What determines the annual reporting lag for listed companies: country and company characteristics effects.

Master thesis Msc Accounting

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Preface

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Summary

In this thesis I investigate the factors that could possibly influence the reporting lag of annual financial statements in Belgium, Germany and the Netherland. A relative small part of the prior literature on corporate disclosure choices has been done about the timing of the annual financial report, especially in Europe. Moreover, most of the research has been done on single country level or before the introduction of IFRS. The results in this thesis indicate that the fact if a company is located in Germany positively effects reporting lag. Notably, more than half of the German companies reported late. The results for the control variables indicate that loss companies (after trimming the top and bottom 2%), technology companies and previous late reporting in 2009 all positively affect reporting lag.

Table of contents

1.Introduction

Examination about corporate disclosure choices has led to a large stream of research. This research is well summarized for example by Verrecchia (2001) and gives valuable insights on what the causes and consequences are of different forms of corporate disclosure. However, prior researchers have mainly been focusing on the reaction to different corporate disclosures (Cready and Mynatt, 1991), whilst fewer have analyzed the timing decisions by the managers with regard to the release of the annual financial report.

In this thesis I investigate the factors which influence the choices in Belgium, German and Dutch companies to release their annual financial report on a certain date. The reporting lag in these countries will be investigated because of the fact, as stated by Sengupta (2004), that the extent to which financial report provides useful information to the stakeholders should be a function not only of the nature of information released, but also of when it is released.
The importance of timely financial information is also recognized by the Financial Accounting Standard Board and the International Accounting Standards Board.

There are two important forms of timeliness according to Feltham (1968) namely: "reporting delay" and "reporting interval". Reporting interval can be seen as how frequent a company reports their information, the more frequent the better the timeliness because information is spread on more occasions (Fu, Kraft and Zhang, 2011). Reporting delay can also be described as reporting lag. This will be the dependent variable in this thesis. The importance of the research on reporting lag is also mentioned by Givoly and Palmon (1982) who said that while numerous studies had their focus on the usefulness of annual reports and some have examined the added benefits of the more frequent quarterly reports, lesser research is done on reporting lag. However, the delay in the release of financial statements is likely to increase the level of uncertainty associated with the decision-making by stakeholders. Which on their turn could lead to nonoptimal or delayed decisions.

Prior literature has identified different number of factors that could influence the reporting lag for listed companies. Factors like size of the company, auditor type, board size and industry type have all been used to find a connection towards the decision making of annual financial report releases (Owusu-Ansah (2000), Whittred (1980), Whittred and Zimmer (1984) and Wu, Wu and Liu (2008).

Previous literature towards reporting lag in European countries has mainly been done on individual levels or before the introduction of IFRS (Annaert, De Ceuster, Polfliet& Van Campenhout, G. (2002) and Soltani (2002)). For this the main research question in this thesis is:

What drives European firms in their decision to publish their annual report on a certain date?

To find an answer to this question the companies listed on the Euronext in Belgium and the Netherlands and the listed companies on the Frankfurter Stock exchange in Germany are investigated.
I use the year 2010 for this thesis, because that is the most recent year for which the annual financial reports of most companies in the sample are available. Due to the fact that there are different country rules in Belgium, Germany and the Netherlands, the relative value of reporting lag is used. This is the same as used by Dyer and McHugh (1975), were the reporting lag is measured as the number of days between the financial year end and the date of the deposit at an official institution, divided by the allowed number of days. The information for the thesis is gathered manually from the different databases.

Although I did not expected to see differences in the reporting lag between companies in Belgium, Germany and the Netherlands because of the fact that they have a very strongly cultural and economical bond, the results show something different. The dummy for German companies seems to have a significant positive effect on the reporting lag. Belgium and Dutch companies, however score almost the same. The hypothesis in this thesis that there would be no differences is therefore rejected. Moreover, an interesting finding was that more than half of the German companies deposited their annual financial report too late at the official institution. For the control variables, 'technology companies', 'late filing in 2009' and 'loss' (after trimming) seems to have a significant positive effect on the reporting lag in Belgium, Germany and the Netherlands.

This thesis contributes to two streams of research.
First of all, by focusing on the reporting lag it extends the discretionary disclosure literature. This part of the corporate disclosure policy seems to be relatively neglected by the previous researchers. The findings in this paper could also be helpful in investigating the effects of the implementation of the European transparency guidelines. Furthermore as stated by Sengupta

(2004), “the reporting lag is also found to be positively associated with measures of business complexity suggesting that some companies facing large information processing costs may produce less reliable financial information in an effort to meet the shorter deadline”.

Second, this thesis extends the research towards the discussion if bad news if reported earlier than good news (Citron, Taffler and Uang (2008), Givoly and Palmon (1982), Chambers and Penman (1984), Begley and Fischer (1998) and Bagnoli, Kross and Watts (2002).

The paper is organized as follows. Section 2 is the literature review in a general way, furthermore an intro of the countries is made. In Section 3 the country specific regulations is handled. Section 4 is about the hypothesis in this paper. This continuous in section 5, where the sample is explained and the search method is described. However, with the explanation of the model, each determinant is briefly explained by prior literature and given an expected sign. Section 6 would be the results and after that is the conclusion and the limitations.

2. Review of the literature

2.1 Determinants for financial reporting

It is almost unfeasible for stakeholders outside the company to obtain all the internal information that is available inside the specific company. Due to this fact it is mentioned that a company and its stakeholders operates in a situation of information asymmetry (Scott, 2009). However, information is key for stakeholders to make the right decisions towards collaborating with, or investing in specific companies and the importance of accurate information is still growing.

The requirements for financial reporting by companies already exist for many years to inform shareholders of a company about the company's financials. However due to accounting scandals in the 1980's, 1990's and 2000's, on international level and in many countries, governments started to set up additional rules and recommendations concerning their Corporate Governance (CG), included their financial reporting. Most known is the Cadbury Report in 1993 in the UK. CG rules are composed to indicate how companies can be well, efficiently and responsibly lead by the management, as well as the accountability over the implemented policy towards the stakeholders including the shareholders, employees, customers and the society as a whole. A good working CG policy ensures the rights of the shareholders. This policy also tries to prevent directors from enriching themselves to the detriment of the shareholder. An important problem of CG is shareholder concentration. Since an individual shareholder is unable to fully appropriate the gains from the monitoring function, a potential for a sub-optimal level of monitoring is created when company's ownership is diverse (Vickers & Yarrow, 1988). In a typical principal agent framework, the shareholders (principals) delegate the decision making authority to managers (agents) whose interest perhaps could diverge from those of the shareholders. The goal of the principals is to get the agents to work in the principals' best interest, given the fact that there is an asymmetry of information (Conyon & Leech, 1994). To that end, the shareholders design the compensation contract of the managers to align the interests of the managers with that of the shareholders (Jensen and Meckling, 1976). However, many firms are owned by thousands of shareholders and it is merely impossible for an individual shareholder to view the desired information directly, due to costs and other factors. For this, shareholders use financial statements (Van Hout, 2011).

Information asymmetry typically leads to two different types of problems namely, moral hazard and adverse selection. Scott (2009) defines moral hazard as "*a type of information asymmetry whereby one or more parties to a business transaction, or potential transaction, can observe their actions in fulfillment of the transaction but other parties cannot"*. This means that, as mentioned above, the shareholders have a hard time monitoring that the managers are operating on the shareholders behalf. Furthermore, there is a risk of slackness among the managers. The second type of information asymmetry, adverse selection, is defined by Scott (2009) as "*a type of information asymmetry whereby one or more parties to a business transaction, or potential transaction, have an information advantage over other parties"*. In other words, one has more information than the other. Moreover, in most cases the managers of the company, other insiders or more entrenched shareholders posses more information about the company towards the value and expectations than outsiders. On the equity market this leads to additional costs in transactions between buyers and sellers of the company's shares. These complimentary costs reduce the level of liquidity for the company's shares. To overcome the reluctance of potential investors to invest in the shares whilst being in illiquid markets, companies have to issue capital at a discount. Discounting results in fewer proceeds to the company and hence higher cost of capital (Leuz and Verrecchia, 2000).

Investors from the debt market are also affected by the existence of information asymmetry. As one can expect, investors charge a higher cost of capital towards a company that provides a low level of information. Besides the higher cost of capital, debtholders also enter covenants in the debt contracts, to provide more control rights to the lenders (when managers violate the covenant) to ensure their investments. These covenants limits a company in its freedom to spend their capital completely to their own discretion. To conclude, the market demands more information from financial reporting to reduce the information asymmetry and managers of a company have incentives to publish the financial statements to reduce the cost of capital. There are other sources for stakeholders of the company to provide the required information, other than the financial reporting i.e. the annual report, like interim reports, earnings announcements, financial news through the media and gathering the information directly from the management. However, these are more costly and/or less reliable to them (Givoly and Palmon, 1982).

