

# **Financial statement filing lags:**

## **An empirical analysis among small firms**

### **Abstract**

We examine financial statement filing lags among a large sample of Belgian small firms (excluding micro entities). Our results indicate that about 31 percent of the financial statements in our sample are being filed late (i.e., after the legal deadline), but our results further suggest that monetary sanctions could be an effective tool in order to ensure compliance with the legal deadline. Whereas the legal deadline and administrative sanctions for late filings are found to be very important filing incentives for many small firms, various firm-specific factors (e.g., firm size, presence of an external financial statement audit, etc.) are also found to affect small firms' financial statement filing lags. Our results further indicate that extremely late filings are associated with lower financial statement quality.

### **Keywords**

small firms, financial reporting, reporting lag, filing requirements

## Introduction

The aim of this paper is to study (determinants of) financial statement filing lags among a large sample of Belgian small firms<sup>1</sup>. Conceptual accounting frameworks worldwide recognize timeliness as one of the main characteristics that determines the relevance of financial statement information. The International Accounting Standards Board, for example, argues that “[t]imeliness means having information available to decision-makers in time to be capable of influencing their decisions. Generally, the older the information is the less useful it is. (...)” (IASB, 2010: QC29). In addition, national regulators acknowledge the importance of timeliness by imposing filing deadlines. Prior studies on financial reporting timeliness have merely focused on large listed firms<sup>2</sup> and can be categorized into two main types. The first type explores the impact of reporting timeliness on stock prices (see e.g., Chambers and Penman, 1984; Atiase et al., 1989). Overall, findings indicate that a short financial reporting lag<sup>3</sup> yields a more pronounced stock price reaction. The second type is mainly concerned with factors influencing timely reporting behavior (see e.g., Dyer and McHugh, 1975; Owusu-Ansah, 2000; Leventis and Weetman, 2004). In the current study, we add to the second type of literature by examining factors that are related to financial statement filing lags among a large sample of (Belgian) small firms. Belgium provides an interesting setting to do so as all Belgian limited liability firms, irrespective of their size or

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<sup>1</sup> As a general remark, one should be very careful when interpreting (comparing) results of (across) different studies because of sampling differences and differences with regard to the way small (and/or medium-sized firms) are defined (see e.g., Psillaki and Daskalakis (2008) for a discussion). Dedman and Lennox (2009), for example, only consider medium-sized private UK firms whose primary activity is within manufacturing. To define medium-sized firms, they require that at least two of the following three conditions hold: (1) £5.6 million < sales ≤ £11.2 million; (2) £2.8 million < assets ≤ £5.6 million; and (3) 50 < employees ≤ 250 (Dedman and Lennox, 2009: 217). As another illustration, Allee and Yohn (2009) rely on a (stratified random) sample of privately held US firms with less than 500 employees (and label them small businesses). In the current paper, we perform an empirical analysis among small Belgian firms and therefore adhere to the term small firms throughout the entire paper. Nevertheless, some studies that we refer to consider samples of both small and medium-sized enterprises (where small and medium-sized enterprises are then defined in various ways, cf. *supra*).

<sup>2</sup> Clatworthy and Peel (2013) provide a notable exception. They examine financial reporting timeliness among a large sample of UK private firms, but mainly focus on the effect of corporate governance (and their paper therefore has a substantially different focus).

<sup>3</sup> The financial reporting lag is then defined as the time period that elapses between the closing date of the accounting year and the moment the information is actually disclosed.

stock listing, are required to prepare annual financial statements that have to be filed with the National Bank of Belgium (henceforth NBB).

Our focus on Belgian small firms implies a meaningful contribution to the existing literature. First, in the absence of capital market pressures to report in a timely manner (cf. *supra*), small firms may be expected to exhibit considerably more ‘tardiness’ with regard to their filing behavior than listed firms. For example, while prior studies indicate that late filings are the exception for listed firms<sup>4</sup>, figures reported by Graydon reveal that about 35 percent of Belgian firms<sup>5</sup> did not file their financial statements for accounting year 2003 within the maximum period of seven months imposed by law (Stolle, 2004). While the latter observation is striking, especially given that private firms get a much longer deadline to file their financial statements than listed firms<sup>6</sup>, to date the issue has not been further explored yet. Second, given the specific Belgian setting, we are able to assess the impact of a monetary sanction on filing practices. As mentioned before, Belgian firms have to file their financial statements within a period of *seven months* after the closing date of the accounting year. However, the administrative (monetary) sanction for late filings is only applicable if the financial statements are filed more than *eight months* after the closing date. Because of this discrepancy, we are able to differentiate between the effect of a monetary sanction and the legal deadline itself. Third, our focus on small firms allows us to explore the impact of variables that have not been considered in prior research. For example, unlike for most listed firms, banks and suppliers are the main financiers of small enterprises (Berger and Udell, 2006). Accordingly, we examine the impact of leverage, as well as the relative importance of different types of creditors, on financial reporting timeliness in a creditor-oriented setting. Moreover, because an external financial statement audit is voluntary for Belgian small firms (i.e., in contrast to being mandatory for listed firms), we are able to

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<sup>4</sup> For example, Naimi et al. (2010) report that merely 2.5% of their sample firms failed to publish their financial statements within the time period prescribed by listing requirements.

<sup>5</sup> The vast majority of Belgian firms are SMEs. For example, based on the Structural Business Statistics Database (Eurostat) more than 99 percent of Belgian firms classify as SME (European Commission, 2010/2011).

<sup>6</sup> For example, subject to SEC requirements, financial statements (i.e., 10-K reports) have to be filed within a period of 60 days after the closing date of the accounting period.

explore the relationship between the presence of an external financial statement audit and financial reporting timeliness.

Results reported in this paper are relevant because they provide additional insights into financial reporting practices and incentives of small firms. As such, they are useful for both small firm managers and external stakeholders. Small firm financial reporting requirements have received a great deal of attention from standard setters and regulators. Examples include the development of International Financial Reporting Standards for SMEs (IFRS for SMEs)<sup>7</sup>; and a European Directive aimed at, amongst other, simplifying accounting requirements for small firms<sup>8</sup>. As discussed in Schiebel (2008), standard setters are struggling with developing financial reporting standards tailored to the special needs of small firms, because, although small firms represent the overwhelming majority of entities preparing financial statements, academic research into their financial reporting is scant. Various authors and organizations have therefore called for further work in this area (see e.g., Evans et al., 2005; IFAC, 2006; IASB, 2007; Di Pietra et al., 2008; Schiebel, 2008). Reported results may help improve our general understanding of the causes of delay in the public disclosure of financial statements.

The remainder of the paper is organized as follows. We begin with a brief discussion of relevant prior literature and the development of our hypotheses. Next, we introduce the sample and the research methods employed. Then, we present and discuss our results. Finally, we summarize our conclusions.

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<sup>7</sup> These standards were issued in July 2009, and the European Commission recently rejected the mandatory use of IFRS for SMEs (Girbina et al., 2012), although the European Financial Reporting Advisory Group (EFRAG) identified only six minor differences (i.e., incompatibilities) with the European Directives (EFRAG, 2010). Nevertheless, EU members may still consider IFRS for SMEs as a benchmark for the modernization of their accounting systems. Some European countries have already adopted IFRS for SMEs or announced plans to do so: Bosnia, Estonia, Macedonia, Switzerland, United Kingdom and Ireland (IFRS Foundation, 2012). As illustrated by a recent reaction from EFRAG to proposed adjustments to IFRS for SMEs (EFRAG, 2014), the aforementioned European Commission's rejection does not necessarily imply a long-term decision.

<sup>8</sup> The European Directive was adopted by the European Parliament and the Council of the European Union in June 2013.

## Review of the literature and development of hypotheses

### *The Belgian legal framework*

Filing obligations for financial statements aim to ensure that a minimum of financial information is made publicly available to all outside stakeholders (Eierle, 2008). Belgian firms are required to prepare their financial statements according to Belgian GAAP (based on the Fourth EU Directive) and a prescribed format in which the different items to be disclosed are explicitly defined. For commercial firms, there are two financial statement formats: a complete format and an abbreviated format. A firm has to file the complete format if it has more than 100 employees, or if at least two of the following criteria are satisfied (in at least one of the two preceding accounting periods): (1) more than 50 employees; (2) turnover of at least 7,300,000 EUR; and/or (3) total assets of at least 3,650,000 EUR. Firms that do not meet these criteria are allowed to use the abbreviated format. Importantly, regardless of the financial statement format used, the firm is obliged to provide all information contained in that type of format (Beuselinck et al., 2008). While the abbreviated format is less detailed than the complete format<sup>9</sup>, it certainly provides a lot of information to external stakeholders. Counting 22 pages, the abbreviated format of the financial statements contains a balance sheet, an income statement and various notes to the financial statements.

All Belgian firms have to file their financial statements (regardless of the format) no later than one month after approval by the annual meeting of shareholders, with a maximum of *seven* months after the closing date of the accounting year. If a firm files its financial statements late and third parties suffer a loss, the loss is assumed to result from the late filing (unless proof to the contrary is provided). In other words, the onus of proof is reversed and lies with the firm filing its financial statements late. In addition, late filings

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<sup>9</sup> Specific examples of differences between the complete and the abbreviated format of the financial statements are that, on the balance sheet, the abbreviated format contains less detailed information with respect to financial fixed assets, inventories, investments, and long-term debt. In the abbreviated format of the income statement, operating revenues (e.g., turnover) and expenses are summarized as a gross margin, whereas detailed information on both operating revenues and expenses are mandatory in the complete format. Finally, less information (and detail) is required in the notes for the abbreviated format of the financial statements.

are punished by means of an administrative sanction. Nevertheless, it is important to note that the aforementioned sanction only comes into effect if financial statements are filed more than *eight* months after the closing date of the accounting period. The administrative sanction depends upon the actual reporting lag and ranges from 120 EUR (400 EUR) up to 360 EUR (1,200 EUR) for the abbreviated (complete) format of the financial statements. If a firm does not file financial statements for three consecutive accounting years, each stakeholder or the Public Prosecutor can claim its judicial annulment.

