) but it is insignificant after the formation of the EBA (Panel B). Thus, banks in strongly regulated countries have less abnormal income-increasing provisions in the period that includes the crisis. The significant control variables are consistent with the results outlined in Table 5.

We repeat the analysis for positive, i.e., income-decreasing, ALLP. The results (not tabulated) reveal that *REG* is not significant in explaining positive ALLP in the period including the crisis.[8] However, the interaction terms *REG*UNEXPTOTFEE* and *REG*UNEXPNASFEE* are both significantly negative indicating that spillover effects are maintained in strongly regulated countries as outlined in Table 5. For the period after the formation of the EBA, *REG* is always significantly positive but none of the unexpected

fee variables as well as the NAS fee ratio are significant. The salient result for regulation is that it is related to more conservative provisioning: in the period that includes the financial crisis *REG* is negatively related to income-increasing provisions while in the period post-EBA formation is it positively related to income-decreasing provisions.

4.3.4 Tests of Robustness

We run a series of tests of robustness. We modify our measure of unexpected fees and create indicator variables to reflect fees that are above the third quartile level of fees.

[Insert Table 7 here]

The evidence from the above tests is consistent with that reported in Tables 5. Indeed, in panel A of Table 7 that focuses on income-increasing ALLP, we still find no evidence of auditor independence being impaired by the amount of fees above the third quartile and we observe spillover effects in the presence of high NAS fees but only among banks operating in countries with strong banking regulation. Panel B of Table 7 focuses on income-decreasing ALLP. We do not find any relationship between ALLP and auditor-client economic bond and the coefficient on the variable *REG* indicates that financial institutions operating in countries with a strong banking regulation are, overall, more conservative.

Additional robustness tests (not tabulated) are carried out as follows. We use the indicator variable explained above and re-estimate our model before and after the period of the financial crisis. Results are consistent with those reported in Table 6. We repeat all of our tests using another indicator variable to reflect fees that are above the median level of fees. Results of these tests are consistent with those reported in Table 5 and 6. In

relation to the limitations on the provision of NAS to audit clients, EU Regulation 537/2014 introduced a cap on permissible NAS of 70% of the average of the fees paid in the last three consecutive financial years to the statutory audit(s) of the audited entity. Thus, we repeat our tests estimating the auditor-client bond with an indicator variable that takes the value of 1 if the level of NAS fees is greater than 70% of the audit fees. In line with the results discussed on the previous section, we do not find evidence of auditor independence being impaired by the level of NAS fees above such a threshold. We repeat all of the tests reported in Tables 5 and 6 above using the absolute value of ALLP instead of *NEGALLP* and *POSALLP*. This allows us to use the maximum amount of data available to us. The results of these tests support those reported above. We then modify the dependent variable, the absolute value of ALLP, and create an indicator variable to reflect above median values and use our indicator variables for fees as the explanatory variables. We use a logit model to estimate this equation and find that the results support those reported in Tables 5 and 6 above. Moreover, we take into account the bond between auditor and client created by the audit tenure and carry out two additional tests of robustness. In particular, we re-estimate equation (3) by controlling for early audits using an indicator variable which is 1 for the first two audits and 0 otherwise. In addition, we replace our measure of unexpected fees with audit tenure. The results from these analyses are entirely consistent with those reported above.

Chen, Hribar, and Melessa (2018) point out that using the residuals from a first step regression as the dependent variable in a second step regression, which is the case for our *ALLP*, is likely to result in biased coefficients and standard errors. To address this issue we use the technique suggested by Chen et al. (2018, p. 773-774) and employ all the

unique independent variables in equations (1) and (3), as explanatory variables for LLP. The result from these regressions support those reported above. In particular, none of the fee variables are significant in any model used to explain LLP except when *AUDICLIBOND* is based on unexpected total fees. In this case, the coefficient is significantly positive at the 10% level. This suggests, however, that increased total fees paid to the auditor are associated with additional provisions, the opposite of what would be expected if auditor independence were compromised. Finally, additional tests also reveal that our results are not affected by M&A activity in the banks.

5. Conclusions

Using a sample of large publicly quoted European banks we test for evidence of impaired auditor independence by examining if the economic bond between an auditor and its client is associated with the audit (earnings) quality of banks, controlling for the strength of banking regulation of the country in which a bank operates. We use unexpected fees paid to the auditor, particularly unexpected total fees and unexpected NAS fees, and the NAS fee ratio as measures of the economic bond between auditors and clients. We employ ALLP, particularly negative (income-increasing) ALLP, as our primary measure of the earnings (audit) quality of banks. We report that there is no evidence of abnormal negative loan loss provisions being positively associated with the economic bond between auditors and clients. Thus, we find no indication that auditor independence is impaired in EU banks. This result is maintained for the period that includes the financial crisis as well as the post-crisis period. It would appear that the misgivings pertaining to reform of the EU audit market for PIEs expressed in Deumes et al. (2010) are well founded, at least as far

as large banks are concerned. However, it must be admitted that the UK evidence pertaining to less regulated non-financial companies provided by Campa and Donnelly (2016) would suggest that the EU reforms do have some merit.

We find that stronger regulation is associated with more income-decreasing ALLP. We also report that stronger banking regulation reduces negative (income-increasing) ALLP in the period of the crisis. These results are indicative of country-level banking regulation being associated with conservative provisioning. Much variation remains particularly with respect to disclosure across European banks (see endnote 9 below). With respect to auditors, we report that regulation moderates the relation between the auditor-client bond and income-increasing loan loss provisions as expected. The negative coefficient on the interaction of unexpected NAS fees with the strength of banking regulation provides some evidence of spillover effects for banks primarily operating in countries where banking regulation is traditionally strong. This suggests that banks from strongly regulated countries may be motivated to further engage with their auditors to improve their financial reporting quality.