2.2 Determinants for timeliness in financial reporting

Stakeholders of a company demand timely information, such that they can make the right decision in time. If this demand of timeliness in the financial reporting cannot be satisfied, companies will most certainly be confronted with negative consequences. A widely supported opinion in the disclosure literature, is that a company's optimal disclosure strategy would be determined by the costs and benefits of disclosure. Managers base their decision on the nature and content of the information reported and the timing of the financial reporting etc. on an assessment of these costs and benefits. This suggests that the manager, should set the release date of their financial reporting based on their evaluation of potential costs and benefits associated with the release of their information more or less quickly (Sengupta, 2004).

Furthermore, Carslaw and Kaplan (1991) stated that timeliness is an important qualitative attribute of financial statements, which requires that information should be made available to the stakeholders as quickly as possible. Both analytical and empirical evidence suggest that stakeholders decisions based on the information in the financial statements may be affected by the timeliness. According to Feltham (1968), there are two important elements of timeliness namely: "reporting delay" and "reporting interval". Where reporting interval can be seen as how frequent a company reports their information, the more frequent the better the timeliness because information is spread on more occasions (Fu, Kraft and Zhang, 2011). Reporting delay is another term for reporting lag, which will be the key element in this thesis and more elaborated further on. Reporting lag is an interesting element of timeliness to examine, while numerous studies had their focus on the usefulness of annual reports and some have examined the added benefits of the more frequent quarterly reports, fewer research is done on reporting lag (Givoly and Palmon, 1982). However, the delay in the release of financial statements is likely to increase the level of uncertainty associated with the decision-making by stakeholders. This could lead to nonoptimal or delayed decisions.

An important role of timeliness in previous research is that of asymmetric timeliness. Asymmetric timeliness arises when, for example, good or bad news is reported more or less rapidly. This good/bad news example is a factor of influence on reporting lag that is mentioned in almost all previous researches about reporting lag, for example see Chambers and Penman (1984) or Ismail and Chandler (2003). One term used in this situation is conservatism, whereby bad news should be reported in an earlier stage than good news. Moreover, accounting conservatism is characterized as earnings reflecting 'bad news' in a

more timely manner than 'good news' (Basu, 1997). However, the situation of reporting bad news more quicker than good news is not always supported. As Wu, Wu and Liu (2008) describes this discussion:

"Prior studies document that managers have incentives to time earnings announcements, suggesting the behavior of good news early and bad news late (e.g. Chambers and Penman (1984), Givoly and Palmon (1982)). This phenomenon can be explained by the *stakeholder theory* and the *internal reporting hypothesis* (Bowen et al (1992), Haw et al (2000)). The stakeholder theory posits that, in the absence of an opportunity to hide bad news due to mandatory disclosure requirements, managers have incentives to delay its release and let bad news be impounded gradually into share prices (Watts and Zimmerman, 1990). The internal reporting hypothesis suggests that, if managers' compensations are related to earnings performance, they may delay bad news until it is verified, justified and/or restated (Lurie and Pastena, 1975)." (p.104)

The increasing chance of litigation faced by the managers and auditors of the companies is an additional important reason to improve timeliness. Especially in cases of bad news, there exist a substantial interest of the company to decrease the chance of litigations (Skinner, 1994). Furthermore, not only the risk of facing personal risks of litigation, but also the decrease of market value could be of influence. When companies take more time before releasing their financial reporting, the market could interpreted that as a signal of forthcoming bad news (Ball and Brown (1968), Beaver (1968)).

Moreover, not only the market influences the timeliness of financial reporting, the government also takes its role in providing the companies with incentives to report more timely (Conover et al. (2008), Owusu-Ansah and Leventis (2006)). The government can issue certain laws to oblige companies to report more timely or even set specific time lapses for the financial reports, for example, rules by the SEC in the US or the act Wft in the Netherlands. The specific rules per country will be treated in the next section. The expected differences according the previous literature, however, will be handled below.

Prior literature has mainly been concentrated on the situation in the US. Only more recently the literature expanded more on the Asian situation, as well as the Australian and formal Soviet countries. For example, Ismail and Chandler (2003) investigated the reporting lag on quarterly financial reports for companies in Malaysia. They found that all four attributes in

their model: size, profitability, growth and capital structure, are significant associated with the reporting lag. Furthermore, McGee (2009) found that Russian companies financial reporting is far less timely than that of developed market economies. This however is not the case for other formal Soviet countries, like Poland, Hungary and Estonia or in other words transition economies, as was found by McGee. Research on reporting lag in European countries, however, has been done mostly on single country level (for example the study on the French situation by Soltani (2002) or the Belgian by Anneart, De Ceuster, Polfliet and Campenhout (2002)), or only towards the changes in the reporting lag and not on what the determinants are of these reporting lags. Furthermore, prior research towards European reporting lag is using data of the pre IFRS situation, for example look at Annaert, De Ceuster, Polfliet and Van Campenhout, G. (2002) who examined Belgium reporting lag in the period of 1991-1998 or Owusu-Ansah, and Leventis (2011) who examined Greece reporting lag for the period of 1999. However, the European situation provides the ideal situation to examine the factors that drive the companies in their timing decision under a uniform mandatory accounting standard (IFRS), but different country specific situation and regulations. The introduction of mandatory IFRS in 2006 for the countries in the EU provides a unique situation where multiple countries fall under the same EU regulations, but also have their own country and stock market specific rules.

So why can there be expected any differences between the prior US researches and the European situation? First of all there is a difference in accounting, namely rule-based and principles-based. As mentioned above, are the European countries required to use IFRS, a principle based accounting principle. On the contrary, in the US it is more common to use rule-based accounting like US-GAAP, where different industries have different accounting rules (Van Vlimmeren, 2011). However, this concerns the content of the financial statement and there is no direct evidence in previous literature that states that this could lead to differences in delays.

Differences then should come from other factors, found in both previous literature and the contemporary situation in country rules. Only the literature part will be explained in this section, the rules and their differences in the next section of this report. In the part above about financial reporting, the importance of corporate governance was already mentioned. The application of CG differs between the US and European countries. Whereas in the US a one-tier board of directors is obliged, in the European countries this is most often a two-tier

board of directors. The main difference with these definitions is that with the one-tier boards there is a combination of the dependent and independent directors, or in other words, mostly executives and non-executives. The two-tier boards, however, have a divided board of directors and a supervisory board. This means, that whereas the one-tier there exists an agency problem because of the fact that the dependent directors have more information than the independent directors, the information asymmetry, which means that there is probably less conservatism (Beasley, 1996). Conservatism plays an important role in the bad news, good news situation and so also in the reporting lag. Moreover, with the two-tier boards, there is a separation between the boards, which in theory should lead to less agency problems. This is to be expected due to the fact that the independent members (supervisory board) have incentives to take out there maximum, to increase their own market value as director (Beasley, 1996).

In this paper, the countries Belgium, Germany and the Netherlands are examined. The three countries are chosen, because there economy and cultural strongly connected. Belgium, Germany and the Netherlands border to each other and are mutually big traders. So companies in Belgium, Germany and the Netherlands have many stakeholders in each of the other countries. In that case it can be said that the demands from the market should be similar in the three countries, and lead to no differences in reporting lag. However, previous literature indicates that differences could occur due to the following reasons.

Numerous authors have suggested that the timeliness of financial reporting is strongly influenced by the fundamental nature of legal systems in different countries (Conover, Miller and Szakmary, 2008). In their paper, Conover, Miller and Szakmary (2008) examined the difference in reporting lag between common and code law countries. As also stated in the research of Ball, Kothari and Robin (2000), the distinction can be made in; common law system where a shareholder governance model prevails and accounting practices are determined primarily in the private sector and the code law system where they have a stakeholder governance model whereby major groups contracting with the firm (such as banks, debt holders and labor unions) are represented on corporate boards. Conover, Miller and Szakmary (2008) expected common law countries to have a shorter reporting lag, due to the fact that there are more outside parties that demand for timely reporting than is with code law countries. In their sample taken from the years between 1986 and 1996, they find a significant difference from the Netherlands towards Belgium and Germany. For these differences and that between US and EU it is stated that the US is a typical common law

country, whereas Germany and Belgium are code law countries, but the Netherlands is also mentioned as a common law country. However, this last assumption is not completely correct and the Netherlands should also be indicated as a code law country, making this argument not really valid.

Another argument is taken from Kaufmann, Kraay and Mastruzzi (2009). They examine the aggregate and individual governance indicators for different countries over the period 1996-2008. In table 2.1 are the scores of the three European countries and that of the US summarized. The US is added to form a further comparison between US and EU. There are six different aspects of governance measured in the research of Kaufmann et al.. The explanation of each aspect is mentioned in appendix A. The countries are given a value between -2.5 and 2.5, the higher the better.