### *Hypotheses development*

In this section, we discuss relevant literature and develop our hypotheses based on three types of arguments. First, we consider demand for information by external stakeholders. Small firms are often labeled “informationally opaque” compared to large firms (see e.g., Berger and Udell, 1998; Niemi and Sundgren, 2012). Whereas the business environment of large listed firms is characterized by various information intermediaries (e.g., financial analysts, financial press, etc.), these sources of information (such as earnings forecasts, market values, etc.) are absent in a small firm setting. As discussed in Xiang et al. (2014), for example, a large body of literature considers the restricted ability of small firms to obtain external financing, largely due to their inherent informational opacity. As such, financial statements are arguably a relatively more important piece of information for small firms than for listed firms to mitigate information asymmetries with (external) stakeholders (Niemi and Sundgren, 2012). As discussed in the Introduction, banks and suppliers are the main financiers of small firms (Berger and Udell, 2006) and they are found to be the most important users of financial statements in Belgium (Tuymans, 2012). For the development of our hypotheses with regard to demand for information we therefore mainly focus on creditors. Second, we consider specific reporting incentives that may affect the timing of filing the financial statements (e.g., delay the disclosure of unfavorable information). Third, we consider the financial statements “production process”. Unlike large listed firms, small firms do not have large administrative departments that deal with financial administration (including the preparation of the

financial statements). Accordingly, the financial statement “production process” in small firms may also affect financial statement filing lags.

**Leverage.** Given the lack of public access to capital markets, private debt – provided by trade creditors and banks – constitutes the main source of finance for small firms (Berger and Udell, 2006; European Commission, 2011). So, despite the fact that small firms are not subject to capital market pressures for timely financial reporting, they rely very heavily on external debt, providers of which also require timely information for their decision making (Collis, 2008; Peek et al., 2010). Based on a survey among financial statement users, suppliers and creditors are found to be the most important users of Belgian financial statements (Tuymans, 2012), which lends strong support for the latter argument. In a similar vein, Maingot and Zeghal (2006) find that, besides fiscal purposes, Canadian small firms consider borrowing as the main reason for preparing the financial statements. Specifically, financial statements may mitigate asymmetric information problems by providing useful and reliable information to the lending agent for evaluating the underwriting decision (Allee and Yohn, 2009). In addition, Jensen and Meckling (1976) argue that creditors might demand monitoring and bonding contracts to mitigate agency problems with debt. These contracts are then often based on accounting data (Smith and Warner, 1979; Leftwich, 1983), creating a demand for timely financial statements. Prior studies have shown that private creditors (i.e., as opposed to the general public) typically include more and tighter covenants in debt contracts than public creditors because the former can more efficiently renegotiate debt (Smith and Warner, 1979; Dichev and Skinner, 2002).

Conversely, some authors argue that information asymmetries between private firms and their stakeholders are mainly resolved via private channels (see e.g., Ball and Shivakumar, 2005; Burgstahler et al., 2006). Private firms’ financial statements may be less relevant because such reports are published less frequently and are less subject to the scrutiny of public markets and the financial press than those of listed firms (Berger and Udell, 2006). Financial statements are nevertheless likely to be a very important source of information in a small firm setting. First, publishing financial statements is more credible than handing

information individually to creditors. Filing financial statements with an independent third party (i.e., the NBB in Belgium) commits the firm, as filed statements cannot be modified and future financial statements will have to be consistent with those filed in the past (Arrunada, 2011).<sup>10</sup> Second, although small firms could provide creditors with information through private channels, it is generally deemed more efficient to file financial statements at a public depository than to respond to multiple requests for this information (Dedman and Lennox, 2009). This is especially true in a setting where such filing is required by law (as is the case in Belgium). Third, from the creditor's point of view, contracting on *hard* information (e.g., financial statements) is efficient because within large lending institutions *soft* information (e.g., reputation based on past experience), is more difficult to document verifiably and to pass credibly from one individual to another (Berger et al., 2005). In addition, it is much easier for the creditor to legally enforce an explicit contract based on hard information than an implicit contract based on soft information (Berger and Udell, 2006). Fourth, while some creditors are likely to have the power to obtain private information about the firm, other creditors might not (e.g., because their competitors do not make such demands) (Schiebel, 2008). Importantly, we do not argue that creditors merely consider financial statement information. Rather we believe that creditors rely on different types of information, including the financial statements. Moro et al. (2012), for example, find that loan managers rely on a combination of publicly available hard financial information, soft information collected through observation and third parties, and voluntarily disclosed information.

Various empirical studies report results that are consistent with financial statements playing an important role in lending decisions for small firms (see also Collis (2012) for a comprehensive overview). Allee and Yohn (2009) and Minnis (2011), for example, find that privately held US firms' financial reporting practices affect their access to and their cost of external debt. In a similar vein, based on a sample of UK and German small firms, Hombach et al. (2013) report results consistent with their hypothesis that

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<sup>10</sup> In the Belgian context, firms are able to correct previously filed financial statements. If so, both the original and corrected financial statements are available in the NBB database (and, based on the heading, a clear distinction is made between original and corrected financial statements in the NBB database). As such, it is highly visible to the firm's stakeholders that previously filed financial statements were modified.



mandatory disclosure and auditing contribute to a higher share of financial statement lending (as proxied by the share of trade credit). Based on a sample of Belgian small firms, Meerschaert et al. (2013) show that external credit market dependence positively affects the informative value of earnings figures. Also in the Belgian context, Van Caneghem and Van Campenhout (2012) observe a significantly positive relationship between leverage and both the amount and the quality of the information disclosed in the financial statements. In sum, the aforementioned evidence is consistent with a demand for financial reporting by small firms to mitigate information asymmetries between the firm and its creditors. Financial statements serve as a monitoring device and timely disclosure of the financial statements could therefore be a way of mitigating agency problems between managers (the owner(s)) and creditors. Based on the aforementioned considerations, we hypothesize:

*H1: There is a negative relationship between leverage and the financial statement filing lag.*

***Financial statement audit.*** Different types of lending technologies exist (see e.g., Berger and Udell, 2006). One of these technologies is so-called *financial statement lending*. As argued by Berger and Udell (2006), informative financial statements, such as audited financial statements that are prepared according to widely accepted accounting standards, are a necessary condition for this type of lending technology. Consistent with this argument, Allee and Yohn (2009), for example, find that private firms with audited financial statements are significantly more likely to be granted credit than those without audited financial statements. As mentioned earlier, an external financial statement audit is not legally required for Belgian small firms. It is only mandatory for *large* firms<sup>11</sup>. Nevertheless, small firms can voluntarily opt for an external financial statement audit. Because such an audit is assumed to provide the firm's stakeholders with independent assurance regarding the accuracy of the financial statements and the going concern status (Van Tendeloo and Vanstraelen, 2008), it increases the informative value of the financial

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<sup>11</sup> In order to define large firms, exactly the same criteria are used as the ones employed in order to identify firms that need to file the complete format of the financial statements (cf. The Belgian legal framework). So, for firms that are allowed to file the abbreviated format of the financial statements, an external financial statement audit is not mandatory.

statements. Based on the aforementioned arguments we expect that financial statements are more likely to be used as a screening and/or a monitoring device by creditors if they are externally audited, which creates a stronger demand for timely information. We therefore hypothesize:

*H2: There is a negative relationship between the presence of an external financial statement audit and the financial statement filing lag.*

**Firm size.** Prior research based on small firms demonstrates an effect of firm size on financial reporting practices. For example, based on a sample of Australian small firms, McMahon (2001) finds that financial reporting practices of medium-sized firms are more comprehensive than those of small firms. In a similar vein, Eierle (2008) demonstrates that voluntary disclosures are significantly more likely for medium-sized GmbHs (in Austria) than for small GmbHs. Analogously, Dedman and Lennox (2009) demonstrate a positive relationship between firm size and voluntary disclosure of sales and cost of sales among a sample of medium-sized UK private firms from the manufacturing sector. In line with these findings, Allee and Yohn (2009) observe a positive relationship between firm size and demand for financial statements among a sample of privately held small US firms. As argued by Minnis (2011), also in a private firm context, larger firms are likely to face more severe agency problems (e.g., manager-ownership separation is more likely in larger firms; larger loan sizes and the resulting additional opportunities for asset substitution), and, hence, have a greater need for monitoring. In addition, larger firms are characterized by more resources (e.g., more accounting staff and/or more advanced accounting information systems) which enables them to report faster (Owusu-Ansah 2000; Allee and Yohn, 2009). Analogous to Eierle (2008), we therefore argue that firm size is likely to affect cost/benefit perceptions of filing choices (and thus filing practices) and we hypothesize:

*H3: There is a negative relationship between firm size and the financial statement filing lag.*

**Growth prospects.** Growth creates a need for resources, which is likely to exhaust internal funds (Michaelas et al., 1999; Psillaki and Daskalakis, 2008). Accordingly, growth firms are more likely to turn

to external funds (Allee and Yohn, 2009). As argued by Minnis (2011), firm growth is likely associated with the number of investment opportunities, which might create a financial reporting incentive to facilitate both internal capital decisions and the attraction of external funds. Consistent with these arguments, McMahon (2001) observes a significantly positive relationship between comprehensiveness of financial reporting practices and firm growth for a sample of Australian small firms. Similarly, Allee and Yohn (2009) find that firm growth is an important driver of the production and use of financial statements for US private firms. There is substantial evidence that small firms face larger growth constraints and have less access to formal sources of external finance than large firms (Beck and Demirguc-Kunt, 2006), which is then typically ascribed to the fact that small firms are more informationally opaque. In order to facilitate their access to external funds, we expect firms with growth prospects to be more transparent (and thus report more timely). Growth firms are also more likely to produce timely financial statements because of increased (internal) information needs. That is, as the firm grows, complexity increases creating a stronger need for timely financial information to aid in (internal) decision making (Bushman and Smith, 2001; Allee and Yohn, 2009). Moreover, firm growth is linked to potential agency problems, creating a stronger demand for (timely) financial information (Allee and Yohn, 2009). Based on the aforementioned considerations, we hypothesize:

*H4: There is a negative relationship between firm growth prospects and the financial statement filing lag.*

**Unfavorable information.** Dye and Sridhar (1995) theoretically show that managers will disclose favorable information more quickly than unfavorable information. In addition, several studies empirically demonstrate that financial statements that contain favorable information are disclosed more quickly than financial statements that contain unfavorable information (see e.g., Whittred, 1980; Givoly and Palmon, 1982; Owusu-Ansah, 2000; Haw et al., 2000). Different explanations have been offered in the literature. Givoly and Palmon (1982), for example, argue that managers delay the disclosure of unfavorable information because they “*wish to continue and complete recent negotiations and contracts in the best*

*possible light*” (Givoly and Palmon, 1982: 490). While the aforementioned studies are based on samples of large listed firms, we expect their findings to hold for small firms too. After all, unlike large listed firms, small firms generally have few information intermediaries and the financial statements of small firms are therefore likely to convey even more ‘news’ about the firm. We therefore formulate the following hypothesis:

*H5: There is a positive relationship between the presence of unfavorable information in the financial statements and the financial statement filing lag.*

**Firm age.** Based on *learning curve theory*, older, well-established firms are believed to be more proficient in collecting, processing and disclosing information because of learning effects (Owusu-Ansah, 2000). As the firm continues and its accountant learns more, ‘teething problems’ that would cause unusual reporting delays are minimized. Based on these considerations, we expect that financial statement filing lags decrease as the number of financial statements prepared by the firm increases. Thus,

*H6: There is a negative relationship between firm age and the financial statement filing lag.*

## Research methods

### *Data collection*

All data, except for the date of filing the financial statements with the NBB, were collected from Bureau Van Dijk’s BELFIRST database, which contains financial statement data for Belgian and Luxembourgian firms. Financial statement filing dates, which are not available in the BELFIRST database, were obtained directly from the NBB for accounting years 2006 up to 2008 (and we therefore use this period as our sample period). For the purposes of our study, we selected all Belgian firms that filed the abbreviated format of the financial statements. Although the small firm definition is subject to considerable differences in prior studies (see, e.g., Psillaki and Daskalakis (2008) for a discussion), there is an

increasing tendency to rely on the European Commission SME definition. Under the European SME definition, a clear distinction is made between small and micro enterprises. Accordingly, inspired by the European definition, we eliminate firms that had less than 10 employees over the sample period to exclude micro firms (and thus only retain small firms). Because filing practices of subsidiaries are likely to be affected by the parent firm's reporting incentives, we excluded firms for which at least 20 percent of the shares were held by another firm (i.e., based on ownership data contained in the BELFIRST database). Finally, we discarded observations with missing data. Doing so, we end up with our final sample of 22,108 firm-year observations. To mitigate the potential impact of outliers, reported results are based on winsorized data. Winsorization restates outlying values to the largest non-outlying value. Continuous variables were winsorized at one percent and 99 percent.