Overall, we conclude that an impairment of auditor independence is not responsible for under-providing for loan losses by publicly quoted banks in the EU. We attribute the difference between our findings for banks and those of Campa and Donnelly (2016) for non-financial firms in the UK to the regulated nature of the banking industry counterbalancing the pressure of unexpected total fees and unexpected NAS fees on auditor independence. In addition, the results we report when estimating normal and abnormal ALLP (see Table 1) provide support for the change from the incurred loss method to the expected loss method for the impairment of loans introduced by the new

IFRS 9. Further research on this matter is undoubtedly warranted. Our findings also encourage greater links between researchers and regulators, especially in relation to the auditing of financial institutions as strongly recommended by Barabás (2013).

There are some caveats pertaining to our results. Our sample comprises large publicly quoted banks from fourteen EU countries, ten of which are in the Eurozone. It must also be recognised that not all EU economies are market-based. The sample size is not as large as we would like due to the non-disclosure of audit fee information by some banks.[9] That said, the sample contains the largest banks in the EU, the vast majority of which are directly regulated by the ECB and the EBA.

ENDNOTES

[1] In the group of six countries made up of Cyprus, Greece, Ireland, Italy, Portugal, and Spain average ROE fell from 16.3% pre-crisis to 2.2% in the crisis and -2.1% post-crisis.

[2] The European Banking Authority (EBA) was formed in January 2011 with the objective of establishing a set of rules that are applicable to all banks in the EU in the same manner. It was established by the EU Regulation 1093/2010 of 24 November 2010. It is involved in the supervision of all banks in the EU not just those in the Eurozone.

[3] For accounting periods ending after 1st January 2005 all PIEs in the EU prepared their accounts using International Financial Reporting Standards (IFRS). Since some variables in our models require lagged data we are obliged to begin the data one year after IFRS adoption to ensure all of our data is prepared under the same accounting standards.

[4] The 60 banks in the sample belong to the following countries: Austria (2), Belgium (2), Denmark (3), France (4), Germany (2), Greece (4), Ireland (4), Italy (9), Netherland (1), Poland (6), Portugal (3), Spain (9), Sweden (4), and the United Kingdom (7).

While the number of banks in the sample may seem small, its size has been impacted greatly by the unavailability of audit fee data. Indeed, if data pertaining to audit fees were not needed in our tests, we could have used 177 unique banks which is a far larger sample than that used by comparable studies, such as Leventis, Dimitropoulos, and Anandarajan (2011) which analyses 91 unique European banks (including Switzerland) and Manganaris, Beccalli, and Dimitropoulos (2017) which analyses 90 (416 bank-years) including 12 non-EU banks from the EFTA countries Norway and Switzerland.

[5] The number of total firm-year observations is lower than the number of unique banks multiplied by the number of years investigated as several banks did not have data for the entire time series investigated.

[6] We are grateful to an anonymous reviewer for pointing this out to us.

[7] Although the analysis of the VIF does not reveal any multicollinearity problem, we re-estimated all our models omitting the variable *CAPRATIO* and our results are unaffected.

[8] Not tabulated tests are available from the authors upon request.

[9] It is noteworthy that a European Banking Authority Report on non-performing exposures from 2016 had to reduce the size of its sample of banks from 166 to 116 for an analysis by residence of the counterparty due to non-disclosure (European Banking Authority, 2016).

REFERENCES

Andreou, P., Cooper, I., Louca, C., & Philip, D. (2017). Bank loan loss accounting treatments, credit cycles and crash risk. *British Accounting Review*, 49, 474-492.

Aschauer E., & Quick R. (2018). Mandatory audit firm rotation and prohibition of audit firm-provided tax services: Evidence from investment consultants' perceptions. *International Journal of Auditing*, 22, 131-149.

Ashbaugh, H., LaFond, R., & Mayhew, B. W. (2003). Do nonaudit services compromise auditor independence? Further evidence. *The Accounting Review*, 78, 611-639.

Barabás, T. (2013). On the independence of auditors, with special regard to the financial sector. *Public Finance Quarterly*, 58, 184-198.

Basioudis, I., Papakonstantinou, E., & Geiger, M. (2008). Audit fees, non-audit fees and auditor going-concern reporting decisions in the United Kingdom. *ABACUS*, 44, 284-309.

Burgstahler, D., & Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics*, 24, 99-126.

Campa, D., & Donnelly, R. (2016). Non-audit services provided to audit clients, independence of mind and independence in appearance: Latest evidence from large UK listed companies. *Accounting and Business Research*, 46, 422-449.

Caprio, G., Laeven, L., & Levine, R. (2007). Governance and bank valuation. *Journal of Financial Intermediation*, 16, 584-617.

Chen, W., Hribar, P & Melessa, S. (2018). Incorrect inferences when using residuals as dependent variables. *Journal of Accounting Research*, 56, 751-796.

Coffee, J. C. (2007). Law and the market: The impact of enforcement. *University of Pennsylvania Law Review*, 156, 229-311.

DeFond, M., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics*, 58, 275-326.

Detragiache, E., Tressel, T., & Turk-Ariss, R. (2018). *Where have all the profits gone? European bank profitability over the financial cycle.* IMF working paper 18/99. Retrieved from: https://www.imf.org/en/Publications/WP/Issues/2018/05/09/Where-Have-All-the-Profits-Gone-European-Bank-Profitability-Over-the-Financial-Cycle-45865.

Deumes, R., Knechel, W. R., Meuwissen, R., Schelleman, C., & Vanstraelen, A. (2010). *Response to consultation on EC green paper: Audit policy: Lessons from the crisis. MARC (Maastricht Accounting, Auditing & Information Management Research Centre).* Maastricht University.

Donnelly, R. (2014). The book-to-market ratio, optimism and valuation. *The Journal of Behavioral and Experimental Finance*, 4, 14-24.

European Bank Authority (2016). EBA *report on the dynamics and drivers of non-performing exposures in the EU banking sector*, Retrieved from: http://www.eba.europa.eu/documents/10180/1360107/EBA+Report+on+NPLs.pdf.