Table 2.1 Governance Indicators

	Voice and Accountability	Political Stability and Absence of Violence	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Netherlands	1.53	0.95	1.86	1.75	1.76	2.19
Germany	1.34	1.08	1.65	1.46	1.72	1.77
Belgium	1.37	0.61	1.36	1.48	1.38	1.35
United States	1.12	0.59	1.65	1.58	1.65	1.55

Source: Kaufmann, Kraay and Mastruzzi (2009)

As can be seen, the Netherlands scores the highest on almost every aspect, except political stability. One of the most important aspect is that of Government Effectiveness which was defined by Kaufmann, Kraay and Mastruzzi (2009) as "measuring perceptions of the quality of public services, the quality of the civil services and the degree of its independence from political pressures, the quality if policy formulation and implementation, and the credibility of the government's commitment to such policies". The Netherlands scores the highest in table 2.1, whilst Belgium scores lower than the other European countries four out of six times.

2.3 Defining reporting lag

In the previous literature, definitions about timeliness and reporting lag are often used in a mixed manner. Reporting lag can be measured by the number of days between the fiscal year end and the earnings announcement (Sengupta, 2004), the number of days between the fiscal

year end and the audit report (Krishnan and Yang, 2009), the days between the earnings announcement and release of the financial statement (Aubert, 2009) etc.. In this paper the reporting lag is defined as the amount of days between the reporting year end and the day that the financial statements are filed into an official institution, as is also used by Conover, Miller and Szakmary (2008).

It is of course impossible for a company to deposit its financial statement on the same day of the end of the reporting period. Not all information is directly available for a company to simply put it in a statement. This info has to be collected, most certainly more or less corrected and audited by an audit firm, which in turn, gives an audit opinion on the financial statements. Furthermore the financial statements needs to be reviewed and then distributed to the designated official institutions. All that leads to a situation where a reporting lag arises (Aubert (2009), Conover et al. (2008), Givoly and Palmon (1982), Sengupta (2004)).

3. Rules and regulations

Different countries have different rules and regulations towards financial reporting and also to assure a certain required timeliness in those financial reports. To begin there are different requirement in the US than in the EU. Where as in the US the SEC requires strict rules about the deadlines for filing periodic reports. Recent the SEC shortened the deadlines for the annual 10-K form, meaning that companies have to file their 10-K in 60 to 90 days from the fiscal year ending, depending on the fact if the company is a accelerated filer or not and on when their fiscal year end. On the EU level such rules do not exist. The 1st, 4th and 7th directive of the board (68/151/EEG, 78/660/EEG and 83/349/EEG) are rules from the EU dealing with financial reporting. These rules however, only mention how and what to publish in the financial statements, but do not give a certain uniform deadline. This is delegated to the individual members of the EU. However, in 2004 the EU came up with the transparency guidelines (2004/109/EG). These guidelines do incorporate a deadline, namely 4 months after the financial year end. Still, the guidelines indicate that the individual members of the EU are responsible for the implementation of the deadline.

Furthermore, although all the countries in Europe have mandate the usage of IFRS for their listed firms, IFRS does not contain requirements regarding publication (Arnold et al, 2009). Therefore the rules of the stock exchanges and specific country regulations will be examined. Belgium firms are listed on the Euronext in Brussels. Here they are required to adhere to the rules incorporated in the Euronext rule book: book 1 harmonized market rules. There are three important rules that needs to be mentioned in this case, rule 61005/1, 61005/2 and 61005/3. These stated that listed companies must submit all publicly required information regarding their listed securities to the relevant Euronext instance, which encompasses the annual statement of the company. This of course has to be done within the familiar term of publication. Information submitted on other security markets should also be included and this information needs to be provided before it revealed on the other security markets. But a real deadline is not mentioned in the rulebook of the Euronext. So the rules of the certain country the company is located is applicable. For companies in Belgium, this means that they have to file their financial statement to the Central Balance Sheet Office, also referred to as the NBB. This has to be done within a maximum of 7 months. The annual report must be approved by the General Assembly within 6 months after the closing date and must be filed within 30 days

after their approval (NBB, 2011). So although there are the EU transparency guidelines, these were not implemented by the Belgium government in 2010.

For German firms, many are listed on the Frankfurt stock exchange, which is part of the Deutsche Börse Group. According to rule §50 "Annual Financial Statements" of the Deutsche Börse Group, companies are obliged to publish their annual financial statement within 4 months after the end of the financial year. Furthermore, the rule requires that the members on the Frankfurter stock draw up their financial statement according §37v of the German Securities Trading Act. Therefore, the requirements for the Frankfurter stock are in this case the same as the national. In Germany, the companies are, since 2007, required to deposit their financial statement electronically to the Bundesanzeiger Verlagsgesellschaft mbh. Listed companies are required to issue their financial statement within 4 months after the end of the financial year.

Companies in the Netherlands are obliged to the same stock exchange rules as for their Belgium counterparts, because of the fact that they are also stated on the Euronext. However, Belgium companies are stated on the exchange in Brussels and the Dutch in Amsterdam. Further, besides the stock exchange rules, the Netherlands has its own requirements according financial reporting. In the Netherlands the Law on financial supervision (Wft) and the Act financial reporting oversight (Wtfv) are applicable. Article 5:25c of the Wft determines that listed companies are required to publish their annual statements within 4 months after the end of the financial year. At the same time, these statements needs to be issued at the Authority Financial Markets (AFM). This has to be done within 5 days after the confirmation on the financial statements by general meeting of shareholders. The deposit of the annual financial report used to be done within 5 months, according to the Burgerlijk Wetboek 2, Titel 9. However, after the implementation of the transparency guidelines in 2008, this is reduced to the 4 months that is obliged nowadays (Stibbe, 2007).

4. Hypothesis development

Prior literature like that of Begley and Fisher (1998) has shown that there is most certain information in financial reporting delay. Furthermore, Sengupta (2004) implies that the extent to which financial reporting will provide "useful" information to stakeholders should be a function to as well the nature of the information as that of when it is released. When stating for the primarily aspects which would make accounting information useful, the Financial Accounting Standards Board underscored timeliness as an important factor which they defined as:

"…having information available to decision makers before it loses its capacity to influence decisions, is an ancillary aspect of relevance. If information is not available when it is needed or becomes available so long after the reported events that it has no value for future action, it lacks relevance and is of little or no use." (FASB, Statement of Accounting Concept No. 2, page 5)

Therefore it is questionable why there are many differences in reporting lag between different companies and different countries. Moreover, since timing is an important factor of financial reporting and could affect the relevance and usefulness of the information in the reporting. In the introduction the main research question was introduced. In this paper the following research question is examined:

What drives European firms in their decision to publish their annual report on a certain date?

On European level there are no exact rules about reporting lag, the same counts for IFRS. Restricting reporting lag is delegated to the individual country governments, who enforced different rules for each countries. For Germany and the Netherlands, the maximum reporting lag for listed companies is limited to four months. For Belgium, however, there is a distinct longer period of seven months allowed before the financial report needs to be deposited at an official institution. However, as will be further explained at the research design, using relative values for reporting lag could possibly eliminate the differences occurring to different rules. Furthermore, the separate stock exchanges in each country also have their own various rules about reporting lag. However, these correspond with the applicable country specific rules. Prior literature indicates that the fundamental nature of the legal systems strongly influences

the timeliness of financial reporting (Conover, Miller and Szakmary, 2008). Hence Germany and Belgium are code law countries and the Netherlands is classified as a common law country, Conover, Miller and Szakmary (2008) found that common law countries the reporting lag is clearly shorter than that in code law. Meaning that there should be a shorter reporting lag in the Netherlands than in Germany or Belgium. But looking back at the argumentation in the specific sections about this point, the Netherlands should also be classified as a code law country, eliminating this argument. Further, using the individual governance indicators for different countries over the period 1996-2008 of Kaufmann, Kraay and Mastruzzi (2009), companies from the Netherlands also should score better than their German or Belgium counterparts. Looking at table 2.1 presented in the previous section, it shows that the Netherlands score better at almost every indicator. This indicates better government effectiveness and better practice of the regulations, meaning a better situation to reduce the reporting lag. However, this is something that says that it could lead to a difference, so it cannot really be said that it would lead to major differences.

All these factors mentioned above indicates that the reporting lag should be probably be the same for each of the three countries. For this, the following main hypothesis is tested;

H1: There is no difference in reporting lag between Belgium, Germany and the Netherlands.

5. Research methodology

5.1 Sample and data collection

The sample used in this research consists of companies that are listed on the different stock exchanges in the three different countries Belgium, Germany and the Netherlands. The lists on which these companies are mentioned are retrieved from the website of either the Euronext or the Deutsche Börse (more specific the Frankfurter Stock). The basic year used in the research is 2010, because that is the latest year most information is available. Furthermore the publishing dates of the year 2009 are also used as a variable to measure the influence of late filing in a previous year. To gather the information about the independent variables like firm size, industry type and auditor type the database Orbis is used. Furthermore, the database of Company.info is used to collect the information that is not available on Orbis. Most data of the different variables had to be hand collected from the individual annual reports. When the annual report was not available at Company.info, it was retrieved from the companies own website. The initial sample existed of 650 companies over the three countries. After extracting the companies of which there were no publishing dates available or no data in the databases, 402 companies remain.