### *Dependent variable(s)*

First, we consider a dummy variable (to be denoted by *LATE*) that distinguishes between timely and late filers. This dummy variable is coded one if the firm filed its financial statements late (i.e., more than seven months after the closing date of the accounting year); and zero otherwise. Second, we consider an ordinal variable (to be denoted by *ORDLATE*) that takes into account the increasing administrative sanction that becomes applicable depending upon the actual reporting lag (see Table 1 for further details regarding the definition of this variable). Considering these increasing “fines” is relevant because, as argued by Dedman and Lennox (2009), managers would not be willing to pay any extra amount with regard to financial reporting choices unless they perceive some benefit to it. A similar approach has been used in Clathworthy and Peel (2013).

## *Independent variables*

To test the relationship between leverage and financial statement filing lags (i.e., H1), we include the ratio of total liabilities over total assets (to be denoted by *LEV*)<sup>12</sup> in our model. We include a dummy variable that captures the presence of an external financial statement audit (to be denoted by *AUDIT*) to test H2. This dummy variable is coded one if the financial statements were subject to an external financial statement audit; and zero otherwise. To assess the impact of firm size on our dependent variables (i.e., H3), we include the natural logarithm of total assets (see e.g., Sogorb-Mira, 2005; Heyman et al., 2008) (to be denoted by *SIZE*) in our model. To test the relationship between firm growth prospects and financial statement filing lags (i.e., H4), we include the ratio of intangible assets to total assets (see e.g., Michaelas et al., 1999; Esperança et al., 2003; Sogorb-Mira, 2005) (to be denoted by *GROWTH*) in our model. In line with prior studies, we consider different variables in order to capture the presence of unfavorable information contained in the financial statements (i.e., H5). More specifically, we include several dummy variables that capture a substantial negative evolution in the firm's financial performance or position. First, we consider a dummy variable that is coded one if the firm reported a profit in the previous accounting period and a loss in the current accounting period; and zero otherwise (to be denoted by *CHLOSS*). As argued by Degeorge et al. (1999: 2), there is a “(...) *psychologically important distinction between positive and negative numbers (or zero)*”. Various studies have scrutinized the distribution of reported earnings figures and report results that are consistent with loss avoidance (i.e., turning small losses into small profits by managing reported earnings) (see e.g., Burgstahler and Dichev, 1997; Degeorge et al., 1999; Holland and Ramsay, 2003). Interestingly, while the bulk of studies have focused on samples of large listed firms, also Belgian private firms are found to exhibit this type of behavior (see De Clerck et al., 2008). Accordingly, regardless of the absolute change in earnings, going from a profit in the previous accounting period to a loss in the current period can be considered bad news.

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<sup>12</sup> We also considered total debt (i.e., total liabilities minus provisions and deferred taxes) over total assets. In addition, we considered the sum of financial debt and trade debt over total assets. However, these alternative specifications do not affect our results.

Second, we consider a dummy variable that is coded one if the current ratio (i.e., the ratio of current assets over current liabilities) exhibits a marked decrease compared to the previous accounting period (to be denoted by *CHCURRENT*). More specifically, this dummy variable is coded one if the firm has a current ratio below one in the current accounting period and a current ratio above 1.50 in the previous accounting period; and zero otherwise.<sup>13</sup> A current ratio below one might be indicative of liquidity problems. Third, we consider a dummy variable that is coded one if the firm has tax and social security liabilities that are overdue (expired) in the current accounting period, while this was not the case in the previous accounting period; and zero otherwise (to be denoted by *CHEXPDEBT*). As discussed in Gaeremynck and Willekens (2003), the existence of expired debt to privileged parties, such as tax and social security authorities, has proven to be an extremely powerful measure to estimate liquidity problems in Belgium (see also Ooghe et al., 1995). In order to test the effect of firm age on our dependent variables (H6), we include the natural logarithm of the number of years since the date of incorporation mentioned on the first page of the financial statements<sup>14</sup> (to be denoted by *AGE*) in our model.

We also consider some control variables. As mentioned earlier, financial debt (i.e., bank loans) and trade debt (i.e., credit provided by suppliers) are considered to be the most important types of credit for small firms (Berger and Udell, 2006). As an illustration, based on our sample, financial (trade) debt accounts for 37 percent (34.9 percent) of total debt. While all creditors are likely to rely on financial statement information (cf. H1), the extent to which the alternative types of creditors (have to) rely on financial statement information might differ. On the one hand, Hombach et al. (2013) and Kitching, Hart and

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<sup>13</sup> Alternatively, we coded the dummy variable one if the firm has a current ratio below 0.80 in the current accounting period and a current ratio above one in the previous accounting period; and zero otherwise. This alternative specification does not affect our results.

<sup>14</sup> The first page of the Belgian financial statements mentions the date of filing the memorandum of association (i.e., date of incorporation) *or* the date of the most recent piece that mentions this date and the act of amendment to the articles of association. In the latter case, the date of incorporation mentioned on the first page of the financial statements is not the date of incorporation itself. Based on the belief that amendments to the articles of association are not common, we rely on the date mentioned on the financial statements for the purposes of our study. In order to assess the appropriateness of relying on this date, we considered the correlation between our proxy and the percentile to which the observation belongs based on the rank (within the sample) of its unique firm number (i.e., firm numbers are assigned sequentially). The latter correlation amounts to 0.96, which supports the validity of our proxy.

Wilson (2013) argue that trade creditors (i.e., suppliers) are likely to benefit more from publicly available financial statements because they are less likely to receive information through private channels. Banks typically maintain a close (long-term) relationship with the borrower and they have contractual means to oblige borrowers to provide certain information during the credit period (Diamond, 1984; Petersen and Rajan, 1994). The short-term nature of trade credit renders such contracting unfeasible and relatively more costly for trade creditors (Hombach et al., 2013). On the other hand, as argued by Petersen and Rajan (1997: 663) “[t]he supplier may visit the buyer’s premises more often than financial institutions would. The size and timing of the buyer’s orders also give him an idea of the condition of the buyer’s business. The buyer’s inability to take advantage of early payment discounts may serve as a tripwire to alert the supplier of a deterioration in the buyer’s creditworthiness. While financial institutions may also collect similar information, the supplier may be able to get it faster and at a lower cost because it is obtained in the normal course of business.”. Because of these competing arguments, the impact of alternative types of creditors on our dependent variables remains an empirical question and we therefore include the ratio of trade debt over total debt (to be denoted by *TRADEDEBT*) and the ratio of financial debt over total debt (to be denoted by *FINDEBT*) as control variables in our model. Next, we include a financial distress score in our model (to be denoted by *DISTRESS*) as a proxy for the general (time-varying) quality of the firm. Specifically, we relied on the Ooghe-Verbaere (1982) model for the calculation of the financial distress score (see Ooghe and Van Wymeersch (2008) for further details), with a lower score implying a higher probability of default and, consequently, lower overall firm quality. Finally, as reporting practices can be largely ritualistic, we include the lagged dependent variable in our model (to be denoted by *LAGDEP*) as a control variable. Adding the lagged dependent variable also implies control for omitted firm characteristics that are not available in the database employed for the current study. In addition, we include both industry (to be denoted by *IND*<sup>15</sup>) and year (to be denoted by *YEAR*) dummies in our model.

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<sup>15</sup> The industry dummy variables employed in the current study are based on Eurostat NACE Rev.2 – Statistical



## Research model

In sum, we estimate the following model to test our hypotheses:

$$\begin{aligned} \text{Dependent}_{it} = & \delta_0 + \delta_1 \text{LEV}_{it} + \delta_2 \text{AUDIT}_{it} + \delta_3 \text{SIZE}_{it} + \delta_4 \text{GROWTH}_{it} + \delta_5 \text{CHLOSS}_{it} \\ & + \delta_6 \text{CHCURRENT}_{it} + \delta_7 \text{CHEXPDEBT}_{it} + \delta_8 \text{AGE}_{it} + \delta_9 \text{TRADEDEBT}_{it} \\ & + \delta_{10} \text{FINDDEBT}_{it} + \delta_{11} \text{DISTRESS}_{it} + \delta_{12} \text{LAGDEP}_{it} + \delta_{13} \text{IND}_{it} + \delta_{14} \text{YEAR}_{it} \\ & + \varepsilon_{it} \end{aligned}$$

where  $i$  and  $t$  denote firms and years. Table 1 summarizes variable definitions and predictions.

[TABLE 1]

As discussed earlier, we consider different dependent variables and we will therefore consider alternative estimation techniques. Using *LATE* as the dependent (i.e., a dummy variable), we rely on a logit regression. Employing *ORDLATE* as the dependent (i.e., an ordinal variable), we rely on an ordered logit regression. All models are estimated using the cluster option in Stata to obtain robust standard errors.

