Empirical studies on audit quality in the Belgian market for audit services

Chapter 5
Summary and Discussion

5.1 Introduction

This chapter first provides a summary of the findings of the three empirical studies included in this dissertation. Subsequently, the conclusions and implications are presented. This is followed by a discussion of potential limitations and suggestions for future research.

5.2 Summary of the empirical studies

This dissertation consists of three empirical studies on audit quality. Each of the three studies uses data from the Belgian market for audit services. Belgium is an appropriate setting for these studies because of its unique characteristics which enable the construction of complete client portfolios at the audit firm, the local office, and the audit partner level.

The first study, discussed in chapter 2, investigates whether audit firms use audit partner expertise as a risk management strategy. Audit firms are expected to allocate audit partners based on the expertise of the audit partners and the risk characteristics of the clients for two reasons. First of all, audit standards require the engagement partner to be assured that the audit engagement team has a sufficient amount of experience with clients of a similar nature (ISA 220.A11). The engagement partner is the leader of the audit team, and his experience can be expected to be an important aspect of the overall required experience level of the engagement team. Second, from a risk management perspective, audit firms are required to sufficiently manage client risks, since a single audit failure can have a significant impact on the profitability and reputation of an entire audit firm.

However, despite the benefits of using audit partner expertise as a risk management strategy, audit firms may fail to use it effectively for three reasons. First of all, the large variation in client characteristics and partner expertise levels makes the allocation of audit partners to clients a complex task (Dopuch et al. 2003). Second, more experienced audit partners may use their power within the audit firm to avoid being allocated to more risky clients because they may be held personally accountable in case of audit failure or litigation. Third, less experienced audit partners may be under pressure to expand their client portfolios due to career concerns. Hence, less experienced auditors may be willing to audit those clients that experienced audit partners are not interested in.

The study examines whether audit partner expertise is used as a risk management strategy for three commonly distinguished risk categories (Huss and Jacobs 1991): audit risk, client business risk, and auditor business risk. Furthermore, two components of auditor expertise are

examined: general partner experience and industry experience. The results, based on an analysis of clients to which a new audit partner was allocated, show that general audit partner experience is used as a risk management strategy for auditor business risk. Furthermore, evidence shows that partner industry experience is used to manage audit risk. No evidence is found that audit firms allocate partners with greater expertise to clients with higher client business risk. Overall, the results discussed in chapter 2 suggest that audit firms use audit partner expertise to manage audit risk and auditor business risk, but not client business risk.

The second study, discussed in chapter 3, examines the effect of auditor-client economic bonding on audit quality. Audit fees may contribute to an economic bond between the auditor and the client. A strong auditor-client economic bond may impair the independence of the auditor, resulting in lower audit quality. However, auditors also face litigation and reputation costs in case of an audit failure. These costs are positively associated with client size. Reputation and litigation costs may therefore induce auditors to remain independent from clients that provide high audit fees (Reynolds and Francis 2001).

The off-setting effect of reputation and litigation costs on auditor-client economic bonding may however be limited to the audit firm level, since the benefits of audit fees mainly accrue to the local audit office or audit partner, whereas litigation and reputation costs are shared by the audit firm. Hence, there may be a moral hazard problem in which audit partners make decisions to maximize their own utility as opposed to firm value. Furthermore, clients are more likely to contribute to a significant source of revenue for a local office or audit partner, than for an audit firm. Hence, it is more likely that auditor-client economic bonding impairs auditor independence at the local office level or audit partner level rather than at the audit firm level office (Reynolds and Francis 2001). The study therefore measures auditor-client economic bonding at three levels of analysis: the audit firm level, the local office level, and the audit partner level.

Furthermore, the study distinguishes between clients that engage in upward earnings management and clients that engage in downward earnings management. Tax authorities are more likely to scrutinize the financial statements of companies that manage earnings downwards than of companies that manage earnings upwards, since downward earnings management results in a reduction of taxable income. Fear that downward earnings management will be detected by the tax authorities may create incentives for auditors to be stricter in constraining downward earnings management than upward earnings management (Vander Bauwhede et al. 2003). Given the relatively low litigious environment in Belgium, these differences in regard to the extent of public oversight create a setting in which can be examined whether reputation concerns are sufficient mechanism to ensure that audit quality is not compromised for clients on which auditors are economically dependent. Furthermore, it enables testing whether public oversight enhances audit quality.