Table 5.1 Number of annual reports examined

	Belgium	Germany	The Netherlands	Total
Initial sample of firms listing on the Euronext (amsterdam and Brussels) and Deutsche Boerse Frankfurt	173	365	112	650
After looking for annual deposit dates and filtering for only country-specific companies	109	245	99	453
After extracting data from ORBIS and Company.info	98	209	95	402

For the dependent variable reporting lag, the information about the date that a company filed its annual report at an official institution, is retrieved from each individual official institution. For the Belgium companies the filing dates can be found at the website of the Balanscentrale (of the National Bank Belgium). The information about German companies is available at the website of the Bundesanzeiger and that of Dutch companies at the website of the AFM.

5.2 Research design

In this part, the research design and the data measurement method is described for the model in this research. For this description, the method as used by Sengupta (2004) is applied. Meaning that each variable is treated individually, including an explanation of the variable, findings from the prior literature and an expectation of the result of each variable.

Dependent variable

In this research the dependent variable is an element of timeliness which is defined as 'reporting lag'. In this paper the same measurement for the reporting lag is used as Conover, Miller and Szakmary (2008), which is defined as the amount of days between the reporting year end and the day that the financial statements are filed to an official institution. The amount of days between the reporting year end and the day of the deposit is called the 'absolute value' of the reporting lag. For the testing of the hypothesis the 'relative value' of the reporting lag is used. With the relative value the total number of days is divided by the maximum of permitted reporting lag in days. This is done so that the different national regulations of the three different countries can be taken into account. As also mentioned by Owusu-Ansah and Leventis (2006), if a company deposits its annual report within the deadline stated by the national regulation, it cannot really be stated that the company is late with its filing. If a company is within the limits it should score a relative value below 1, every score above 1 means that a company filed its annual report to late. As mentioned with the main hypothesis it is expected that there will be a difference in reporting lag, with the Netherlands scoring better than Belgium or Germany.

Independent variables

Country:

The main hypotheses in this thesis is that there are no significant differences between the reporting lag of the annual report of listed companies in Belgium, Germany and the Netherlands. To test this, two Dummy variables are added. One which will equal 1 if a company is from Germany, 0 otherwise, and one working the same way but than for Belgium companies.

Size of the company:

The variable size of the firm is an often used determinant in prior literature, often also as a control variable. Different ways of measuring the size of the company has been used. For example, Wu, Wu and Lui (2008) used the natural log of the market value of common equity at the close of two days prior to the annual report filing date, whilst Aubert (2009) uses the log of total sales of the year as a measure for the company size. In this paper the total assets is used as a measure of company size, which is also used in prior literature of Davies and Whittred (1980), Dyer and McHugh (1975) and Carslaw and Kaplan (1991). Some can say that smaller companies are less complicated and have less to report so their reporting lag should be shorter. However, on the other hand, larger companies have more financial power and should in that situation be potentially better in reducing the reporting lag. Larger companies may have stronger internal controls, which should reduce the chance of financial statement errors that needs to be repaired, and may also be able to put more pressure on the auditors to set more pace behind their audit. Where the audit also forms an important role in the time it takes to finish the annual report and deposit it at an official institute. As a last point, larger firms are often in more interest of a larger group of stakeholders who in their turn require a timely reporting, so larger firms have more incentives to file their annual report in a timely fashion (Owusu-Ansah, 2000). This is supported by the findings of Carslaw and Kaplan (1991) who found a significant negative association between size of the company and the reporting lag. To conclude, the expectation of the variable size of the company, is that it will have a negative influence on reporting lag.

Firm performance:

To measure the variable Firm performance, the financial condition index of Zwijewski (1984) is used. The model is also used by Ahmed (2003) and Bamber, Bamber and Schoderbek (1993), who described it as a measure for firm performance or in other words to measure the financial condition of a company. In the model an estimate risk index of the financial position of the company is given with ZFC. The higher the value of ZFC, the greater the risk of bankruptcy. The model is specified as follows:

$$ZFC = -4{,}336 - 4{,}513(ROA) + 5{,}679(FINL) + 0{,}004(LIQ)$$

Where:
ZFC represents an estimated risk index of the financial condition of the company.
ROA (return on assets) = (net income / total assets)*100
FINL (financial leverage) = total debt / total assets
LIQ (liquidity) = current assets / current liabilities

If a company is scoring a high ZFC, it has a high chance of bankruptcy. According to Bamber, Bamber and Schoderbek (1993), firms with poorer financial conditions lead to higher auditor business risk. Meaning that the auditor have to do more work, which eventually will lead to more reporting lag. So it is expected that the higher the variable firm performance, the longer the reporting lag.

Loss:
The variable Loss is used to measure for bad news. As mentioned earlier in this paper, it is not really clear if Loss (bad news) will lead to more or less reporting lag. Carslaw and Kaplan (1991) argue that companies who are reporting a loss for the period are less likely to publish in a timely manner. First of all, companies may wish to delay bad news to smooth the impact of the bad news, by delaying the report and partially let the market get used to the expectation of bad news. Furthermore, the same argument about the audit is applicable as with the firm performance variable. Auditors may proceed more cautiously towards the audit, increasing the amount of work and time. These arguments, however are counter to that of Skinner (1994, 1997) who argued that to reduce possible litigation costs, companies have incentives to publish bad news more quickly. Using the same approach as Carslaw and Kaplan (1991), companies reporting a loss in the researched period are assigned a 1, the other a 0. Further, since the conflicting prior research about this variable, no prediction of the impact on reporting lag is given, following the example of Sengupta (2004).

ROE:
Conover, Miller and Szakmary (2008) used Return on equity (ROE) as a proxy for a firm-specific characteristic that influences reporting lag. They find a negative correlation between ROE and reporting lag. Meaning that a higher return on equity leads to a shorter reporting lag. Aubert (2009) stated that a higher ROE (better profitability) makes companies to publish their annual report more early, using the good news to benefit from high profitability in

shareholders' investments. Following their example the prediction is that ROE will have a negative correlation with reporting lag for Belgium, German and Dutch listed companies.

Financial Company:

By using the classifications by Orbis and the different stock exchanges, it is possible to classify each individual company by its primary industry. In accordance with Carslaw and Kaplan (1991) and Krishnan and Yang (2009), financial (service) companies were assigned with a 1, others 0. Prior research has shown that industrial companies on average take longer to deposit their annual report than their financial counterparts (Carslaw and Kaplan (1991), Krishan and Yang (2009) and Owusu-Ansah and Leventis (2006)). The argument used by Carslaw and Kaplan (1991) is that financial (service) companies typically have little or no inventory. Inventories are much harder to audit and represent an area where material errors frequently occur. Needing less time to audit, will decrease the reporting lag, meaning that the expectation of the variable Financial company is a negative correlation.

Litigation Risk:

Just as with financial (service) companies, is it possible to classify some other companies as technological companies. Previous literature by Aubert (2009), Krishan and Yang (2009) and Sengupta (2004) used Technology companies (TECH) as a measurement for litigation risk. Following the arguments of Skinner (1994) that the threat of lawsuits arising from large negative earnings surprises gives managers strong incentives for pre-announcing information in order to reduce litigation costs. Furthermore, Skinner (1994, 1997) showed that companies reporting bad news are more likely to report in a more timely fashion than firms releasing good news. Indicating that timely disclosures are most likely to play an important role in reducing litigation costs. Which is supported by Pukthuanthong (2010), who also mentions that investors and analysts do not like negative earnings surprises and that they discount companies that are not transparent about potential negative earnings. This will also damage the company's reputation. From prior literature, Sengupta (2004) stated that TECH companies are more likely to warn stakeholders of an earnings surprise, which supports the argument that litigation risk provides motivation for quicker disclosure. The following measure is used for Litigation risk, where it equals 1 if a company belongs to the technological sectors (computers, software, programming), and 0 otherwise. If this variable is effectively in capturing litigation risk and firms partake early disclosure to reduce litigation risk, the reporting lag should be negatively associated with it.

Debt to asset ratio:

Besides the measurement of Tech companies to invest the effect of litigation risk, Aubert (2009) also uses the debt to asset ratio. Moreover, some might say that debt is playing a more important role in annual reporting choices than one will think of in first case. Ball, Robin and Sadka (2008) argued that timely loss recognition, overall timeliness and conditional conservatism are associated with debt market size. Meaning that the amount of debt at a company can have an influence on the reporting lag of the annual report. However, other prior literature by Carslaw and Kaplan (1991) and Wu, Wu, and Liu (2008) states the contrary. Eventually a higher level of debt might indicate that the financial health of a company is decreasing, which ultimately will lead to more attention from the outside and longer audits with a longer reporting lag as a consequence. Second, unlike shareholders, debtholders have obtained certain rights, such as the ability to repossess some of the company's assets. Thus, debtholders might put less weight on the companies to report in a timely way, because of these additional rights. If these last arguments hold, it is expected that a higher debt to asset ratio have a positive effect on reporting lag.