European Commission (2011). *Reform of the audit market.* Retrieved from: http://ec.europa.eu/internal_market/auditing/reform/.

European Commission (2014). *Regulation 537/2014 of 16 April 2014*. Retrieved from: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014L0056.

European Commission (2016). *Memo 16/2244 - Reform of the EU statutory audit market*. Retrieved from: http://europa.eu/rapid/press-release_MEMO-16-2244_en.htm.

Ferguson, M. J., Seow, G. S., & Young, D. (2004). Nonaudit services and earnings management: UK evidence. *Contemporary Accounting Research*, 21, 813-841.

Fields, L. P., Fraser, D. R., & Wilkins, M. S. (2004). An investigation of the pricing of audit services for financial institutions. Jou*rnal of Accounting and Public Policy*, 23, 53-77.

Firth, M. (1997). The provision of non-audit services and the pricing of audit fees. *Journal of Business Finance & Accounting*, 24, 511-525.

Francis, J. R. (2006). Are auditors compromised by nonaudit services? Assessing the evidence. *Contemporary Accounting Research*, 23, 747-760.

Francis, J. R., & Ke, B. (2006). Disclosure of fees paid to auditors and the market valuation of earnings surprises. *Review of Accounting Studies*, 11, 495-523.

Gebhardt, G. U., & Novotny-Farkas, Z. (2011). Mandatory IFRS adoption and accounting quality of european banks. *Journal of Business Finance & Accounting*, 38, 289-333.

Gore, P., Pope, P., & Singh, A. (2007). Earnings management and the distribution of earnings relative to targets: UK evidence. *Accounting and Business Research*, 37, 123-149.

Haldane, A. (2009). *Why banks failed the stress test*. Speech given at the Marcus-Evans Conference on Stress Testing, 9-10 February. A Retrieved from: http://econ.queensu.ca/faculty/milne/870/speech374.pdf.

Kanagaretnam, K., Lobo, G. J., & Mathieu, R. (2003). Managerial incentives for income smoothing through bank loan loss provisions. *Review of Quantitative Finance and Accounting*, 20, 63-80.

Kanagaretnam, K., Krishnan, G. V., & Lobo, G. J. (2010). An empirical analysis of auditor independence in the banking industry. *The Accounting Review*, 85, 2011-2046.

Kennedy, P. (2008). *A Guide to Econometrics.* Hoboken, NJ: Wiley-Blackwell.

Kinney, W. R., & Libby, R. (2002). The relation between auditors' fees for nonaudit services and earnings management: discussion. *The Accounting Review*, 77, 107-114.

Koh, K., Rajgopal, S., & Srinivasan, S. (2013). Non-audit services and financial reporting quality: evidence from 1978 to 1980. *Review of Accounting Studies*, 18, 1-33.

Köhler, A. G., Quick, R., & Willekens, M. (2016). The new European audit regulation arena: Discussion of new rules and ideas for future research. *International Journal of Auditing*, 20, 211-214.

Krishnan, J., Sami, H., & Zhang, Y. (2005). Does the provision of nonaudit services affect investor perceptions of auditor independence? *Auditing: A Journal of Practice and Theory*, 24, 111-135.

Laeven, L., & Majnoni, G. (2003). Loan loss provisioning and economic slowdowns: too much, too late? *Journal of Financial Intermediation*, 12, 178-197.

Leventis, S., Dimitropoulos, P., & Anandarajan, A. (2011). Loan loss provisions, earnings management and capital management under IFRS: the case of EU commercial banks. *Journal of Financial Services Research*, 40, 103-122.

Li, S., Beekes, W. A., & Peasnell, K. V. (2009). *Litigation risk and auditor conservatism: a UK-US comparison.* Working Paper (Lancaster University). Retrieved from: http://eprints.lancs.ac.uk/48974.

Mangaris, P., Beccalli, E., & Dimitropoulos, P. (2017). Bank transparency and the crisis, *British Accounting Review*, 49, 121-137.

Security Exchange Commission (2000). *Revision of the commission's auditor independence requirements.* Retrieved from: http://www.sec.gov/rules/proposed/34-42994.htm.

Skinner, D. J., & Sloan, R. G. (2002). Earnings surprises, growth expectations, and stock returns or don't let an earnings torpedo sink your portfolio. *Review of Accounting Studies*, 7, 289-312.

Wahlen, J. M. (1994). The nature of information in commercial bank loan loss disclosures. *The Accounting Review*, 69, 455-478.

Watts, R., & Zimmerman, J. (1981). *The markets for independence and independent auditors.* New York: University of Rochester. Retrieved from: https://urresearch.rochester.edu/institutionalPublicationPublicView.action?institutionalItemVersionId=4475.

Young, S. (2008). Discussion of do acquirers manage earnings prior to a share bid. *Journal of Business Finance & Accounting*, 35, 671-678.

Appendix A. Variable description (in alphabetical order)