The results of the study show that high levels of auditor-client economic bonding increase the likelihood that auditors acquiesce to client pressure to

allow earnings management. This finding is however restricted to clients that manage their earnings upwards. Auditors do not give in to pressure from clients on which they are economically dependent to allow downward earnings management. This could imply that auditors may fear downward earnings management to be detected by the tax authorities (Vander Bauwhede et al. 2003), suggesting that public oversight is an important factor in maintaining audit quality. Furthermore, the results do not support the notion that problems related to auditor-client economic bonding are more likely to manifest at the local office level and audit partner level than at the audit firm level. A possible explanation lies in the fact that Belgian audit firms and local offices are relatively smal. Independence issues at the audit partner level are therefore likely to also result in independence issues at the local office level and audit firm level, implying that any differences in results between the three levels will be limited.

The third empirical study, discussed in chapter 4, analyzes the association between competition on the market for audit services and audit quality. The market for audit services is commonly criticized to not be competitive because of the typically high market concentration levels (e.g. Government Accountability Office 2003; Financial Stability Forum 2006). A lack of competition is commonly argued to result in reduced audit quality (Yardley et al. 1992). However, it can be disputed whether high (static) concentration levels reflect a lack of competition (Buijink et al. 1998). Furthermore, while standard economic theory predicts a positive association between competition and quality on product markets, this prediction cannot be directly translated to the market for audit services because the audit industry is highly regulated and audit quality is not directly observable. Competition may result in reduced audit fees, which could reduce incentives for auditors to invest in quality, harming auditor competence and thereby lowering audit quality (Leland 1979; Kranton 2003). In addition, there may be a negative effect of competition on auditor independence, since lower audit fees may cause auditors to be dependent upon future audits of the same client to offset initial losses (DeAngelo 1981a). Reduced auditor competence and auditor independence will negatively affect audit quality (DeAngelo 1981a).

To test whether high concentration levels reflect limited competition, and to examine the association between competition on the market for audit services and audit quality, this study uses one measure of market concentration and two measures of competition. The Herfindahl index is used as a measure of market concentration. The first measure of competition is based on the market share mobility measure used by Buijink et al. (1998). The second measure of competition is a newly developed measure of competitor density, based on the geographical coordinates of all local audit offices and audit clients in Belgium.

The empirical results show that audit quality proxied by the magnitude of absolute discretionary accruals is higher in more concentrated audit markets. Overall, the results based on the competition measures show that audit quality is positively associated with competition. This finding suggests that

high concentration levels do not necessarily reflect limited competition and that highly concentrated audit markets can still be competitive.

5.3 Conclusions and implications

The first study deals with the use of audit partner expertise as a risk management strategy. While audit firms are expected to benefit from allocating audit partners with the highest expertise to those clients that pose higher risks, the actual allocation might be too complex or may be hindered by audit partner incentives. The findings show that audit firms allocate audit partners with greater general experience to clients which pose a higher auditor business risk. Audit risk is managed by the allocation of partners with greater industry experience. However, no evidence is found that client business risk is managed using partner expertise. Even though it is possible that audit firms use alternative risk management strategies to manage this type of risk, auditors should examine whether client business risk is sufficiently managed as required by auditing standards (e.g. ISA 220.14; AU. 312.02). Furthermore, it is worthwhile to investigate why audit partner expertise is not used as a risk management strategy for client business risk. Possible reasons relate to risk aversion of experienced audit partners and career pressure faced by less experienced audit partners. Pressure to develop their client portfolio might create incentives for less experienced partners to attract clients regardless of their risk characteristics. Furthermore, it is important to note that the use of general partner experience as a risk management strategy is limited to auditor business risk. Although prior research has indicated that public listing status, a proxy for auditor business risk, is considered by auditors to reflect increased auditor business risk, auditors and regulators need to consider whether the allocation of experienced personnel to clients with a high auditor business risk is in fact the result of a risk management strategy. Alternatively, it could be explained by prestige and career perspectives associated with the audit of a listed client. This alternative explanation is a concern especially since the use of general audit partner experience as a risk management strategy is limited to auditor business risk. Hence, it is important for audit firms and regulators to consider whether audit partner experience is used by audit firms as a risk management strategy, and whether audit quality could benefit from ensuring that audit partners with more years of experience are allocated to clients with high audit risk and high client business risk. With respect to the current debate on fair value accounting and the need for audit partner expertise (e.g. IAASB 2008), the findings of this study suggest that auditors should consider what aspect of expertise (i.e. the number of years of experience or industry experience) is required for auditing judgments associated with fair value accounting. Furthermore, auditors and regulators need to ensure that guidelines and regulation are in place to ensure that the allocation of experts to engagements occurs in a manner in which audits can benefit most from audit partner expertise.