Year-end:

Most of the companies in Europe have their financial year end on the 31st of December. As almost all the companies need to report in the period after December the 31st, a huge increase in workload occurs for the auditors with probably scheduling problems as a result. In compliance with Carslaw and Kaplan (1991), the busy season with 31st of December as it year-end date is assigned a 1, all other dates a 0. Furthermore, the expectation is that the vastly flow of year-ends at 31st of December will have a positive association with reporting lag.

Board size:

Besides the financial and industrial factors, prior literature also indicated that the amount of members of the board could have an influence on reporting lag. Wu, Wu and Liu (2008) empirically proved that the board size has a positive effect on reporting lag at Taiwanese listed companies. As the amount of directors increases, the quality of the communication could get more and more harder to maintain and decision-making could also be slowed down. However, for a more timely annual report filing, there needs to be more efficient monitoring, communication and coordination with the board. Thus, an increase in board size will lead to

ineffectiveness in these items, resulting in an increasing of reporting lag, meaning a positive association.

Board independence:

The composition of the board of a company is influenced by the inclusion of independent directors. Their primary responsibility is to oversee the company's internal control system, the acquisition and disposal of assets, and lending or endorsement events (Wu, Wu and Liu, 2008). The opinions of the independent directors should be considered by the board and needs to be recorded in the minutes of board meetings. Wu, Wu and Liu (2008) found that there is a negative correlation between board independence and reporting lag for the Taiwanese companies. If this also holds for the Dutch, Belgium and German listed companies, a negative association is expected.

Big Four:

Outside factors can also have their influence on the amount of reporting lag. Prior literature has found that the fact if a company is audit by one of the big international auditors, will have a negative effect on the reporting lag of the annual report. Wu, Wu and Liu (2008) argues that the bigger the auditor is, the higher the number of clients it has and the less the auditor has incentives to behave opportunistically, which will lead to a higher quality of the audit. However, one can say that a big international auditor wants to differentiate itself from the local auditors by conducting the audit in a more timely fashion. Furthermore, bigger auditors might be able to work more efficiently and have greater flexibility in scheduling to do the audits on a timely basis (Carslaw and Kaplan, 1991). Nowadays only four big international auditors are left. If a company is audited by one of the big four auditors (Ernst & Young, PWC, Deloitte and KPMG) it is assigned a 1, all others assigned a 0. If the explanation holds, the attendance of a big four would have a negative influence on reporting lag.

Audit opinion:

Each audit should end with an audit opinion. If a company received a standard unqualified opinion it is assigned a 1, otherwise a 0. Prior research by Carslaw and Kaplan (1991), Owusu-Ansah and Leventis (2006) and Whittred (1980) have questioned the relationship between the audit opinion and reporting lag. They find that companies which receive an audit opinion other than a standard unqualified opinion, are more likely to have a larger reporting lag. An explanation is given by Whittred (1980), stating that the professional auditing

standards require that all possible and reasonable steps to issue an unqualified opinion are taken by the auditors, before they can issue a qualified opinion. Moreover, auditors are also not very excited to give qualified opinions, so it is expected that increase their work to resolve any irregularities. Naturally, the management of a company does not want to receive a qualified audit report, so they are likely to negotiate with the auditor if any irregularities arise. This is also supported by Yim (2011) who stated that if an auditor observes a red flag it will respond and perform more controls. All this will lead to more reporting lag, so the expectation is that a standard unqualified opinion will have a negative effect on reporting lag.

Previous late:

In the section about country differences it was shown that each country has its own regulation towards annual reporting and reporting lag. What they do have in common is that all three of the countries in this research fine a company if it is late with the deposit of its annual report at the official institution. These fines might differ in the amount a company has to pay at each country, however they all are meant to give companies incentives to deposit their annual report in time the next year. To examine if these fines have any influence, the dummy variable Previous late is added to the model. If a company was late in 2009 it is assigned with a 1, 0 otherwise. The occurrence of a late deposit in 2009, should lead to a more timely deposit in 2010, meaning a negative effect on the reporting lag.

US stock:

Many prior literature focuses on the situation in the US. Furthermore, in the research by Conover, Miller and Szakmary (2008) it is shown that the US scores better than the countries in this thesis. So it can be expected that companies that are also stated in the US have a shorter reporting lag than companies that are only stated in their primary country. Moreover, recall that the rules in the US are more strict than in the EU countries. To test if stating on the stock in the US has an effect, the companies who are also stated in the US are assigned a 1, all others a 0.

Model:

Putting it all together to following model can be composed:

Reporting lag = β_0 + β_1Belgium + β_2Germany + β_3Size + β_4Performance + β_5Loss + β_6ROE + β_7Fincomp + β_8Litigation risk + β_9Debt ratio + β_{10}Yearend + β_{11}Boardsize + β_{12}Independence + β_{13}Bigfour + β_{14}Opinion + β_{15}Previous Late + β_{16}US stock + ε

The following table summarizes the model and the expected effects.

Table 5.2 Determinants of the financial reporting lag and expected effects

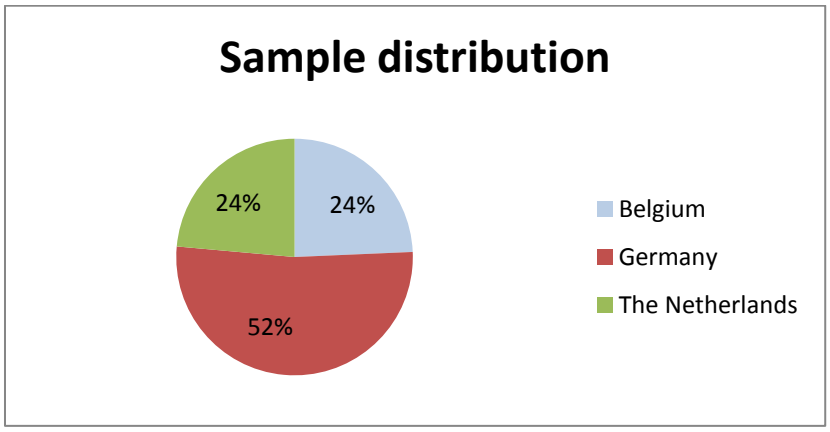
Dependent variable	Methodology	
Reporting Lag	The amount of days between the reporting year end and the day that the financial statements are filed to an official institution divided by the maximum permitted reporting lag. (Davies and Whittred (1980), Dyer and McHugh (1975), Haw et al. (2000), Owusu-Ansah and Leventis (2006))	
Independent variable	Methodology	Expected sign
Country	(0) The Netherlands (1) Belgium (2) Germany	 = =
Firm performance	Financial condition index of Zmijewski (1984) (Ahmed (2003), Bamber et al. (1993))	+
Loss	Companies reporting a loss for the period assigned a 1, if not assigned a 0 (Carslaw and Kaplan (1991), Sengupta (2004))	?
ROE	Return on equity (Conover et al. (2008)	+
Financial company	Equals 1 if financial company, 0 otherwise (Carslaw and Kaplan (1991))	-
Litigarion risk	Equals 1 if technical company, 0 otherwise (Sengupta (2004), Skinner (1994))	-
Debt to asset ratio	Proportion of debt to total assets (Carslaw and Kaplan (1991), Conover et al. (2008))	+
Year end	Equals 1 if financial year end on 31/12, 0 otherwise (Carslaw and Kaplan (1991))	+
Board size	Amount of persons in the board (Wu, Wu and Liu (2008))	+
Board independence	Percentage of independent directors on the board (Wu, Wu and Liu (2008))	-
Big four	Equals 1 if auditor is a Big Four auditor, 0 otherwise (Carslaw and Kaplan (1991), Owusu-Ansah and Leventis (2006), Wu, Wu and Liu (2008))	-
Audit opinion	Equals 1 if a standard unqualified opinion, 0 otherwise (Ashton et al. (1987), Carslaw and Kaplan (1991), Owusu-Ansah and Leventis (2006), Wu, Wu and Liu (2008))	-
Previous late	Equals 1 if a company deposit its annual report beyond the regulatory limmit in the previous year, 0 otherwise	-
US stock	Equals 1 if the company is also stated at the stock exchange in the US	-

6. Results

6.1 Descriptive statistics

The results described in this chapter are based on 98 Belgium, 210 German and 95 Dutch companies. In figure 6.1 the distribution of the sample is shown. Germany holds the biggest part of the sample because there were much more companies on the Frankfurter stock exchange.

Figure 6.1 Sample Distribution



The descriptive statistics of the non-dummy variables are shown in table 6.1. Both the absolute value and the relative value for the reporting lag that is regression analysis are shown in the table. The dummy variables will be evaluated individually with figures.