## Results

### Descriptive statistics

Panel A of Table 2 presents detail with regard to the timing of filing the financial statements for the sample under study and yields some interesting insights. Firstly, it is only from the sixth month onwards that financial statements are starting to be filed in large numbers. More specifically, about 80 percent of the sample firms filed their financial statements in the period of six up to eight months after the closing

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classification of economic activities in the European Community. The inclusion of separate dummy variables for all these industries in our model gives rise to multicollinearity problems among the industry dummy variables (the large majority of the VIFs exceeding 10). We therefore chose to only retain the largest industries (i.e., those having more than 2,000 observations based on our sample) and aggregated all other industries into an ‘other’ category. The largest industries are: ‘manufacturing’ (Section C in the classification); ‘construction’ (Section F in the classification); ‘wholesale and retail trade, repair of motor vehicles and motorcycles’ (Section G in the classification); and ‘transportation and storage’ (Section H in the classification).

date of the accounting year. Secondly, both the reporting deadline and the administrative sanction appear to have a significant effect on filing practices. The largest number of financial statements (i.e., about 31 percent) is filed in the seventh month after the closing date of the accounting year. These filings do therefore just meet the legal deadline. In addition, a very large number of financial statements (i.e., about 23 percent) is filed in the eighth month after the closing date. These financial statements are thus filed late, but the administrative sanction is not applicable yet. The impact of the reporting deadline and the administrative sanction on filing practices becomes even more pronounced when considering the number of financial statements filed in the last week before these important dates. Untabulated results indicate that about 22 percent of the financial statements (or 4,662 financial statements) are filed in the last week before the end of month seven or eight<sup>16</sup>.

Panel B of Table 2 presents descriptive statistics for the variables included in our model.

[TABLE 2]

A correlation matrix is presented in Table 3. All correlation coefficients among the independent variables fall below the cutoff of .600, which is often used to assess potential multicollinearity problems. Nevertheless, we also considered variance inflation factors (VIFs). The maximum VIF (average VIF) equals 1.80 (1.33). Thus, we conclude that our multivariate results are not affected by multicollinearity problems.

[TABLE 3]

### *Multivariate results*

Regression results are presented in Table 4. Reported results for Model I are based on a logit regression with *LATE* as the dependent variable, while results for Model II are based on an ordered logit regression

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<sup>16</sup> 2,059 FS are filed in the last week before the reporting deadline, while 2,603 FS are filed in the last week before the administrative sanction becomes applicable.

with *ORDLATE* as the dependent. In order to facilitate the interpretation of our results, we report both the coefficients and the odds ratios in Table 4<sup>17</sup>. A first look at Table 4 indicates that both models yield very similar results and we will therefore mainly focus on Model I in our discussion below.

Whereas we predicted a negative relationship between leverage and our dependent variables, we observe a significantly positive coefficient for *LEV* in both models. This means that no evidence is found of heavier reliance on external debt financing ultimately leading to more timely public disclosure of financial statement information. Results are therefore inconsistent with H1. The odds ratio for the coefficient on *LEV* in model I, equals 1.3461. This implies that, controlling for all other variables, the odds for filing the statements late increase by about 35% for a one-unit increase in leverage<sup>18</sup>. We observe a significantly negative relationship between an external financial statement audit (*AUDIT*) and both dependent variables. This observation provides support for H2 and is consistent with our argument that

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<sup>17</sup> Odds are then defined as the ratio of the probability of success over the probability of failure.

<sup>18</sup> An alternative explanation for this finding might be that high leverage is considered to be unfavorable information and that highly indebted firms may therefore delay the financial reporting process. However, Lemmon et al. (2008) show that leverage is quite stable over time. Accordingly, firms with high leverage might have had high leverage in prior years as well. Therefore, in line with Lemmon et al. (2008), we estimate a cross-sectional regression of leverage on one-year lagged factors that have been previously identified in the literature as being relevant determinants of capital structure in order to capture *unexpected leverage*. More specifically, we regress leverage (i.e., *LEV* as defined in Table 1) on the following one-year lagged variables: *LEV*, *SIZE* (as defined in Table 1), *ROA* (as defined in Panel A of Table 5), *TANG* (i.e., tangibility defined as the ratio of tangible assets (net fixed assets and inventories) over total assets), an industry variable (cf. *infra*) and year dummy variables. Unlike Lemmons et al. (2008), we are unable to control for market-to-book, because all firms in our sample are unlisted. Also, unlike Lemmons et al. (2008), we do not merely consider industry dummy variables. Rather, we include lagged average leverage within the industry. That is, several studies document important differences in financing patterns across industries (see e.g., Harris and Raviv, 1991; Michaelas et al., 1999; Romano et al., 2001). One possible explanation is that firms target an ‘optimal’ leverage ratio and that the ‘industry practice’ serves as a target. In other words, firms aim for a financing structure that represents a consensus on what is appropriate given prevailing circumstances in the industry (Holmes et al., 2003). Next, we include the residual of the aforementioned model in our financial statement lag models as a proxy for unexpected leverage. Including unexpected leverage together with *LEV* does not pose problems in terms of multicollinearity (i.e., VIFs are well below 2). The inclusion of unexpected leverage in our models does not affect our results. The coefficient for *LEV* remains significantly positive in all our models, while the coefficient for unexpected leverage does not attain statistical significance at the conventional levels in any of our models. With a view to being complete, we add that the coefficient for unexpected leverage attains marginal significance (i.e., at the 10% level) in Model II and Model III and that the coefficient in both these models is positive. Consequently, overall, our results are not supportive of the possibility that *LEV* might be acting as a proxy for unfavorable information.

financial statements are more likely to serve as a monitoring and/or screening device if they are externally audited. The odds ratio for the coefficient on *AUDIT* in model I, equals .5951. This implies that, controlling for all other variables, the odds for filing the statements late are about 40% lower if the financial statements are externally audited compared to when the financial statements were not subject to an external financial statement audit. Consistent with H3, we observe a significantly negative relationship between firm size (*SIZE*) and both dependent variables. This observation lends support for larger firms facing more severe agency problems and thus having a greater need for monitoring. The odds ratio for the coefficient on *SIZE* in model I, equals .9031. This implies that, controlling for all other variables, the odds for filing the statements late decrease by about 10% for a one-unit increase in firm size. Results do not provide support for H4, as the coefficient for *GROWTH* fails to attain statistical significance. Consistent with H5, we note that the coefficients for all ‘unfavorable information’ proxies reveal the predicted sign. Nevertheless, it is important to acknowledge that only the coefficient for *CHLOSS* differs significantly from zero at the conventional levels. The odds ratio for the coefficient on *CHLOSS* in model I equals 1.2384. This implies that, controlling for all other variables, the odds for filing the statements late are about 24% higher if the firm reported a profit in the previous accounting period and a loss in the current accounting period compared to all other possible scenarios. In sum, our results lend support for the idea that firms delay the disclosure of unfavorable information. Finally, the coefficient for *AGE* is not statistically significant and H6 is therefore not supported.

With regard to the control variables, we find for both models a significantly negative relationship between *DISTRESS* and the dependent variable. This indicates that firms of higher overall quality tend to have shorter reporting lags. The odds ratio for the coefficient on *DISTRESS* in model I equals .9912. This implies that, controlling for all other variables, the odds for filing the financial statements late decrease by about 1% for a one-unit increase in the distress score. Further, we observe a significantly positive relationship between the lagged dependent variable (*LAGDEP*) and the dependent variable in both models. This finding is consistent with the idea that reporting practices are largely ritualistic and the

magnitude of the odds ratio for *LAGDEP* clearly indicates that past filing behavior is the most important predictor of current filing behavior. Coefficients for the control variables that capture the importance of alternative types of creditors do not attain statistical significance.<sup>19</sup>

[TABLE 4]

As discussed earlier, the legal reporting deadline and/or imposed administrative sanctions are found to have an important impact on filing practices (cf. descriptive statistics). We therefore estimated an additional logit regression in which we distinguish between firms that filed their financial statements well before the legal deadline (to be denoted by ‘early filers’), a subsample of firms for which the legal reporting deadline itself is not a primary filing incentive, and all other observations (to be denoted by non-‘early filers’). Specifically, results for Model III in Table 4 are based on a logit regression for which the dependent variable (to be denoted by *NONEARLY*) is coded one if the firm filed its financial statements more than six months after the closing date of the accounting year (i.e., the non-early filers); and zero otherwise (i.e., the early filers). When we compare results for Model III with those obtained for Model I, we see that coefficients for two additional variables attain statistical significance. In Model III, the coefficient for *CHEXPDEBT* is significantly positive (which is consistent with H5). Based on the odds ratio, we note that the odds for being a non-‘early filer’ are about 94% higher if the firm has tax and/or social security liabilities that are overdue in the current accounting period, while this was not the case in the previous accounting period, compared to all other scenarios. In addition, unlike for Model I, Model III yields a significantly negative coefficient for *AGE*, which is consistent with H6. The odds ratio for the coefficient on *AGE* in model III, equals .9372. This implies that, controlling for all other variables, the odds for being a non-‘early filer’ decrease by about 6% for a one-unit increase in *AGE*. For the other variables, results are similar to those obtained based on Model I.

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<sup>19</sup> We also considered an alternative specification of our model in which *LEV*, *TRADEDEBT* and *FINDEBT* were replaced by the ratio of trade debt over total assets and the ratio of financial debt over total assets. Employing these proxies, we obtain a significantly positive coefficient for the former ratio in both models and a coefficient that does not differ significantly from zero for the latter ratio. These results suggest that mainly large levels of trade debt cause delay in filing the financial statements.

### *Financial statement filing lags and financial statement quality*

Prior studies (based on large listed firms) suggest a negative relationship between financial reporting lags and the quality of the information provided in the financial statements (see e.g., Knechel and Payne, 2001; Mohd-Sulaiman, 2008). In a small firm context, however, one could argue that a trade-off might arise between financial statement quality and reporting timeliness (i.e., small firms have fewer resources (e.g., accounting staff, accounting information systems) to meet financial reporting requirements). While not being the main purpose of our study, we performed an additional analysis in order to assess the relationship between financial statement filing lags and financial statement quality in a small firm context. Analogous to Atwood et al. (2011) and Meerschaert et al. (2013) we proxy for financial statement quality by examining the usefulness of current period earnings in predicting next period operating cash flow. As argued by Atwood et al. (2011), the main conceptual accounting frameworks state that financial reporting should provide information helpful to users in predicting future cash flows (see e.g., FASB, 1978; IASB, 2010). Specifically, we estimate the following model:<sup>20</sup>

$$\begin{aligned} CFO_{it+1} = & \delta_0 + \delta_1 ROA_{it} + \delta_2 LOSS_{it} + \delta_3 ROA_{it} * LOSS_{it} + \delta_4 SIZE_{it} \\ & \delta_5 ROA_{it} * SIZE_{it} + \delta_6 AUDIT_{it} + \delta_7 ROA_{it} * AUDIT_{it} + \delta_8 LAG_{it} + \\ & \delta_9 ROA_{it} * LAG_{it} + \delta_{10} IND_{it} + \delta_{11} ROA_{it} * IND_{it} + \delta_{12} YEAR_t + \varepsilon_{it} \end{aligned}$$

Panel A of Table 5 presents variable definitions. All control variables, except for *AUDIT* and *LAG*, are based on prior studies (see Atwood et al., 2011; Meerschaert et al., 2013). Hayn (1995) and Collins et al. (1999) conclude that losses are less informative than profits about a firm's future prospects and we therefore include *LOSS* and its interaction with *ROA* in our model. Results reported by Meerschaert et al. (2013) indicate that larger firms have more useful earnings and we therefore include *SIZE* and its

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<sup>20</sup> Preliminary analyses revealed very strong correlations between main effects and interaction terms. Therefore, we centered the variables (i.e., average values are subtracted from each datum) in order to calculate the interaction terms, a procedure suggested by Cronbach (1987) and Jaccard et al. (1990).

interaction with *ROA* in our model. Unlike prior studies, we control for an external financial statement audit. As discussed earlier, an external financial statement audit is not mandatory for the firms in our sample (unlike for the samples considered in prior studies), but is likely to have a positive effect on the quality of the information provided in the financial statements. In order to assess the relationship between the financial statement filing lag and financial statement quality, we include *LAG* and its interaction with *ROA* in our model. *ROA\*LAG* is the main variable of interest, because the coefficient on this variable indicates whether there is a relationship between the financial statement filing lag and the usefulness of reported current period earnings in predicting next period cash flow.