ALLP = value of abnormal loan loss provision (the residual from model (1)).
AUDCLIBOND = proxies for the economic bond between auditors and clients (for details see: UNEXPTOTFEE, UNEXPNASFEE, UNEXAUDFEE, NASFEERATIO, UNEXPTOTFEE_3Q, UNEXPNASFEE_3Q, UNEXAUDFEE_3Q, NASFEERATIO_3Q).
BEGLLA = beginning loan loss allowance divided by beginning total assets.
BEGNPL = beginning non-performing loans divided by beginning total assets.
CAPRATIO = total risk-adjusted capital ratio.
CGSCORE = measure of companies' corporate governance quality.[1]
CHLOAN = change in total loans outstanding divided by beginning total assets.
CHNPL = change in non-performing loans divided by beginning total assets.
EBP = net income before extraordinary items and LLP divided by beginning total assets.
EFFICIENCY = total operating expenses divided by total revenues (i.e., interest income plus other income).
FEE = fees paid to the auditor: Total Fees = ln (audit fees + non-audit fees); or Non-Audit Fees = ln (non-audit fees); or Audit Fees = ln (audit fees).
GDPGROWTH = real growth rate in domestic product per capita of the country where the financial institution is located.
GROWTH = annual change in total assets.
INTANG = intangible assets divided by total assets.
LCO = net loan charge-offs divided by beginning total assets.
LLP = provision for loan losses divided by beginning total assets.
LMVE = natural log of market value of common equity at the end of the year.
LOANS = total loans outstanding divided by beginning total assets.
LOSS = 1 if a firm reports a net loss and 0 otherwise.
MTB = market value of equity divided by book value of equity.
NASFEERATIO = Non-audit fees divided by total fees paid to auditors.
NASFEERATIO_3Q = 1 for firm-year observations with NASFEERATIO bigger than the third quartile of the sample and 0 otherwise.
NEGALLP = absolute value of negative ALLP.
PASTLLP = prior year's LLP divided by total assets at the beginning of the year.
POSALLP = absolute value of positive ALLP.
REG = 1 for strong regulation countries (i.e., countries with an index above the median of the sample) and 0 for countries with weaker bank supervision.
RESTAT = 1 for firm-year observations that are later restated and 0 otherwise.
ROA = operating profit divided by beginning total assets.
SECURITIES = [1–(total securities/total assets)].
SIZE = natural logarithm of total assets.
SLCO = net loan charge-offs divided by loan loss allowance.
SNPL = non-performing loans divided by lagged total loans.
TIER1 = tier 1 risk-adjusted capital ratio.
UNEXAUDFEE = unexpected total fees, estimated as the residuals from model (1) using total audit fees as dependent variable.
UNEXAUDFEE_3Q = 1 for firm-year observations with UNEXAUDFEE bigger than the third quartile of the sample and 0 otherwise.
UNEXPNASFEE = unexpected total fees, estimated as the residuals from model (1) using total non-audit fees as dependent variable.
UNEXPNASFEE_3Q = 1 for firm-year observations with UNEXPNASFEE bigger than the third quartile of the sample and 0 otherwise.

UNEXPTOTFEE = unexpected total fees, estimated as the residuals from model (1) using total fees as dependent variable.
UNEXPTOTFEE_3Q = 1 for firm-year observations with a UNEXPTOTFEE bigger than the third quartile of the sample and 0 otherwise.

[1] The score is provided by a DataStream ASSET4 ESG ratio coded 'CGVSCORE'. It is a number between 0 and 100 that indicates how a company performs compared to the entire ASSET4 universe. This figure includes normalized scores thus is not affected by the different levels of governance quality in each country; it is 'independent', i.e., it is not affected by biases due to a self-selection of corporate governance attributes to be included in the score.

Table 1. Results of regression of LLP on determinants of normal LLP

Dependent variable	**LLP**
INTERCEPT	-0.002
	(0.137)
BEGLLA	0.050**
	(0.030)
BEGNPL	0.002
	(0.880)
CHNPL	0.054**
	(0.012)
LCO	0.087
	(0.270)
CHLOAN	0.007**
	(0.029)
EBP	-0.332***
	(0.000)
LOANS	0.004***
	(0.000)
GDPGROWTH	0.000
	(0.398)
Observations	353
R-squared	0.810
F-Stat	167.06***
Year dummies	Yes

P-values (in parentheses below the coefficients) are calculated using robust standard errors. *, **, *** indicate that a coefficient is statistically significant at the 10%, 5%, and 1% level or better.

Regression model:

$LLP_{it} = \alpha + \beta_1 BEGLLA_{it} + \beta_2 BEGNPL_{it} + \beta_3 CHNPL_{it} + \beta_4 LCO_{it} + \beta_5 CHLOAN_{it} + \beta_6 EBP_{it} + \beta_7 LOANS_{it} + \beta_8 GDPGROWTH_{it} + \varepsilon_{it}$

Variables are defined in Appendix A.

Table 2. Results of simultaneous regressions of fee measures on determinants of fees

	(A)	**(B)**	**(C)**
Dependent variable	**Total Fees**	**Non-Audit fees**	**Audit fees**
INTERCEPT	-2.769	7.077	-3.272**
	(0.158)	(0.210)	(0.028)
SIZE	0.780***	0.345*	0.893***
	(0.000)	(0.086)	(0.000)
SNPL	-0.370	1.610	-1.433
	(0.739)	(0.666)	(0.178)
LOSS	-0.104	-0.231	-0.125
	(0.486)	(0.646)	(0.385)
INTANG	29.277***	101.699***	14.607**
	(0.000)	(0.000)	(0.018)
EFFICIENCY	2.827***	0.008	2.386***
	(0.001)	(0.998)	(0.005)
SLCO	0.039	-0.903	-0.080
	(0.868)	(0.249)	(0.722)
CAPRATIO	1.520	9.291	-0.712
	(0.452)	(0.171)	(0.713)
CGSCORE	0.001	-0.001	0.002
	(0.804)	(0.919)	(0.252)
RESTAT	-0.067	0.223	-0.151*
	(0.475)	(0.480)	(0.093)
GROWTH	-0.425	-0.006	-0.409
	(0.150)	(0.995)	(0.149)
SECURITIES	0.001	-0.192	0.176
	(0.999)	(0.877)	(0.619)
MTB	-0.051	-0.461	0.077
	(0.640)	(0.208)	(0.459)
ROA	47.452***	-47.280	34.805**
	(0.007)	(0.427)	(0.040)
Observations	353	353	353
R-squared	0.743	0.334	0.777
Chi-Squared	193,562.65***	176.81***	1,231.81***
Year dummies	Yes	Yes	Yes
Country dummies	Yes	Yes	Yes

Table 2 (cont'd). Results of simultaneous regressions of fee measures on determinants of fees

The model is estimated using simultaneous equations. P-values (in parentheses below the coefficients) are calculated using robust standard errors. For clarity, the year-specific and country-specific intercepts are omitted. *, **, *** indicate that a coefficient is statistically significant at the 10%, 5%, and 1% level or better.