Looking at the values for reporting lag it can be seen that the lowest values can be found in the Netherlands, where Sligro Food Group deposited its annual financial report within 39 days to the official institute. In contrast, the shortest lag in Germany is almost the double of that in the Netherlands. Furthermore, the longest reporting lag in both relative and absolute can be found in Germany, where the company First sensor needed 357 days to deposit its annual financial report. Looking at the maximum value for the relative reporting lag it can be seen that this is above 1. This means that not all companies were able to report within the permitted time. However, more shocking is the fact that the mean value for German companies is above one. Looking at the distribution of companies in Germany which reported in time, it is clear that more than half of the companies do not manage to deposit their annual financial report in time. The amount of firms that reported on time will be further explained later with the dummy variable ‘late 2009’.

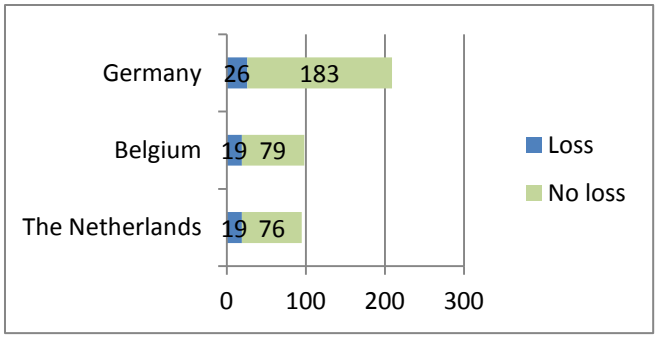
Further analysis of the descriptive variables shows that companies in Germany on average are much larger that their Belgium or Dutch counterparts. Another point is that the maximum board size that is found, is at a German company. With a board of 50 members, this is much more than can be found in Belgium or the Netherlands. However, looking at the board independence, it is shown that the board in Belgium companies is less independent than in German or Dutch companies.

Table 6.1 Descriptive statistics

		Minimum	Maximum	Mean	Std. Deviation
Reporting lag (absolute values: in # days)	Belgium	83	297	158,12	34,06
	Germany	67	357	129,28	32,44
	The Netherlands	39	168	92,09	28,07
Reporting lag (relative values: # days / allowed # days)	Belgium	,39	1,39	,74	,16
	Germany	,55	2,93	1,06	,27
	The Netherlands	,32	1,38	,75	,23
Size (x €1000)	Belgium	8084	85527813	2070918	8831716
	Germany	3731	199393000	7641293	25374893
	The Netherlands	36	41167000	3253053	7018090
Firm performance	Belgium	-207,98	432,52	-10,46	72,00
	Germany	-133,59	1866,39	-6,89	136,76
	The Netherlands	-280,62	682,03	-5,89	93,94
ROE	Belgium	-15,086	,626	-,134	1,631
	Germany	-2,014	17,706	,158	1,243
	The Netherlands	-5,581	,710	-,007	,634
Debt to asset ratio	Belgium	,001	,941	,503	,222
	Germany	,067	2,010	,568	,213
	The Netherlands	,055	,969	,568	,185
Board size	Belgium	3	29	10,67	4,65
	Germany	4	50	14,86	8,79
	The Netherlands	2	16	7,72	3,07
Board independence	Belgium	,10	,85	,40	,15
	Germany	,25	,94	,65	,14
	The Netherlands	,33	,83	,64	,09

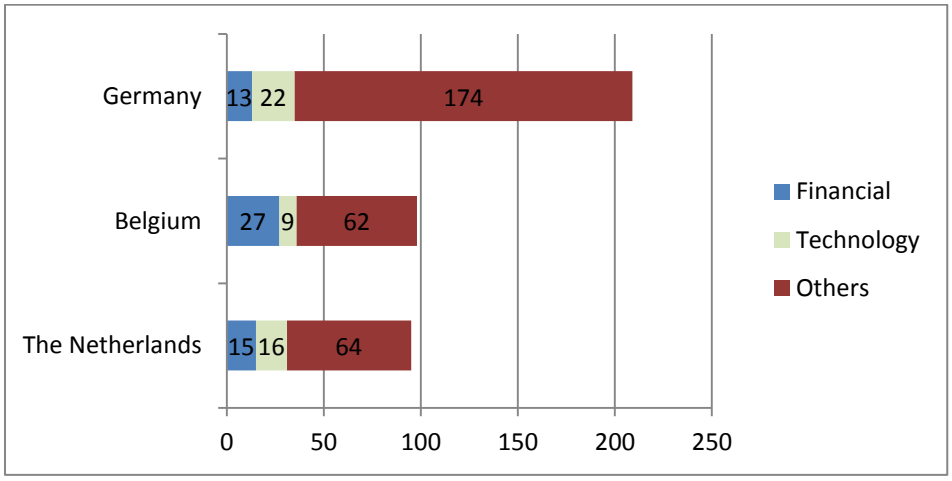
The number of companies that reported a loss during 2010 is almost the same over the three countries, except for Germany that has a few more as can be seen in figure 6.1. If this is translated towards the total amount, the German companies relatively report less loss than their Belgium and Dutch counterparts.

Figure 6.1 Frequency distribution of Loss



Most of the companies of three countries in the sample operate in an industry type differently than that of the financial (service) or technology industries. In figure 6.2 it can be seen that in Belgium, however, more financial (service) companies are present than in the other two countries.

Figure 6.2 Frequency Financial and Technology companies



In Europe it is common for most of the companies to end their financial year on 31st of December. This is reflected in the result shown by figure 6.3, where the majority of the companies are the ones that have their year-end on December the 31st.

Figure 6.3 Frequency distribution of Yearend

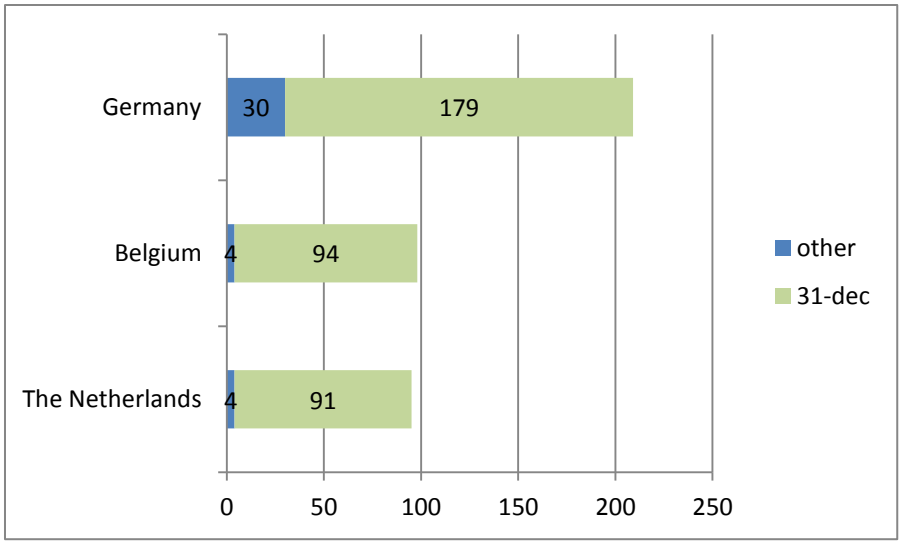
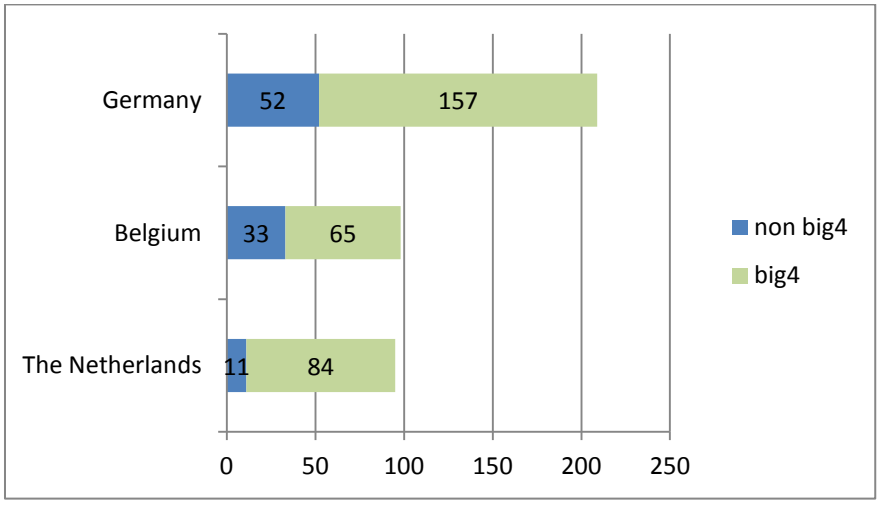


Figure 6.4 shows an interesting result for the distribution of Big4 auditors. Germany and the Netherlands show a quite normal distribution where the biggest part of the auditors is a big4 auditor. In Belgium, however, this is not completely the case. As can be seen in figure 6.4 the amount of big4 auditors is still the biggest part, but the non-big4 auditors equal a third of the total amount. This is fairly more than in the other two countries.