[TABLE 5]

Panel B of Table 5 presents results from estimating the aforementioned multivariate model<sup>21</sup>. As can be seen from Panel B, we estimated the model three times employing three different financial statement filing lag variables. In Model IV, we distinguish between firms that report within six months after the closing date of the accounting period (i.e., the early filers) and all other firms (i.e., the non-early filers). In Model V, we distinguish between firms that report within seven months after the closing date of the accounting period (i.e., timely filers) and firms that violate the legal deadline (i.e., late filers). In Model VI, we distinguish between firms that report within eight months after the closing date of the accounting period (i.e., those firms that file their financial statements before the administrative sanction becomes applicable) and firms that are subject to the administrative sanction. While all three models yield a negative coefficient for *ROA\*LAG*, only the coefficient for Model VI differs significantly from zero. Thus, reported results indicate that financial statements that are subject to an administrative sanction for being filed late, exhibit lower quality. Worded differently, our results indicate that extreme financial statement filing lags are associated with lower financial statement quality. Results are therefore

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<sup>21</sup> Analogous to previously reported results, results presented in Panel B of Table 5 are based on winsorized data to mitigate the potential impact of outliers. The maximum VIF (average VIF) for the models reported in Table 5 equals 3.93 (1.66). We therefore conclude that the reported results are not affected by multicollinearity problems.

inconsistent with a trade-off between financial statement quality and financial reporting timeliness, but provide support for the previously observed negative relationship between financial reporting lags and the quality of the information provided in the financial statements. With a view to being complete, we add that the other variables in the models have the predicted signs.

### *Sensitivity analyses*

We performed several robustness checks. First, in an attempt to discern the impact of high leverage resulting from a deliberate financing decision versus high leverage resulting from a poor financial condition, we included an interaction term between *LEV* and a dummy variable indicating the presence of retained losses on the balance sheet in our models. The inclusion of this interaction term does not affect our findings. Second, as leverage decisions are not a random choice, we also considered the industry median (i.e., for each sample year separately) for all leverage-related independent variables (i.e., *LEV*, *TRADEDEBT* and *FINDEBT*) in our models (i.e., instead of the firm-level variables). This approach is inspired by the work of Rajan and Zingales (1998), Bertrand et al. (2006) and Giannetti and Ongena (2009), among others. With a view to being complete, we add that we excluded industry dummy variables from our models when considering the industry median for the leverage-related variables in our models. Using the industry median for the leverage-related variables, we obtain a significantly positive coefficient for *FINDEBT* in all three models, while coefficients for *LEV* and *TRADEDEBT* do not attain statistical significance in any of the models. Our results therefore suggest that firms in industries that rely more heavily on financial debt (as a fraction of total debt) exhibit longer financial statement filing lags. Third, opting for an external financial statement audit is not a random choice either and self-selection issues may therefore bias the coefficient for *AUDIT*. In order to control for potential self-selection bias, we rely on propensity score matching (PSM). The idea behind PSM is matching the observable characteristics of members in the treatment group (i.e., those firms for which the financial statements were subject to an external audit) to members in the untreated group (i.e., those firms for which the financial statements



were not subject to an external audit) (Clatworthy et al., 2009). First the selection model is estimated using a parametric estimator of the external financial statement audit equation (in our case a probit model) and the probabilities (propensity score) of opting for an external financial statement audit are obtained for all sample firms. Each firm for which the financial statements were subject to an external audit is then matched to one or more firms for which the financial statements were not subject to an external audit with a similar propensity score. Based on Van Caneghem and Van Campenhout (2012), the following variables are included in the financial statement audit equation: *SIZE* (as defined in Table 1), *FINDEBT* (dummy variable that is coded one if the firm relies on financial debt; and zero otherwise), *ROA* (as defined in Panel A of Table 5), *PGROWTH* (geometric average of the yearly growth in total assets over the last three years), *CURRENT* (current ratio), *LOSS* (as defined in Panel A of Table 5) and *NOEMPL* (natural logarithm of the number of employees). We relied on the *nnmatch* command in Stata (Abadie et al., 2004) for PSM. Untabulated results reveal that coefficients for *AUDIT* in the reported models are not affected by selection bias. Fourth, in a similar vein, our firm growth variable does not result from a random choice and we therefore considered the industry average (i.e., for each sample year separately) instead of the firm-level variable in our models (again, excluding the industry dummy variables). Replacing the firm-level growth variable by an industry-level growth variable does not affect our results (i.e., analogous to the firm-level variable, the industry-level variable does not attain statistical significance at the conventional levels in any of our models). Finally, because of learning effects, we assume a negative relationship between firm age and our dependent variables. Nevertheless, information asymmetries are less severe for older firms than for younger firms, because the former have established a track record and reputation (Diamond, 1989; Ang, 1991). As a result, it could be argued that young firms are more likely to file their financial statements in a timely manner. As a robustness check, we replaced *AGE* by a dummy variable that is coded one if firm age does not exceed five years; and zero otherwise. In line with our original findings, the coefficient for this dummy variable is significantly (i.e., at the 10% level) positive in Model III, while it does not attain statistical significance in Model I and Model II. Results are therefore inconsistent with young firms filing more quickly in order to reduce information asymmetries.

## Discussion

First of all, our multivariate analyses contribute to the existing literature by revealing a number of variables that are significantly related to small firms' financial statement filing lags. Consistent with the argument that financial statements are more likely to be used as a screening and/or monitoring device when they are externally audited, we find that externally audited financial statements are significantly less likely to be filed late (i.e., after the legal deadline) and significantly more likely to be filed early (i.e., more than one month before the legal deadline). In addition, we find that late (early) filings are significantly less (more) likely for larger firms. This finding supports the argument of Minnis (2011), that also in a small firm context, larger firms have a greater need for monitoring because they are likely to face more severe agency problems. The latter observation is also consistent with the argument that larger firms are characterized by more resources, which enables them to report faster. While not all unfavorable information proxies attain statistical significance in our models, we find support for small firms delaying the public disclosure of unfavorable information. For example, firms that report a loss in the current accounting period and a profit in the previous accounting period are significantly more (less) likely to file their financial statements late (early). Consistent with a learning curve effect, we find that older firms are significantly more likely to file their financial statements early. Firm age does, however, not affect the likelihood of filing the financial statements late. Our results further reveal that past filing behavior is the most important predictor of current filing behavior.

Secondly, we contribute to the existing literature by demonstrating that, at least generally speaking, the timeliness of financial statement publication by small firms does not appear to be demand-driven. Specifically, our results show that the majority of the financial statements (i.e., about 54 percent) are filed in the seventh or eighth month after the closing date of the accounting year, and about 22 percent of the financial statements are filed in the last week before the end of the seventh or eighth month. This indicates that both the reporting deadline itself (seven months after the closing date) and the

administrative sanction (which becomes applicable one month after the legal reporting deadline) are very important filing incentives. Apparently, many small firms just meet the deadline (either the legal deadline or the one to avoid an administrative sanction), suggesting that they face few other incentives (and/or little pressure) to file their financial statements in a more timely manner. This observation is reinforced by our surprising result that in a creditor-oriented setting such as the Belgian small firm context we find no evidence whatsoever that heavier reliance on external credit leads to more timely filing of the financial statements. One potential explanation for these findings is that, in line with the arguments made in Ball and Shivakumar (2005) and Burgstahler et al. (2006) for example, information asymmetries between small firms and their stakeholders are mainly resolved through private channels. Our results would then imply that a very substantial portion of small firms regards private channels as being more efficient than (timely) public filing of the financial statements to resolve information asymmetries with their stakeholders. This may obviously raise important questions with respect to the usefulness of a generalized obligation for small firms to make their financial statements publicly available in a timely fashion (as is the case in Belgium, among other countries). Regulators should be cautious in this respect, though. First, efficient behavior at the individual firm level is not necessarily optimal from a public interest perspective. Second, our overall sample distribution of reporting lags also shows that about 40 percent of the observations file their financial statements more than one month before the legal deadline. This implies that, even in the absence of capital market pressures, there is a considerable subsample of small firms that does appear to have an incentive to report substantially more quickly than required by law. The fact that small firms resolve their information asymmetries through private channels can therefore not be generalized either. Finally, any argument for a “free” market for financial statement information (i.e. without a legal filing requirement) hinges critically upon the assumption that firm managers are able to rationally take into account the costs and benefits involved in their filing behavior.