Regression model:

$$FEE_{it} = \alpha + \beta_1 SIZE_{it} + \beta_2 SNPL_{it} + \beta_3 LOSS_{it} + \beta_4 INTANG_{it} + \beta_5 EFFICIENCY_{it} + \beta_6 SLCO_{it} + \beta_7 CAPRATIO_{it} + \beta_8 CGSCORE_{it} + \beta_9 RESTAT_{it} + \beta_{10} GROWTH_{it} + \beta_{11} SECURITIES_{it} + \beta_{12} MTB_{it} + \beta_{13} ROA_{it} + \varepsilon_{it}$$

Variables are defined in Appendix A.

Table 3. Descriptive statistics

	N.	Mean	Median	Std. Dev.	1st Quartile	3rd Quartile
ALLP	353	0.000	0.000	0.003	-0.001	0.001
NEGALLP	192	0.002	0.001	0.003	0.001	0.002
POSALLP	161	0.002	0.002	0.002	0.001	0.003
UNEXPTOTFEE	353	0.000	0.031	0.695	-0.357	0.335
UNEXPNASFEE	353	0.000	0.153	2.335	-0.685	2.335
UNEXAUDFEE	353	0.000	0.001	0.667	-0.323	0.323
NASFEERATIO	353	0.223	0.178	0.176	0.083	0.353
CAPRATIO	353	0.135	0.132	0.030	0.113	0.156
CGSCORE	353	60.128	69.430	26.315	36.560	82.410
GROWTH	353	0.057	0.037	0.154	-0.031	0.107
MTB	353	1.068	0.899	0.681	0.562	1.424
EBP	353	-0.003	-0.001	0.013	-0.007	0.004
LOSS	353	0.212	0.000	0.410	0.000	0.000
LMVE	353	16.407	16.434	1.542	15.309	17.485
TIER1	353	0.107	0.106	0.031	0.082	0.123
PASTLLP	353	0.005	0.004	0.006	0.002	0.008
REG	353	0.357	0.000	0.480	0.000	1.000

Variables are defined in Appendix A.

Table 4. Pearson correlation matrix

	ALLP	NEGALLP	POSALLP	UNEXPTOTFEE	UNEXPNASFEE	UNEXPAUDFEE	NASFEERATIO	CAPRATIO	CGSCORE	GROWTH	MTB	EBP	LOSS	LMVE	TIER1	PASTLLP
ALLP																
NEGALLP																
POSALLP																
UNEXPTOTFEE	0.084	-0.034	-0.007													
UNEXPNASFEE	0.070	-0.010	0.035	0.384***												
UNEXPAUDFEE	0.047	0.002	-0.068	0.867***	0.158***											
NASFEERATIO	0.055	-0.014	0.013	0.172***	0.479***	-0.176***										
CAPRATIO	0.071	-0.061	-0.005	0.000	-0.000	-0.000	0.031									
CGSCORE	-0.000	-0.034	-0.026	-0.000	-0.000	-0.000	-0.123**	-0.001								
GROWTH	0.054	-0.030	0.034	0.0000	0.000	0.000	0.095*	-0.200***	-0.047							
MTB	0.059	-0.055	-0.049	0.000	-0.014	-0.000	0.029	0.003	-0.051	0.275***						
EBP	-0.062	-0.461***	-0.513***	-0.011	0.000	-0.008	0.003	0.065	0.054	0.293***	0.480***					
LOSS	-0.091*	0.333***	0.287***	0.000	-0.005	0.000	-0.042	0.069	-0.043	-0.325***	-0.384***	-0.682***				
LMVE	0.041	-0.210***	-0.131***	0.039	-0.108**	0.038	-0.037	0.332***	0.384***	0.146***	0.378***	0.457***	-0.374***			
TIER1	0.084	-0.086	0.037	-0.067	0.064	-0.025	-0.052	0.871***	0.020	-0.194***	-0.041	0.064	0.038	0.291***		
PASTLLP	0.153***	0.372***	0.418***	0.072	-0.000	0.045	0.104**	0.057	-0.198***	-0.179***	-0.156***	-0.593***	0.344***	-0.325***	0.059	
REG	-0.017	0.114	-0.124	-0.000	-0.011	0.000	-0.078	0.082	0.115**	0.017	-0.064	-0.112**	0.250***	-0.126**	0.048	0.042

Variables are defined in Appendix A.

Table 5. Relation between ALLP and fee measures

PANEL A - Income-increasing (negative) ALLP				
	(A)	**(B)**	**(C)**	**(D)**
Dependent variable	**NEGALLP**	**NEGALLP**	**NEGALLP**	**NEGALLP**
INTERCEPT	-0.002	-0.002	-0.002	0.001
	(0.689)	(0.969)	(0.754)	(0.844)
UNEXPTOTFEE (β_1)	-0.000			
	(0.888)			
UNEXPNASFEE (β_1)		0.000		
		(0.162)		
UNEXPAUDFEE (β_1)			0.000	
			(0.930)	
NASFEERATIO (β_1)				0.001
				(0.422)
CAPRATIO	0.003	-0.001	0.002	0.001
	(0.808)	(0.936)	(0.834)	(0.906)
CGSCORE	0.000	0.000	0.000	0.000
	(0.756)	(0.831)	(0.817)	(0.690)
GROWTH	0.004**	0.004**	0.004**	0.004**
	(0.022)	(0.017)	(0.027)	(0.025)
MTB	0.001*	0.001**	0.001	0.001*
	(0.067)	(0.033)	(0.101)	(0.078)
EBP	-0.042	-0.054	-0.038	-0.047
	(0.427)	(0.353)	(0.480)	(0.392)
LOSS	0.001*	0.001	0.001*	0.001
	(0.082)	(0.195)	(0.081)	(0.167)
LMVE	0.000	-0.000	0.000	-0.000
	(0.918)	(0.775)	(0.941)	(0.642)
TIER1	-0.000	-0.000	-0.000	-0.000
	(0.416)	(0.625)	(0.452)	(0.582)
PASTLLP	0.106	0.107	0.103	0.108
	(0.211)	(0.195)	(0.227)	(0.191)
REG	-0.001	-0.001	-0.000	-0.000
	(0.694)	(0.546)	(0.769)	(0.957)
*UNEXPTOTFEE*REG* (β_{12})	-0.001*			
	(0.071)			
*UNEXPNASFEE*REG* (β_{12})		-0.001***		
		(0.000)		
*UNEXPAUDFEE*REG* (β_{12})			-0.001	
			(0.351)	
*NASFEERATIO*REG* (β_{12})				-0.003
				(0.186)
$\beta_1 + \beta_{12}$	-0.001**	-0.001***	-0.001	-0.002
	(0.037)	(0.000)	(0.316)	(0.269)
Observations	192	192	192	192
R-squared	0.390	0.410	0.379	0.381
F-Stat	3.74***	3.67***	3.22***	3.37***
Year and country dummies	Yes	Yes	Yes	Yes