Figure 6.4 Frequency distribution of big4 / non-big4 auditors



Every audit eventually will lead to an opinion of the auditor if the financial report gives a fair view of the company. If everything is all right the opinion will be in the form of a unqualified standard opinion. This will be in most of the cases, as can be seen in the results. Furthermore,

German companies score relatively only slightly better than the Belgium or Dutch companies, as shown by figure 6.5.

Figure 6.5 Auditor opinion

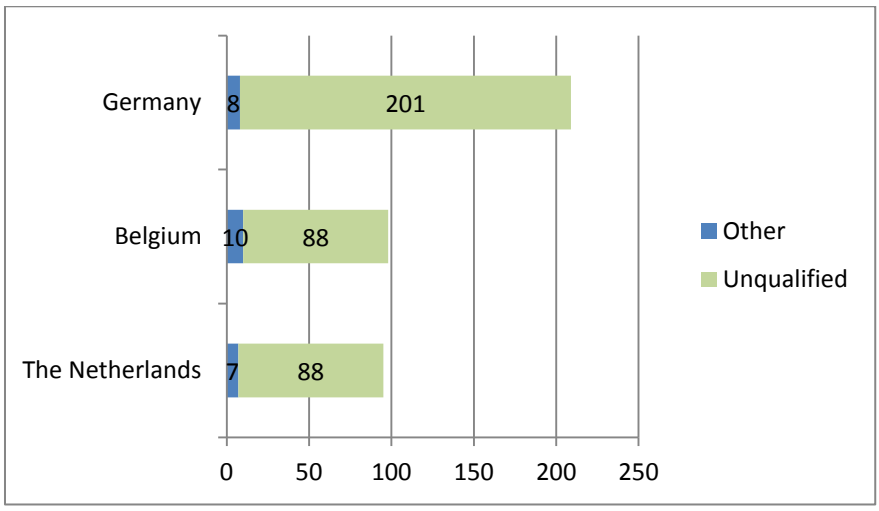
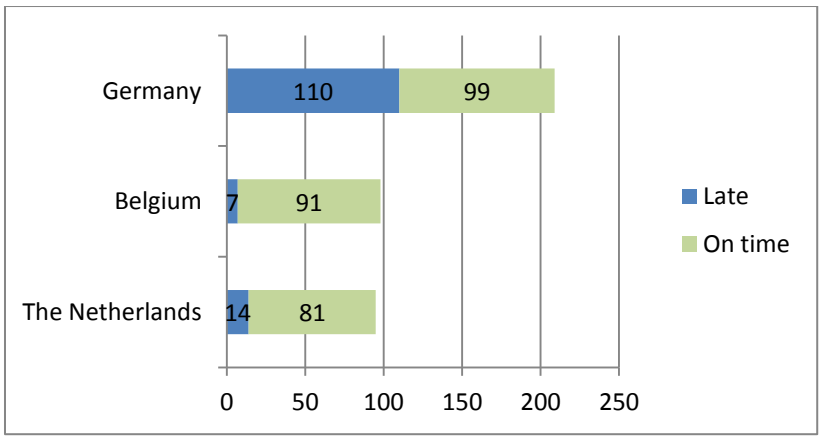


Figure 6.6 shows that the majority of the companies in Belgium and the Netherlands reported on time in 2009. German companies however, show a huge difference towards these results. More than half of the companies in Germany filled their financial report to late in 2009. This is an interesting finding, which already gives an indication that German companies report less timely than their Belgium and Dutch counterparts.

Figure 6.6 Late in 2009



No figure is given for the variable US stock, because across the complete sample only 14 companies are also listed in the US. Furthermore, these companies are also evenly spread across the three countries.

6.2 Analysis of the regression

Table 6.2 shows the results of the determinants of the relative reporting lag. The results of the regression are based on the full sample of 402 observations for the year 2010. A significant portion of the variance in the dependent variable reporting lag is explained by the independent variables in the model. The R^2 of the model is 0,398 which means that almost 40% of the variance in the reporting lag is explained by the model. After trimming the top and bottom 2% for outliers, the R^2 even increases to 0,451.

Table 6.2 Results of the regression for reporting lag

Number of observations	402			
R^2	,398			
Adjusted R^2	,373			
	Independent variables	Predicted sign	Coefficients	Significance
	(constant)		,803	,000
	BE	=	-,003	,951
	DE	=	,265	,000
	Size (total assets)	-	,000	,521
	Performance	+	,000	,769
	Loss	?	,061	,105
	ROE	-	,002	,863
	Fin comp	-	,010	,762
	Tech comp	-	,064	,077
	Debt ratio	+	-,083	,158
	Year end	+	,013	,737
	Board size	+	-,001	,536
	Independence	-	,022	,802
	Big 4	-	-,036	,211
	Opinion	-	-,034	,509
	Late 2009	-	,153	,000
	US stock	-	-,012	,860

Looking at the results it can be seen that some variables effect the reporting lag as expected and some do not. However, only the dummy's for German companies, Tech comp (litigation

risk) and late filing in 2009 are significant at either the 1% or 10% level. The coefficient for German companies is significant at the 1% level and has a positive effect on reporting lag. This is partially in line with the findings of Conover, Miller and Szakmary (2008) and the point estimates of government effectiveness from the paper of Kaufmann, Kraay and Mastruzzi (2009), except for the fact that Belgium firms have a slightly negative but certainly no significant effect on reporting lag. The hypothesis that there is no difference between Belgium, German and the Netherlands in means of reporting lag is not supported by the results of the regression. Although there is no significant difference between Belgium and Dutch companies, German companies on the other hand do have a longer reporting lag, meaning that the hypothesis in this thesis is rejected. This result is no different after trimming for outliers.

Continuing the results by looking at the control variables it can be seen that the technology companies at the 10% level and the late filing in 2009 at the 1% level have a significant influence on the reporting lag. The variable for technology companies has a slightly positive effect on reporting lag, which is not in line with the findings in prior literature by Sengupta (2004). Sengupta (2004) found a significantly negative effect of the technology companies, meaning that the litigation risk indeed plays a important role in shortening the reporting lag. In the results of this thesis however, the opposite is found. The variable for late filing in 2009 also has a positive effect on reporting lag. This will not directly mean that companies who deposited their annual financial report to late in 2009 did not improve their reporting lag. But companies who deposited their annual financial report late in 2009 are still more likely to have more reporting lag than other companies.

After trimming the top and bottom 2% for outliers, not much changes for the results. However, the variable Loss do become significant at the 1% level and the variable for technology companies goes from the 10% to the 1% significance level. In this case Loss has a positive effect on reporting lag, which is in line with previous literature like Givoly and Palmon (1982), who stated that good news will be reported more timely than bad news.

With the results from the regression know, the research question of this thesis can be answered. Recall that the research question was:

What drives European firms in their decision to publish their annual report on a certain date?

The variables Loss (after trimming), technology companies and late filing in 2009 all have a significant influence on the reporting lag. Furthermore, they all have a positive influence, meaning that the occurrence of the variable would probably lead to a longer reporting lag. Also the main hypothesis that there is no difference between Belgium, German and the Netherlands towards reporting lag after the introduction of IFRS is rejected, due to the fact that the dummy for German companies is positive and significant at the 1% level.

7. Conclusion, limitations and recommendations

7.1 Conclusion

In this thesis I investigated the factors influencing the reporting lag in European countries. To be able to answer this question the listed firms in Belgium, Germany and the Netherlands were investigated for the year 2010. First the incentives for timely financial reporting was examined in this thesis. Managers of the companies have incentives to publish their financial information to reduce the cost of capital. Moreover, to avoid negative consequences they also have incentives to do this in a timely manner. If the annual financial report is not deposit in a timely manner, the company breaches the rules set up by exchanges and governments (Conover, Miller and Szakmary, 2008), there will most possible be a negative reaction from the market (Bagnoli, Kross and Watts, 2002), the change of litigation increases and the company's reputation can by damaged (Skinner, 1994 and 1997).

The relative value of the reporting lag in the three countries is used, according Davies and Whittred (1980). For this the total number of days it takes between the year end and to deposit the annual financial report to the official institution is divided by the total number of days allowed. With the relative reporting lag the hypothesis that there is no difference between Belgium, Germany and the Netherlands is tested. Furthermore I included control variable to see what might influence the reporting lag in the three countries. After looking at the results it was clear that the hypothesis needed to be rejected, because the dummy for German companies was significant and positive effecting the reporting lag. This means that German companies significantly take longer to deposit their annual financial report than companies in the Netherlands, which was the base value. The dummy for Belgium companies seems not to be effecting the reporting lag in any way, meaning that the reporting lag in Belgium is about the same as in the Netherlands. Very important is the fact that German companies not only seems to need longer but that more than half of the companies reported late. Furthermore, looking at the control variables, it can be seen that loss (after trimming the top and bottom 2%), Technology companies and previous late filing in 2009 positively effects reporting lag.