The latter consideration potentially provides for an alternative explanation for the findings described above: if (some) small firm owners/managers are unable to properly weigh the costs and benefits involved

in their filing choices, their filing behavior may become inefficient and the timeliness of the publication of financial statement information may appear not to be demand-driven. Herein lies a third contribution of our analyses: the specific Belgian context in which the administrative sanction for late filings only becomes applicable if financial statements are filed more than one month after the legal deadline makes it possible to separately assess the impact of a (fairly small) monetary sanction on filing practices. We find that about 31 percent of the observations in our sample violate the legal filing deadline, with about 23 percent of the financial statements being filed in the first month after the legal deadline. From a regulator's perspective, our results therefore suggest that monetary sanctions are an effective tool in enforcing timely filing behavior. This observation is in line with prior findings reported by Dedman and Lennox (2009) that even small amounts (i.e., the administrative sanctions are rather modest) affect private firms' financial reporting practices. As such, our findings raise the question on why the sanction does not come into effect immediately after the legal filing deadline in Belgium. From the perspective of small firm owners/managers, however, our observation that nearly a quarter of all filings take place in the first month after the legal deadline, casts serious doubts on their rationality in this context. After all, in order for those filings to be cost efficient would require that the firms concerned see sufficient benefits in postponing the publication of their financial statements just a few weeks beyond the legal deadline, thus exposing themselves to the risk of being liable for all stakeholder losses resulting from the late filing, yet do not see sufficient benefits in any further delay to offset the small monetary sanction that becomes applicable after the eighth month. Although this possibility cannot be ruled out entirely, the frequency with which this behavior occurs at least suggests that a considerable portion of small firms is primarily focused on the direct and immediate costs involved in the filing process, without adequately considering the implicit costs and benefits. Clearly, there is some awareness of the use that is made by stakeholders of publicly available financial statements. Otherwise we would not observe the delay in the disclosure of unfavorable information<sup>22</sup>. Nevertheless, in line with Kitching, Kasperova and Collis (2013) for example,

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<sup>22</sup> It should be noted, though, that this may actually constitute additional evidence of irrational filing behavior in that the late disclosure of unfavorable information is likely to increase the risk of being liable for resulting

it seems quite likely that certain small firm owners/managers are not fully aware of the consequences of their disclosure policies. As discussed (and illustrated) in Kitching, Hart and Wilson (2013), small firm owners/managers typically view regulation (e.g., financial reporting requirements) as a burden, cost or constraint on the business, but regulation often generates effects beyond those perceived by these owners/managers. For example, as argued by Kitching et al. (2011), clients might choose not to invite a small firm to be a supplier due to the latter's decision to file the abbreviated format of the financial statements. In a similar vein, a small firm might obtain credit at less favorable conditions (e.g., higher interest rate, shorter period of trade credit) from its creditors because of the adopted disclosure policy (e.g., filing the financial statements late). Small firms' owners/managers might not be (fully) aware of these adverse effects that may result from the adopted disclosure practices.

Finally, we find that about seven percent of the observations in our sample are subject to the administrative sanction for filing the financial statements late, which certainly remains a non-negligible portion. Further analyses reveal that filings that are subject to the administrative sanction are associated with significantly lower financial statement quality. Thus, our results indicate that extremely late filings can be considered as an important negative signal with regard to the quality of the financial statements. That is, for these filings, the financial statement information is not only less useful (because it is filed extremely late), but is also found to be of lower quality.

## Conclusion

As discussed in Schiebel (2008), small firm financial reporting requirements have received a great deal of attention from standard setters and regulators, who are struggling with developing financial reporting standards tailored to the special needs of small firms. Although small firms represent the overwhelming majority of entities preparing financial statements and despite the fact that small firm financial disclosure

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stakeholder losses.

behavior tends to exhibit considerably more ‘tardiness’ than that of large listed firms, academic research into small firm financial reporting is scant. Inspired by calls for further research on small firm financial reporting practices, we relied on a large sample of Belgian small firms to examine (the determinants of) financial statements filing lags. In addition, we explored the relationship between filing lags and quality of the financial statements.

Our focus on the Belgian research setting provided us with a number of advantages. First, all Belgian limited liability firms are required to prepare annual financial statements that have to be filed at a public depository, thus automatically leading to a large sample of mandatory financial statement filings. Second, the discrepancy between the legal filing deadline on the one hand (seven months after the closing date of the accounting year) and the deadline for an administrative monetary sanction on the other hand (eight months after the closing date) made it possible to separately assess the impact of a monetary sanction on filing practices. Third, it enabled us to test the influence of variables that have not been considered in prior research (e.g., the presence of an external financial statement audit).

Results obtained in the current study are of interest to small firms’ stakeholders (e.g., bankers, suppliers, etc.) because they provide an additional insight into the financial reporting practices of small firms. As such, they may help them to understand reporting practices, reporting incentives and causes for delay in the public disclosure of small firms’ financial statements. Inordinate delay in filing the financial statements might, for example, be a signal of ‘unfavorable information’ and/or poor financial statement quality (i.e., we observe lower quality for financial statements that are subject to an administrative sanction for being filed late). Our findings are relevant for regulators too. For example, results indicate that ‘fines’ are an effective tool to ensure compliance with filing deadlines. Further, we find that reporting practices are significantly affected by firm size. As financial reporting requirements are often differentiated based on firm size, this result suggests that such differentiation is at least to some extent appropriate. Another finding that is relevant for both regulators and small firm owners/managers is the fact that, at least generally speaking, the timeliness of financial statement publication by small firms does

not appear to be demand-driven. This observation may be due to information asymmetries in the small firm context mainly being resolved through private channels and/or small firm owners/managers not being able to properly assess the costs and benefits involved in their filing choices. Both explanations, which are not mutually exclusive for the small firm population as a whole by the way, are feasible on the basis of our results.

One limitation of the current study is that our analyses are solely based on publicly available information. This entails that we rely on an outcome of small firms' financial reporting processes (i.e. reporting lags) to draw inferences about those underlying processes without being able to look into them directly. Future research is therefore encouraged to use survey-based evidence, for example, to investigate small firms' filing choices more directly. Among other things, such an approach may be very helpful to differentiate between the alternative explanations that we have suggested for our finding that the timeliness of the publication of financial statement information by small firms does not appear to be demand-driven (i.e. private information channels versus irrationality of small firm owners/managers). Another limitation of our study is that we do not explicitly try to assess the costs and benefits involved in small firms' filing behavior. We therefore encourage future research to examine whether small firms' financial reporting lags and/or (systematic or exceptional) late filings have economic consequences. Because financial statements serve as a screening and/or a monitoring device, systematic late filings might, for example, have an impact on the cost of and/or the access to external debt, which is possibly not perceived correctly by small firm owners/managers.

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## References

- Abadie A, Drukker D, Herr JL and Imbens GW (2004) Implementing matching estimators for average treatment effects in Stata. *The Stata Journal* 4(3): 290-311.
- Allee KD and Yohn TL (2009) The Demand for Financial Statements in an Unregulated Environment: An Examination of the Production and Use of Financial Statements by Privately Held Small Businesses. *Accounting Review* 84(1): 1-25.
- Ang JS (1991) Small business uniqueness and the theory of financial management. *Journal of Small Business Finance* 1(1): 1-13.
- Arrunada B (2011) Mandatory accounting disclosure by small private companies. *European Journal of Law and Economics* 32: 377-413.
- Atiase R, Bamber L and Tse S (1989) Timeliness of financial reporting, the firm size effect, and stock price reactions to annual earnings announcements. *Contemporary Accounting Research* 5(2): 526-552.
- Atwood TJ, Drake MS, Myers JN and Myers LA (2011) Do earnings reported under IFRS tell us more about future earnings and cash flows. *Journal of Accounting and Public Policy* 30: 103-121.
- Ball R and Shivakumar L (2005) Earnings quality in UK private firms: comparative loss recognition timeliness. *Journal of Accounting & Economics* 39: 83-128.
- Beck T and Demirguc-Kunt A (2006) Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance* 30: 2931-2943.
- Berger AN and Udell GF (1998) The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking & Finance* 22: 873-897.
- Berger AN, Miller NH, Petersen MA, Rajan RG and Stein JC (2005) Does function follow organizational form? Evidence from the lending practices of large and small banks. *Journal of Financial Economics* 76: 237-269.
- Berger AN and Udell GF (2006) A more conceptual framework for SME finance. *Journal of Banking & Finance* 30: 2945-2966.
- Bertrand M, Schoar A and Thesmar D (2007) Banking deregulation and industry structure: Evidence from the French banking reforms of 1985. *Journal of Finance* 62(2): 597-628.
- Beuselinck C, Deloof M and Manigart S (2008) Private equity investments and disclosure policy. *European Accounting Review* 17(4): 607-639.
- Burgstahler D and Dichev I (1997) Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics* 24: 99-126.
- Burgstahler DC, Hail L and Leuz C (2006) The importance of reporting incentives: Earnings management in European private and public firms. *Accounting Review* 81: 983-1016.
- Bushman R and Smith A (2001) Financial accounting information and corporate governance. *Journal of Accounting and Economics* 32: 237-333.
- Chambers A and Penman S (1984) Timeliness of reporting and the stock price reaction to earnings announcements. *Journal of Accounting Research* 22: 21-47.



- Clathworthy MA, Makepeace GH and Peel MJ (2009) Selection bias and the Big Four premium: new evidence using Heckman and matching models. *Accounting and Business Research* 39(2): 139-166.
- Clatworthy MA and Peel MJ (2013) Corporate Governance and Regulation Effects on the Timeliness of Private Company Financial Reporting. Working Paper.
- Collins D, Pincus M and Xie H (1999) Equity valuation and negative earnings: the role of book value of equity. *Accounting Review* 74: 29-61.
- Collis J (2008) Directors' Views on Accounting and Auditing Requirements for SMEs. Report for UK Department for Business and Enterprise and Regulatory Reform.
- Collis J (2012) Determinants of voluntary audit and voluntary full accounts in micro- and non-micro small companies in the UK. *Accounting and Business Research* 42(4): 441-468.
- Cronbach L (1987) Statistical Tests for Moderator Variables: Flaws in Analysis Recently Proposed. *Psychological Bulletin* 102: 414-417.
- De Clerck E, Van Caneghem T and Verbruggen S (2008) Winststuring bij Belgische ondernemingen: Bevindingen op basis van de verdeling van gerapporteerde resultaten. *Accountancy & Bedrijfskunde* 28(1): 3-11.
- Dedman E and Lennox C (2009) Perceived competition, profitability and the withholding of information about sales and the cost of sales. *Journal of Accounting and Economics* 48: 210-230.
- Degeorge F, Patel J and Zeckhauser R (1999) Earnings management to exceed thresholds. *The Journal of Business* 72: 1-33.
- Di Pietra R, Evans L, Chevy J, Cisi M, Eierle B and Jarvis R (2008) Comment on the IASB exposure draft 'IFRS for Small and Medium-sized Entities'. *Accounting in Europe* 5(1-2): 27-47.
- Diamond DW (1984) Financial intermediation and delegated monitoring. *Review of Economic Studies* 51: 393-414.
- Diamond DW (1989) Reputation acquisition in debt markets. *Journal of Political Economy* 97: 828-862.
- Dichev I and Skinner D (2002) Large-sample evidence on the debt covenant hypothesis. *Journal of Accounting Research* 40(4): 1091-1123.
- Dye R and Sridhar S (1995) Industry-wide disclosure dynamics. *Journal of Accounting Research* 33(1): 157-174.
- Dyer J and McHugh A (1975) The timeliness of the Australian annual report. *Journal of Accounting Research* 13(3): 204-219.
- Eierle B (2008) Filing Practices of Small and Medium-Sized Companies: Empirical Findings from Austria. *International Small Business Journal* 26(4): 491-528.
- Esperança JP, Gama AP and Gulamhussen MA (2003) Corporate debt policy of small firms: An empirical (re)examination. *Journal of Small Business and Enterprise Development* 10(1): 62-80.
- European Commission (2010/2011) Enterprise and industry. SBA Fact Sheet Belgium 2010/2011.
- European Commission (2011) SME's access to finance – Survey 2011.