Table 5 (cont'd). Relation between ALLP and fee measures

PANEL B - Income-decreasing (positive) ALLP				
	(A)	**(B)**	**(C)**	**(D)**
Dependent variable	**POSALLP**	**POSALLP**	**POSALLP**	**POSALLP**
INTERCEPT	-0.006*	-0.005*	-0.005*	-0.005*
	(0.085)	(0.058)	(0.074)	(0.072)
UNEXPTOTFEE (β_1)	0.000			
	(0.946)			
UNEXPNASFEE (β_1)		0.000		
		(0.402)		
UNEXPAUDFEE (β_1)			-0.000	
			(0.347)	
NASFEERATIO (β_1)				0.001
				(0.725)
CAPRATIO	0.003	-0.003	-0.001	0.000
	(0.795)	(0.782)	(0.959)	(0.993)
CGSCORE	-0.000	-0.000	-0.000	-0.000
	(0.194)	(0.129)	(0.252)	(0.195)
GROWTH	0.003**	0.002**	0.002**	0.003**
	(0.015)	(0.016)	(0.019)	(0.017)
MTB	0.000	0.000	0.000	0.000
	(0.480)	(0.800)	(0.850)	(0.699)
EBP	-0.104**	-0.074**	-0.073**	-0.089**
	(0.022)	(0.018)	(0.020)	(0.028)
LOSS	-0.000	-0.000	-0.000	-0.000
	(0.605)	(0.729)	(0.646)	(0.603)
LMVE	0.000*	0.000**	0.000**	0.000*
	(0.100)	(0.042)	(0.034)	(0.068)
TIER1	0.000	0.000	0.000	0.000
	(0.655)	(0.350)	(0.718)	(0.478)
PASTLLP	0.021	0.019	0.022	0.021
	(0.781)	(0.740)	(0.709)	(0.756)
REG	0.001*	0.002**	0.001*	0.002*
	(0.082)	(0.045)	(0.084)	(0.065)
*UNEXPTOTFEE*REG* (β_{12})	-0.000			
	(0.594)			
*UNEXPNASFEE*REG* (β_{12})		-0.001**		
		(0.045)		
*UNEXPAUDFEE*REG* (β_{12})			0.000	
			(0.970)	
*NASFEERATIO*REG* (β_{12})				-0.001
				(0.590)
$\beta_1 + \beta_{12}$	0.000	-0.001*	0.000	0.000
	(0.557)	(0.095)	(0.454)	(0.709)
Observations	161	161	161	161
R-squared	0.498	0.455	0.453	0.476
F-Stat	9.29***	8.97***	9.00***	9.54***
Year and country dummies	Yes	Yes	Yes	Yes

Table 5 (cont'd). Relation between ALLP and fee measures

P-values (in parentheses below the coefficients) are calculated using robust standard errors. For clarity, the year-specific and country-specific intercepts are omitted. *, **, *** indicate that a coefficient is statistically significant at the 10%, 5%, and 1% level or better.

Regression models:

Panel A: $NEGALLP_{it} = \alpha + \beta_1 AUDCLIBOND_{it} + \beta_2 CAPRATIO_{it} + \beta_3 CGSCORE_{it} + \beta_4 GROWTH_{it} + \beta_5 MTB_{it} + \beta_6 EBP_{it} + \beta_7 LOSS_{it} + \beta_8 LMVE_{it} + \beta_9 TIER1_{it} + \beta_{10} PASTLLP_{it} + \beta_{11} REG_{it} + \beta_{12} AUDCLIBOND*REG_{it} + \varepsilon_{it}$

Panel B: $POSALLP_{it} = \alpha + \beta_1 AUDCLIBOND_{it} + \beta_2 CAPRATIO_{it} + \beta_3 CGSCORE_{it} + \beta_4 GROWTH_{it} + \beta_5 MTB_{it} + \beta_6 EBP_{it} + \beta_7 LOSS_{it} + \beta_8 LMVE_{it} + \beta_9 TIER1_{it} + \beta_{10} PASTLLP_{it} + \beta_{11} REG_{it} + \beta_{12} AUDCLIBOND*REG_{it} + \varepsilon_{it}$

Variables are defined in Appendix A.