7.2 Limitations and recommendations

Most of the information used in this thesis was not directly available in the databases. The dates of the deposit at the official institution and many other variables had to be manually

collected. Although I tried to work as precise as possible, some minor mistakes could have been made, slightly biasing the data. However this should not be of any difference to the results in the thesis.

As my limited knowledge of formal languages limits me to widely examine the entire European situation, this could though be an interesting follow up. As mentioned earlier in the thesis, not much research is done towards multiple country comparison in the EU after introduction of IFRS. Furthermore, in this thesis only one year is used. To examine for an improvement or maybe a decline in the reporting lag, multiple years should be evaluated.

Besides the definition for the reporting lag used in this thesis, other components of reporting lag can also be used for a follow up research (for example: Whittred, 1980). Finally, the characteristics and cultural influences of countries could be invested as a influence on reporting lag.

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Appendix

The six dimensions of the table of Kaufmann, Kraay and Mastruzzi (2009)

Below are the definitions of the six dimensions of governance from the table by Kaufmann, Kraay and Mastruzzi (2009), that are used in this paper. This is cited from the paper of Kaufmann et al.

1. *Voice and Accountability*: capturing perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association and a free media.
2. *Political Stability and Absence of Violence*: capturing perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.
3. *Government Effectiveness*: capturing perceptions of the quality of public services, the quality of the civil services and the degree of its independence from political pressures, the quality of policy formulation and implementation and the credibility of the government's commitment to such policies.
4. *Regulatory Quality*: capturing perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.
5. *Rule of Law*: capturing perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular that quality of contract enforcement, property rights, the police and the courts, as well as the likelihood of crime and violence.
6. *Control of Corruption*: capturing perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

Sample list

Following are the lists of companies used in the final sample.

Table 2 Sample companies

Table 1: Companies in the sample	**Belgium**		
	4Energy	Hamon	Ter Beke
	AB Inbev	Henex	Tessenderlo
	Ablynx	Home	Texaf
	Accentis	IBA	Thenergo
	Ackermans	Interv.Retail-Sifi	Think-Media
	Aedifica	Intervest	Thrombogenics
	Agfa-Gevaert	Jensen Group	Tigenix
	Alfacam Group	KBC	Transics
	Arseus	Keyware	UCB
	Ascencio	Kinepolis Group	Umicore
	Atenor Group	Leasinvest-Sicafi	Van de Velde
	Banimmo	Lotus Bakeries	VGP
	Barco	MDXHealth	VPK Packaging
	Befimmo-Sicafi	Melexis	Warehouse-Sicafi
	Belgacom	Miko	WDP-Sicafi
	Belreca	Mobistar	Wereldhave
	Beluga	Montea	Zenitel
	Brederode	Moury Construct	Zetes Industries
	Campine	Nyrstar	
	Cimescaut	Option	
	CMB	Picanol	
	Cofinimmi-Sicafi	Pinguinlutosa	
	Connect Group	Punch	
	D'Ieteren	Quest for Growth	
	Deceuninck	Realdolmen	
	Deficom Group	Recticel	
	Delhaize Group	Rentabiliweb	
	Devgen	Resilux	
	Duvel Moortgat	Retail Est.-Sicafi	
	Eckert-Ziegler	Rosier	
	Econocom Group	Roularta	
	Elia	Sapec	
	Euronav	Scheerd.V Kerchove	
	EVS	Serviceflats	
	Exmar	Sioen	
	Floridienne	Sipef	
	Fluxys	Sofina	
	Fountain	Solvay	
	Galapagos	Spector	
	Gimv	Telenet Group	

Germany					
Axel Springer	Cewe Color Holding	Gesco	Lanxess	Rational	Volkswagen
Aap Implantate	Compugroup	GFK	Leifheit	Rheinmetall	VTG
ADC	Conergy	GFT Technologies	Leoni	Rhoen-Klinikum	Wacker Chemie
Adidas	Constantin Medien	Gildemeister	Linde	Ruecker	Wilex
Adler	Continental	Grammer	Lloyd Fonds	RWE	Wincor Nixdorf
Adva	Cropenergies	Graphit Kropfmuehl	Loewe	Salzgitter	Wirecard
Agennix	CTS Eventim	Hamborner	Lufthansa	SAP	Xing
Ahlers	Curanum	Hamburg Hafen	Magix	Schaltbau Holding	Youniq
Aixtron	Daimler	Hansa Group	Man	Secunet Security	Zooplus
Aleo Solar	Data Modul	Hawesko Holding	Manz	Sedo Holding	
All For One	Demag Cranes	HCI Capital	Masterflex	SGL Carbon	
Alphaform	Deufol	Heidelberg Druckma	MBB Industries	Siemens	
Alstria	Deutsche Euroshop	Heidelberg Cement	Mediclin	Singulus	
Amadeus Fire	Deutsche Post	Henkel	Medigene	Sixt	
Analytik Jena	Deutz	Hochtief	Medion	SMA Solar	
Artnet	Douglas Holding	Hornbach Holding	Merck	SMT Scharf	
Atoss Software	Drillisch	Hornbach Baumarkt	Metro	Softing	
Augusta	DT Telekom	Hugo Boss	Mevis Medical	Solar-Fabrik	
Aurubis	Duerr	IFM immobilien	Morphosys	Solarworld	
Balda	E.on	Indus Holding	MTU Aero engines	Stada	
Basf	Ecotel	Infineon	Muehlbauer	Stratec Biomedical	
Basler	Einhell Germany	Init Innovation	MVV Energie	Stroeer	
Bauer	Elexis	Integralis	Nemetschek	Suedzucker	
BMW	Elmos	Intershop	Nexus	Sunways	
Bayer	Epigenomics	Intica Systems	Norma Group	Surteco	
Baywa	Essanelle Hair	Invision Software	November	Sygnis Pharma	
Beate Uhse	Estavis	Isra Vision	OHB	Symrise	
Bechtle	Euromicron	Itelligence	OVB Holding	TAG Immobilien	
Beiersdorf	Evotec	IVG Immobilien	Paion	Technotrans	
Bertrandt	First Sensor	IVU Traffic	Paragon	Telegate	
Bilfinger Berger	Fortec Elektro	Jenoptik	Patrizia Immobilien	Thyssenkrupp	
Biotest	Francotyp-Postalia	Jetter	Pfeiffer Vaccuum	Tognum	
BMP Media Investors	Fraport	Jungheinrich	Phoenix Solar	Tom Tailor	
Cancom	Freenet	K+S	PNE Wind	Tui	
Carl-Zeiss	Fresenius	Kloeckner	Praktiker	United Labels	
Celesio	Funkwerk	Koenig+Bauer	Progress-Werk	USU Software	
Cenit	GEA Group	Kontron	PSI	VBH Holding	
Centrosolar Group	Geratherm	Krones	Pulsion	Versatel	
Centrotec	Gerresheimer	Kuka	PVA Tepla	Villeroy+Boch	
Centrotherm	Gerry Weber	KWS Saat	QSC	Vita 34	

The Netherlands		
Aalberts	HITT	Unilever
Accell Group	Holland Colours	Unit 4
Aegon	Hydratec	USG People
Ahold	ICT Automatisering	Value8
Ajax	ING Groep	Van Lanschot
Akzo Nobel	Kardan	Vastned Retail
AMG	KAS Bank	Vivenda
Amsterdam C.	Kendrion	Vopak
AMT Holding	KPN	Wavin
AND International	Macintosh	Wegener
Arcadis	Mediq	Wereldhave
ASM International	Nedap	Wessanen
ASML Holding	Nedsense	Witte Molen
Ballast Nedam	New Sources	Wolters kluwer
BAM Groep	Neways	Xeikon
Batenburg	Nieuwe Steen	
BE Semiconductor	Nutreco	
Beter Bed	Octoplus	
Bever Holding	Oranjewoud	
Binckbank	Ordina	
Boskalis	Pharming Group	
Brill	Philips	
Brunel	Porcelyene Fles	
Corio	PostNL	
Crown Van Gelder	Qurius	
Cryo Save Group	Randstad	
CSM	Reed Elsevier	
CTAC	Roodmicrotec	
Delta Lloyd	Roto Smeets	
DPA Group	Royal Imtech	
DSM	SBM Offshore	
Eurocommercial	Simac	
Exact	Sligro	
Fornix	SNS Reaal	
Fugro	Stern Groep	
Grontmij	Telegraaf	
Groothandelsgebouwen	Ten Cate	
Heijmans	TIE Holding	
Heineken	TKH Group	
HES Beheer	TomTom	