- European Financial Reporting Advisory Group (EFRAG) (2010) Advice on compatibility of the IFRS for SMEs and the EU Accounting Directives.
- European Financial Reporting Advisory Group (EFRAG) (2014) Re: Proposed amendments to the International Financial Reporting Standard for Small and Medium-Sized Entities (IFRS for SMEs).
- Evans L, Gebhardt G, Hoogendoorn M, Marton J, di Pietra R, Mora A, Thinggard F, Vehmanen P and Wagenhofer A (2005) Problems and Opportunities of an International Financial Reporting Standard for Small and Medium-sized Entities. The EAA FRSC's Comment on the IASB's Discussion paper. *Accounting in Europe* 2: 23-45.
- Financial Accounting Standards Board (FASB) (1978) Objectives of Financial Reporting by Business Enterprises, Statement of Financial Accounting Concepts No.1. Stamford, CT.
- Gaeremynck A and Willekens M (2003) The endogenous relationship between audit-report type and business termination: evidence on private firms in a non-litigious environment. *Accounting and Business Research* 33(1): 65-79.
- Giannetti M and Ongena S (2009) Financial integration and firm performance: Evidence from foreign bank entry in emerging markets. *Review of Finance* 13(2): 181-223.
- Girbina MM, Albu CN and Albu N (2012) Convergence of National Regulations with IFRS for SMEs: Empirical Evidences in the Case of Romania. *World Academy of Science, Engineering and Technology* 69: 879-883.
- Givoly D and Palmon D (1982) Timeliness of annual earnings announcements: Some empirical evidence. *Accounting Review* 57: 486-508.
- Harris M and Raviv A (1991) The theory of capital structure. *Journal of Finance* 46: 297-355.
- Haw I-M, Qi D and Wu W (2000) Timeliness of annual report releases and market reaction to earnings announcements in an emerging capital market: the case of China. *Journal of International Financial Management and Accounting* 11(2): 108-131.
- Hayn K (1995) The information content of losses. *Journal of Accounting and Economics* 20: 125-153.
- Heyman D, Deloof M and Ooghe H (2008). The financial structure of privately held Belgian firms. *Small Business Economics* 30: 301-313.
- Holland D and Ramsay A (2003) Do Australian companies manage earnings to meet simple earnings benchmarks. *Accounting & Finance* 43(1): 41-62.
- Holmes S, Hutchinson P, Forsaith D, Gibson G and McMahon R (2003) *Small enterprise finance*. Brisbane: Wiley.
- Hombach K, Breuer M and Müller M (2013) Disclosure, Auditing and Debt Contracts: Evidence from Private Firms. Working paper.
- IFRS Foundation (2012) IFRS for SMEs Fact Sheet.
- International Accounting Standards Board (IASB) (2007) Exposure draft of a proposed IFRS for Small and Medium-sized Entities.
- International Accounting Standards Board (IASB) (2010) Conceptual Framework for Financial Reporting 2010.
- International Federation of Accountants (IFAC) (2006) Micro-entity financial reporting: perspectives of preparers and users.

- Jaccard J, Turrisi R and Wan C (1990). *Interaction Effects in Multiple Regression*. Sage.
- Jensen M and Meckling W (1976) Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure. *Journal of Financial Economics* 10: 305-360.
- Kitching J, Kasperova E and Blackburn R et al. (2011) Small company abbreviated accounts: A regulatory burden or a vital disclosure? Report for Institute of Chartered Accountants of Scotland.
- Kitching J, Hart M and Wilson N (2013) Burden or benefit? Regulation as a dynamic influence on small business performance. *International Small Business Journal* DOI:10.1177/0266242613493454
- Kitching J, Kasperova E and Collis J (2013) The contradictory consequences of regulation: The influence of filing abbreviated accounts on UK small company performance. *International Small Business Journal* DOI:10.1177/0266242613503973
- Knechel W and Payne J (2001) Additional evidence on audit report lag. *Auditing: A Journal of Practice & Theory* 20(1): 137-146.
- Leftwich T (1983) Accounting information in private markets: Evidence from private lending agreements. *Accounting Review* 58(1): 23-43.
- Lemmon ML, Roberts MR and Zender JF (2008) Back to the beginning: persistence and the cross-section of corporate capital structure. *Journal of Finance* 63(4): 1575-1608.
- Leuz C, Nanda D and Wysocki PD (2003) Earnings management and investor protection: an international comparison. *Journal of Financial Economics* 69: 505-527.
- Leventis S and Weetman P (2004) Timeliness of financial reporting: applicability of disclosure theories in an emerging capital market. *Accounting and Business Research* 34(1): 43-56.
- Maingot M and Zeghal D (2006) Financial Reporting of Small Business Entities in Canada. *Journal of Small Business Management* 44(4): 513-530.
- McMahon RGP (2001) Business Growth and Performance and the Financial Reporting Practices of Australian Manufacturing SMEs. *Journal of Small Business Management* 39(2): 152-164.
- Meersschaert S, Vander Bauwhede H and Van Cauwenberge P (2013) SME Earnings and Future Economic Performance. Working paper.
- Michaelas N, Chittenden F and Potziouris P (1999). Financial policy and capital structure choice in U.K. SMEs: Evidence from company panel data. *Small Business Economics* 12: 113-130.
- Minnis M (2011). The Value of Financial Statement Verification in Debt Financing: Evidence from Private U.S. Firms. *Journal of Accounting Research* 49(2): 457-506.
- Mohd-Sulaiman A (2008) Financial misreporting and securities fraud - public and private enforcement. *Australian Journal of Corporate Law* 22: 31-50.
- Moro A, Fink M and Kautonen T (2012) How do banks assess entrepreneurial competence? The role of voluntary information disclosure. *International Small Business Journal* DOI:10.1177/0266242612458444.
- Naimi M, Rohami S and Wan-Hussin W (2010) Corporate Governance and Audit Report Lag in Malaysia. *Asian Academy of Management Journal of Accounting and Finance* 6(2): 57-84.

- Niemi L and Sundgren S (2012) Are Modified Audit Opinions Related to the Availability of Credit? Evidence from Finnish SMEs. *European Accounting Review* 21(4): 767-796.
- Ooghe H, Joos P and De Bourdeaudhuij C (1995) Financial distress models in Belgium: the results of a decade of empirical research. *International Journal of Accounting* 30: 245-274.
- Ooghe H and Van Wymeersch C (2008) Handboek financiële analyse van de onderneming, theorie en toepassing op de jaarrekening. Intersentia.
- Owusu-Ansah S (2000) Timeliness of corporate financial reporting in emerging capital markets: Empirical evidence from the Zimbabwe Stock Exchange. *Accounting and Business Research* 30(3): 241-254.
- Peek E, Cuijpers R and Buijink W (2010) Creditors' and shareholders' reporting demands in public versus private firms: Evidence from Europe. *Contemporary Accounting Research* Spring: 49-91.
- Petersen MA and Rajan RG (1994) The benefits of lending relationships: Evidence from small business data. *Journal of Finance*, 49, 3-37.
- Petersen MA and Rajan RG (1997) Trade Credit: Theories and Evidence. *Review of Financial Studies* 10(3): 661-691.
- Psillaki M and Daskalakis N (2008) Are the determinants of capital structure country or firm specific? *Small Business Economics* 33(3): 319-333.
- Rajan RG and Zingales L (1998) Financial dependence and growth. *American Economic Review* 88: 559-586.
- Romano CA, Tanewski GA and Smyrniotis KX (2001) Capital structure decision making: A model for family business. *Journal of Business Venturing* 16(3): 285-310.
- Schiebel A (2008) Is there a solid empirical foundation for the IASB's draft IFRS for SMEs? Working paper.
- Smith C and Warner J (1979) On financial contracting: An analysis of bond covenants. *Journal of Financial economics* 7(2): 117-161.
- Sogorb-Mira F (2005) How SME uniqueness affects capital structure: Evidence from a 1994-1998 Spanish data panel. *Small Business Economics* 24: 447-457.
- Stolle L (2004) Neerlegging van de jaarrekening als sluitstuk van de jaarlijkse algemene vergadering. *Pacioli* 165: 1-4.
- Tuymans D (2012) De balanscentrale in beweging. Available at <http://www.nbb.be/DOC/BA/Presentations/20120227%20Balanscentrale%20in%20beweging.pdf>
- Van Caneghem T and Van Campenhout G (2012) Quantity and Quality of Information and SME Financial Structure. *Small Business Economics* 39(2): 341-358.
- Van Tendeloo B and Vanstraelen A (2008) Earnings management and audit quality in Europe: Evidence from the private client segment market. *European Accounting Review* 17(3): 447-469.
- Whittred G (1980) The timeliness of the Australian annual report: 1972-1977. *Journal of Accounting Research* 18(2): 623-628.

Xiang D, Worthington AC and Higgs H (2014) Discouraged finance seekers: An analysis of Australian small and medium-sized enterprises. *International Small Business Journal* DOI:10.1177/0266242613516138.