Table 6. Relation between income-increasing (negative) ALLP and fee measures: the impact of the financial crisis

Panel A – Period up to and including the financial crisis				
	(A)	**(B)**	**(C)**	**(D)**
Dependent variable	**NEGALLP**	**NEGALLP**	**NEGALLP**	**NEGALLP**
INTERCEPT	0.005*	0.006*	0.004	0.006*
	(0.095)	(0.061)	(0.226)	(0.060)
UNEXPTOTFEE (β_1)	-0.000			
	(0.412)			
UNEXPNASFEE (β_1)		0.000		
		(0.166)		
UNEXPAUDFEE (β_1)			-0.000	
			(0.546)	
NASFEERATIO (β_1)				0.000
				(0.655)
CAPRATIO	0.007	-0.001	0.011	0.004
	(0.496)	(0.908)	(0.292)	(0.740)
CGSCORE	0.000	0.000	0.000	0.000
	(0.471)	(0.657)	(0.686)	(0.499)
GROWTH	0.004***	0.004***	0.004***	0.003**
	(0.007)	(0.009)	(0.006)	(0.025)
MTB	0.000	0.000	0.000	0.002
	(0.314)	(0.299)	(0.510)	(0.683)
EBP	-0.023	-0.029	-0.014	-0.012
	(0.502)	(0.419)	(0.656)	(0.709)
LOSS	0.001**	0.001	0.001**	0.001*
	(0.033)	(0.106)	(0.016)	(0.090)
LMVE	-0.000	-0.000	-0.000	-0.000
	(0.141)	(0.122)	(0.297)	(0.124)
TIER1	-0.000	-0.000	-0.000*	-0.000
	(0.138)	(0.296)	(0.080)	(0.198)
PASTLLP	-0.017	-0.019	-0.016	-0.019
	(0.797)	(0.789)	(0.807)	(0.784)
REG	-0.002***	-0.002**	-0.002**	-0.002**
	(0.005)	(0.014)	(0.030)	(0.031)
*UNEXPTOTFEE*REG* (β_{12})	-0.001			
	(0.147)			
*UNEXPNASFEE*REG* (β_{12})		-0.000		
		(0.129)		
*UNEXPAUDFEE*REG* (β_{12})			-0.001	
			(0.118)	
*NASFEERATIO*REG* (β_{12})				0.000
				(0.870)
$\beta_1 + \beta_{12}$	-0.001*	0.000	-0.001*	0.000
	(0.077)	(0.167)	(0.057)	(0.761)
Observations	102	102	102	102
R-squared	0.511	0.483	0.520	0.451
F-Stat	8.24***	7.89***	7.40***	9.46***
Year dummies	Yes	Yes	Yes	Yes
Country dummies	Yes	Yes	Yes	Yes

Table 6. Relation between income-increasing (negative) ALLP and fee measures: the impact of the financial crisis

Panel B – Period after the financial crisis				
	(A)	**(B)**	**(C)**	**(D)**
Dependent variable	**NEGALLP**	**NEGALLP**	**NEGALLP**	**NEGALLP**
INTERCEPT	0.000	-0.001	0.001	-0.001
	(0.973)	(0.911)	(0.895)	(0.905)
UNEXPTOTFEE (β_1)	0.000			
	(0.921)			
UNEXPNASFEE (β_1)		0.000		
		(0.602)		
UNEXPAUDFEE (β_1)			0.000	
			(0.999)	
NASFEERATIO (β_1)				0.001
				(0.523)
CAPRATIO	0.005	0.008	0.005	0.011
	(0.789)	(0.681)	(0.795)	(0.597)
CGSCORE	0.000	0.000	0.000	0.000
	(0.646)	(0.611)	(0.750)	(0.597)
GROWTH	0.005*	0.006**	0.005	0.006**
	(0.100)	(0.043)	(0.120)	(0.046)
MTB	0.001	0.002*	0.002	0.002*
	(0.140)	(0.092)	(0.114)	(0.086)
EBP	-0.013	-0.010	-0.013	-0.012
	(0.865)	(0.897)	(0.867)	(0.873)
LOSS	0.001	0.001	0.001	0.001
	(0.135)	(0.156)	(0.139)	(0.154)
LMVE	-0.000	-0.000	-0.000	-0.000
	(0.802)	(0.879)	(0.7550)	(0.824)
TIER1	0.000	-0.000	0.000	-0.000
	(0.903)	(0.901)	(0.882)	(0.904)
PASTLLP	0.094	0.110	0.086	0.111
	(0.482)	(0.389)	(0.506)	(0.363)
REG	0.002	0.001	0.002	0.003
	(0.592)	(0.699)	(0.585)	(0.326)
*UNEXPTOTFEE*REG* (β_{12})	0.000			
	(0.822)			
*UNEXPNASFEE*REG* (β_{12})		-0.001		
		(0.157)		
*UNEXPAUDFEE*REG* (β_{12})			0.002	
			(0.186)	
*NASFEERATIO*REG* (β_{12})				-0.008
				(0.263)
$\beta_1 + \beta_{12}$	0.000	-0.001	0.002	-0.007
	(0.772)	(0.165)	(0.128)	(0.308)
Observations	90	90	90	90
R-squared	0.489	0.512	0.500	0.512
F-Stat	2.06***	2.28***	2.18***	2.29***
Year and country dummies	Yes	Yes	Yes	Yes

Table 6. Relation between income-increasing (negative) ALLP and fee measures: the impact of the financial crisis

P-values (in parentheses below the coefficients) are calculated using robust standard errors. For clarity, the year-specific intercepts are omitted. *, **, *** indicate that a coefficient is statistically significant at the 10%, 5%, and 1% level or better.

Regression model:

$$NEGALLP_{it} = \alpha + \beta_1 AUDCLIBOND_{it} + \beta_2 CAPRATIO_{it} + \beta_3 CGSCORE_{it} + \beta_4 GROWTH_{it} + \beta_5 MTB_{it} + \beta_6 EBP_{it} + \beta_7 LOSS_{it} + \beta_8 LMVE_{it} + \beta_9 TIER1_{it} + \beta_{10} PASTLLP_{it} + \beta_{11} REG_{it} + \beta_{12} AUDCLIBOND*REG_{it} + \varepsilon_{it}$$

Variables are defined in Appendix A.