**Table 1. Variable definitions**

<b>Variable name</b>	<b>Variable description</b>	<b>Predicted sign</b>
<i>LATE</i>	Dummy variable that is coded one if the firm filed its financial statements late (i.e., more than seven months after the closing date of the accounting year); and zero otherwise.	Dependent
<i>ORDLATE</i>	Ordinal variable that is coded as follows: zero if the financial statements are filed within seven months after the closing date; one if the financial statements are filed between seven and eight months after the closing date; two if the financial statements are filed between eight and nine months after the closing date; three if the financial statements are filed between nine and 12 after the closing date; and four if the financial statements are filed more than 12 months after the closing date.	Dependent
<i>NONEARLY</i>	Dummy variable that is coded one if the firm filed its financial statements more than six months after the closing date of the accounting year; and zero otherwise.	Dependent
<i>LEV</i>	The ratio of total liabilities over total assets.	- (H1)
<i>AUDIT</i>	Dummy variable that is coded one if the financial statements were subject to an external financial statement audit; and zero otherwise.	- (H2)
<i>SIZE</i>	Natural logarithm of total assets.	- (H3)
<i>GROWTH</i>	The ratio of intangible assets over total assets.	- (H4)
<i>CHLOSS</i>	Dummy variable that is coded one if the firm reports a loss in the current accounting period and a profit in the previous accounting period; and zero otherwise.	+ (H5)
<i>CHCURRENT</i>	Dummy variable that is coded one if the firm has a current ratio below one in the current accounting period and a current ratio above 1.50 in the previous accounting period; and zero otherwise.	+ (H5)
<i>CHEXPDEBT</i>	Dummy variable that is coded one if the firm has tax and/or social security liabilities that are overdue in the current accounting period, while this was not the case in the previous accounting period; and zero otherwise.	+ (H5)
<i>AGE</i>	Natural logarithm of the number of years since the date (of incorporation) mentioned on the first page of the financial statements.	- (H6)
<i>TRADEDEBT</i>	The ratio of trade debt over total debt.	Control
<i>FINDEBT</i>	The ratio of financial debt over total debt.	Control
<i>DISTRESS</i>	Ooghe-Verbaere (1982) financial distress score (with a lower score implying a higher probability of default).	Control
<i>LAGDEP</i>	Lagged dependent variable.	Control
<i>IND</i>	Dummy variables that denote the specific industry to which the firm belongs (see footnote 16 for additional details).	Control
<i>YEAR</i>	Dummy variables that denote the specific year (i.e., we include dummies for 2007 and 2008, 2006 is used as the year of reference).	Control

**Table 2. Descriptive statistics**

***Panel A. Breakdown based on month during which the financial statements are filed***

	Number of Observations	Percentage	Cumulative Percentage
1 <sup>st</sup> month	3	.014	.014
2 <sup>nd</sup> month	23	.110	.125
3 <sup>rd</sup> month	163	.783	.907
4 <sup>th</sup> month	345	1.656	2.564
5 <sup>th</sup> month	1,398	6.711	9.275
6 <sup>th</sup> month	6,040	28.997	38.272
7 <sup>th</sup> month	6,424	30.840	69.112
8 <sup>th</sup> month	4,884	23.447	92.559
9 <sup>th</sup> month	733	3.519	96.078
10 <sup>th</sup> up to 12 <sup>th</sup> month	655	3.145	99.222
> 12 months	162	.778	100.000
	20,830		

This table presents a breakdown of sample observations based on the month (after the closing date of the accounting year) during which the financial statements are filed. This table is based on unwinsorized data.

***Panel B. Descriptive statistics***

Variable name	Mean	Median	St.Dev.	25 <sup>th</sup> percentile	75 <sup>th</sup> percentile
LATE	.309				
LEV	.672	.697	.248	.513	.839
AUDIT	.055				
SIZE	14.183	14.227	.842	13.639	14.769
GROWTH	.008	.000	.032	.000	.001
CHLOSS	.108				
CHCURRENT	.001				
CHEXPDEBT	.013				
AGE	2.909	2.944	.599	2.485	3.332
TRADEDEBT	.349	.319	.221	.171	.501
FINDEBT	.370	.367	.258	.143	.576
DISTRESS	7.824	7.102	5.227	4.493	10.483

The variables are defined in Table 1.

**Table 3. Correlation matrix**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<b>LATE</b> <b>(1)</b>	1.000											
<b>LEV</b> <b>(2)</b>	.082 (.000)	1.000										
<b>AUDIT</b> <b>(3)</b>	-.068 (.000)	-.073 (.000)	1.000									
<b>SIZE</b> <b>(4)</b>	-.065 (.000)	-.156 (.000)	.194 (.000)	1.000								
<b>GROWTH</b> <b>(5)</b>	.021 (.002)	.146 (.000)	.004 (.535)	-.026 (.000)	1.000							
<b>CHLOSS</b> <b>(6)</b>	.045 (.000)	.143 (.000)	.007 (.326)	-.075 (.000)	.027 (.000)	1.000						
<b>CHCURRENT</b> <b>(7)</b>	.012 (.075)	.033 (.000)	.003 (.712)	-.009 (.190)	.018 (.007)	.041 (.000)	1.000					
<b>CHEXPDEBT</b> <b>(8)</b>	.023 (.001)	.062 (.000)	.004 (.515)	-.024 (.000)	.027 (.000)	.019 (.004)	.002 (.789)	1.000				
<b>AGE</b> <b>(9)</b>	-.051 (.000)	-.304 (.000)	.133 (.000)	.259 (.000)	-.194 (.000)	-.019 (.004)	-.026 (.000)	-.034 (.000)	1.000			
<b>TRADEDEBT</b> <b>(10)</b>	.008 (.251)	-.093 (.000)	.002 (.754)	.042 (.000)	-.062 (.000)	-.043 (.000)	-.033 (.000)	-.016 (.018)	.072 (.000)	1.000		
<b>FINDEBT</b> <b>(11)</b>	.002 (.814)	.256 (.000)	-.038 (.000)	.177 (.000)	.043 (.000)	.079 (.000)	.022 (.001)	.006 (.340)	-.000 (.996)	-.558 (.000)	1.000	
<b>DISTRESS</b> <b>(12)</b>	-.041 (.000)	-.226 (.000)	-.061 (.000)	-.095 (.000)	.005 (.504)	-.279 (.000)	-.029 (.000)	-.044 (.000)	-.121 (.000)	-.136 (.000)	-.005 (.458)	1.000

The variables are defined in Table 1. *p*-values are reported between brackets.



**Table 4. Regression results**

Variable name	Predicted Sign	Model I (Logit - <i>LATE</i> )			Model II (Ordered Logit - <i>ORDLATE</i> )			Model III (Logit - <i>NONEARLY</i> )		
		Coefficient	Odds ratio	( <i>p</i> -value)	Coefficient	Odds ratio	( <i>p</i> -value)	Coefficient	Odds ratio	( <i>p</i> -value)
Intercept		-.4924		(.121)				.0642		(.837)
<i>LEV</i>	- (H1)	.2972	1.3461	(.000)	.2887	1.3347	(.000)	.1884	1.2073	(.013)
<i>AUDIT</i>	- (H2)	-.5191	.5951	(.000)	-.6103	.5432	(.000)	-.2048	.8148	(.005)
<i>SIZE</i>	- (H3)	-.1019	.9031	(.000)	-.0861	.9175	(.000)	-.0506	.9507	(.018)
<i>GROWTH</i>	- (H4)	.6085	1.8376	(.213)	.5729	1.7734	(.207)	.5060	1.6586	(.320)
<i>CHLOSS</i>	+ (H5)	.2138	1.2384	(.000)	.2234	1.2504	(.000)	.2579	1.2943	(.000)
<i>CHCURRENT</i>	+ (H5)	.0498	1.0510	(.819)	.1469	1.1583	(.457)	.3496	1.4184	(.136)
<i>CHEXPDEBT</i>	+ (H5)	.1806	1.1964	(.253)	.1512	1.1633	(.305)	.6580	1.9308	(.000)
<i>AGE</i>	- (H6)	-.0201	.9801	(.457)	-.0189	.9813	(.464)	-.0611	.9407	(.023)
<i>TRADEDEBT</i>	Control	.1793	1.1964	(.079)	.1625	1.1765	(.092)	.0001	1.0001	(.999)
<i>FINDEBT</i>	Control	.0822	1.0857	(.345)	.0871	1.0910	(.296)	-.0648	.9372	(.433)
<i>DISTRESS</i>	Control	-.0081	.9919	(.031)	-.0079	.9921	(.025)	-.0105	.9896	(.003)
<i>LAGDEP</i>	Control	2.4483	11.5690	(.000)	1.5182	4.5642	(.000)	2.3051	10.0251	(.000)
cut1					.5055					
cut2					2.7528					
cut3					3.6345					
cut4					5.6722					
# Observations		22,108			22,108			22,108		
Pseudo R-squared		.2180			.1610			.2065		
Chi-squared		3,764.31		(.000)	2,647.01		(.000)	3,807.52		(.000)

The variables are defined in Table 1. *p*- values are reported between brackets. In order to preserve overview, coefficients for the industry and year dummy variables are not reported.

**Table 5. Relationship between financial statement filing lags and financial statement quality**

*Panel A. Variable definitions*

Variable name	Variable description
<i>CFO</i>	Cash flow from operations, being measured as operating profit (or loss) minus accruals. Consistent with prior research (see e.g., Leuz et al., 2003; Meerschaert et al., 2013) accruals are calculated as follows: $[(\Delta \text{current assets} - \Delta \text{cash and cash equivalents}) - (\Delta \text{current liabilities} - \Delta \text{short-term debt} - \Delta \text{tax liability}) - \text{depreciation and amortization}]$ . Cash flow from operations is then scaled by total assets.
<i>ROA</i>	Return on assets, being the ratio of net income over total assets.
<i>LOSS</i>	Dummy variable that is coded one if the firm reports a loss; and zero otherwise.
<i>AUDIT</i>	Dummy variable that is coded one if the financial statements were subject to an external financial statement audit; and zero otherwise.
<i>LAG</i>	Dummy variable that is coded one if the financial statements were filed after a certain period of time; and zero otherwise. Three periods are considered for this variable: filing the financial statements within six months (i.e., Model IV); seven months (i.e., Model V); or eight months (i.e., Model VI) after the closing date of the accounting year.
<i>IND</i>	Dummy variables that denote the specific industry to which the firm belongs (see footnote 16 for additional details).
<i>YEAR</i>	Dummy variables that denote the specific year (i.e., we include dummies for 2007 and 2008, 2006 is used as the year of reference).

*Panel B. Regression results*

Variable name	Predicted Sign	Model IV (6 months)	Model V (7 months)	Model VI (8 months)
Intercept		.1919 (.000)	.1917 (.000)	.1906 (.000)
<i>ROA</i>	+	.7214 (.000)	.7174 (.000)	.7174 (.000)
<i>LOSS</i>	?	-.0030 (.500)	-.0029 (.509)	-.0027 (.542)
<i>ROA * LOSS</i>	-	-.3520 (.000)	-.3514 (.000)	-.3463 (.000)
<i>SIZE</i>	?	-.0095 (.000)	-.0096 (.000)	-.0095 (.000)
<i>ROA * SIZE</i>	+	.1401 (.000)	.1397 (.000)	.1401 (.000)
<i>AUDIT</i>	?	-.0228 (.000)	-.0231 (.000)	-.0230 (.000)
<i>ROA * AUDIT</i>	+	.1316 (.009)	.1298 (.010)	.1257 (.013)
<i>LAG</i>	?	-.0041 (.044)	-.0056 (.009)	-.0129 (.001)
<i>ROA * LAG</i>	?	-.0205 (.407)	-.0282 (.260)	-.1199 (.004)
# Observations		20,830	20,830	20,830
Adj. R-squared		.1073	.1074	.1086
F		143.63 (.000)	143.81 (.000)	144.39 (.000)

The variables are defined in Panel A of this table. *p*-values are reported between brackets. In order to preserve overview, coefficients for the industry and year dummy variables are not reported.