Table 7. Relation between ALLP and fee measures: alternative measure for unexpected fees

PANEL A - Income-increasing (negative) ALLP				
	(A)	**(B)**	**(C)**	**(D)**
Dependent variable	**NEGALLP**	**NEGALLP**	**NEGALLP**	**NEGALLP**
INTERCEPT	0.000	0.000	0.000	0.001
	(0.969)	(0.970)	(0.924)	(0.885)
UNEXPTOTFEE_3Q (β_1)	-0.000			
	(0.946)			
UNEXPNASFEE_3Q (β_1)		-0.000		
		(0.646)		
UNEXPAUDFEE_3Q (β_1)			-0.000	
			(0.987)	
NASFEERATIO_3Q (β_1)				0.000
				(0.694)
CAPRATIO	0.000	0.000	-0.000	0.001
	(0.981)	(0.991)	(0.999)	(0.948)
CGSCORE	0.000	0.000	0.000	0.000
	(0.768)	(0.753)	(0.763)	(0.684)
GROWTH	0.004**	0.004**	0.004**	0.004**
	(0.030)	(0.030)	(0.037)	(0.026)
MTB	0.001	0.001*	0.001*	0.001
	(0.110)	(0.071)	(0.100)	(0.101)
EBP	-0.041	-0.044	-0.042	-0.044
	(0.433)	(0.423)	(0.400)	(0.424)
LOSS	0.001	0.001	0.001	0.001
	(0.108)	(0.102)	(0.132)	(0.151)
LMVE	-0.000	-0.000	-0.000	-0.000
	(0.800)	(0.748)	(0.762)	(0.708)
TIER1	-0.000	-0.000	-0.000	-0.000
	(0.580)	(0.601)	(0.595)	(0.590)
PASTLLP	0.102	0.103	0.101	0.106
	(0.231)	(0.216)	(0.236)	(0.203)
REG	-0.001	-0.000	-0.001	-0.001
	(0.689)	(0.788)	(0.663)	(0.653)
*UNEXPTOTFEE_3Q*REG* (β_{12})	-0.000			
	(0.989)			
*UNEXPNASFEE_3Q*REG* (β_{12})		-0.002***		
		(0.006)		
*UNEXPAUDFEE_3Q*REG* (β_{12})			0.000	
			(0.768)	
*NASFEERATIO_3Q*REG* (β_{12})				-0.001
				(0.487)
$\beta_1 + \beta_{12}$	-0.001	-0.002***	0.000	-0.001
	(0.959)	(0.001)	(0.716)	(0.535)
Observations	192	192	192	192
R-squared	0.372	0.385	0.372	0.374
F-Stat	2.95***	3.15***	3.00***	3.24***
Year and country dummies	Yes	Yes	Yes	Yes

Table 7 (cont'd). Relation between ALLP and fee measures

PANEL B - Income-decreasing (positive) ALLP				
	(A)	**(B)**	**(C)**	**(D)**
Dependent variable	**POSALLP**	**POSALLP**	**POSALLP**	**POSALLP**
INTERCEPT	-0.005	-0.005*	-0.005*	-0.005
	(0.135)	(0.073)	(0.084)	(0.102)
UNEXPTOTFEE_3Q (β_1)	0.000			
	(0.410)			
UNEXPNASFEE_3Q (β_1)		-0.000		
		(0.594)		
UNEXPAUDFEE_3Q (β_1)			0.000	
			(0.422)	
NASFEERATIO_3Q (β_1)				0.000
				(0.556)
CAPRATIO	-0.000	0.003	0.002	-0.001
	(0.981)	(0.808)	(0.422)	(0.950)
CGSCORE	-0.000	-0.000	0.002	-0.000
	(0.272)	(0.136)	(0.872)	(0.352)
GROWTH	0.003**	0.003**	0.003**	0.003**
	(0.016)	(0.019)	(0.019)	(0.015)
MTB	0.000	0.000	0.000	0.000
	(0.631)	(0.690)	(0.672)	(0.636)
EBP	-0.086**	-0.088**	-0.087**	-0.085**
	(0.026)	(0.025)	(0.027)	(0.029)
LOSS	-0.000	-0.000	-0.000	-0.000
	(0.640)	(0.497)	(0.609)	(0.587)
LMVE	0.000	0.000**	0.000	0.000
	(0.204)	(0.040)	(0.120)	(0.123)
TIER1	0.000	0.000	0.000	0.000
	(0.415)	(0.778)	(0.524)	(0.425)
PASTLLP	0.010	0.029	0.023	0.023
	(0.838)	(0.666)	(0.726)	(0.732)
REG	0.001*	0.001	0.002*	0.001*
	(0.095)	(0.128)	(0.071)	(0.100)
*UNEXPTOTFEE_3Q*REG* (β_{12})	0.000			
	(0.828)			
*UNEXPNASFEE_3Q*REG* (β_{12})		-0.000		
		(0.477)		
*UNEXPAUDFEE_3Q*REG* (β_{12})			-0.000	
			(0.549)	
*NASFEERATIO_3Q*REG* (β_{12})				0.000
				(0.828)
$\beta_1 + \beta_{12}$	0.000	0.000	0.000	0.000
	(0.351)	(0.159)	(0.975)	(0.257)
Observations	161	161	161	161
R-squared	0.477	0.475	0.474	0.476
F-Stat	8.00***	9.08***	9.09***	10.13***
Year and country dummies	Yes	Yes	Yes	Yes

Table 7 (cont'd). Relation between ALLP and fee measures

P-values (in parentheses below the coefficients) are calculated using robust standard errors. For clarity, the year-specific and country-specific intercepts are omitted. *, **, *** indicate that a coefficient is statistically significant at the 10%, 5%, and 1% level or better.

Regression model:

$$NEGALLP_{it} = \alpha + \beta_1 AUDCLIBOND_{it} + \beta_2 CAPRATIO_{it} + \beta_3 CGSCORE_{it} + \beta_4 GROWTH_{it} + \beta_5 MTB_{it} + \beta_6 EBP_{it} + \beta_7 LOSS_{it} + \beta_8 LMVE_{it} + \beta_9 TIER1_{it} + \beta_{10} PASTLLP_{it} + \beta_{11} REG_{it} + \beta_{12} AUDCLIBOND*REG_{it} + \varepsilon_{it}$$

Variables are defined in Appendix A.