The results of the second study, which analyzes the effect of auditor-client economic bonding on audit quality, suggest that high auditor-client economic bonding only induces auditors to acquiesce to client pressure to allow upward earnings management, not downward earnings management. This result can be explained by an increased fear by auditors that material misstatements will be detected by the tax authorities if clients engage in income decreasing, hence taxable income decreasing, earnings management. This result shows the importance of public oversight in maintaining audit quality, and adds to the current debate on the need for increased public oversight (e.g. Financial Stability Forum 2008; Basel Committee 2008). The results reported in the study are consistent across the three levels of analysis (i.e. the audit firm level, the local office level, and the audit partner level). This suggests that there is no moral hazard problem arising from the fact that reputation and litigation costs are carried by the entire firm, while the benefits related to the audits of single clients pertain mostly to individual audit partners and local audit offices. This may be due to the fact that audit firms in Belgium are relatively small. Conflicts of interests between individual audit partners and audit firms will be less prominent in smaller audit firms than in larger audit firms, because audit partners in small audit firms typically have a relatively larger interest in the audit firm.

The third and final study examines the relationship between competition on the market for audit services and audit quality. The results of this study show that competition is positively associated with audit quality. This finding is in line with the positive effect of competition on quality suggested by standard economic theory. It is therefore important for regulators to ensure that the market for audit services remains competitive. The results also show a positive relationship between audit market concentration and audit quality. This finding therefore shows that high market concentration does not, by definition, reflect limited competition. It is important for regulators to take this into account to make certain that regulation is not merely aimed at lowering concentration levels. Although this study shows mixed findings regarding the effect of audit firm size on audit quality, the positive association between concentration levels and audit quality suggests that audit quality may be higher in more concentrated audit markets. Robustness checks conducted for the study show that the positive association between competition on the audit market and audit quality is limited to clients that engage in downward earnings management. No effect between competition and audit quality is found for clients that engage in upward earnings management. This finding is likely related to fear by auditors that downward earnings management will be detected by the tax authorities. This may induce auditors to be stricter in reducing downward earnings management than upward earnings management. This underlines the importance of public oversight in maintaining audit quality.

Overall, the findings of this dissertation suggest that there are opportunities for the audit profession and audit regulators to enhance audit quality. With respect to the use of partner expertise as a risk management strategy, the results of the first study show that audit firms allocate audit partners with greater expertise to clients that have a higher audit risk and

clients that have a higher auditor business risk. However, no association is found between client business risk and audit partner expertise. While one explanation could be that alternative risk management strategies are more efficient at managing this type of risk, it is also possible that auditor partner expertise is not used as a risk management strategy due to risk aversion by auditor partners. Therefore, audit firms and regulators should focus on ensuring that the partner allocation process is effective since it reduces the risk that client risks are not sufficiently managed. Furthermore, the allocation of partners with greater expertise to risky clients results in a higher probability that material misstatements are detected by the auditor. Hence, it is important that auditors with high levels of expertise are allocated to clients with greater risk because this will have a positive impact on audit quality. With respect to auditor independence, the findings of the second study suggest that auditors may acquiesce to pressure by influential clients to allow earnings management. Hence, regulators and audit firms should focus on ensuring that auditors remain independent from their clients. Furthermore, the findings suggest that public oversight is an important factor in maintaining auditor independence. This adds to the current debate on whether public oversight is needed to enhance audit quality. With respect to competition, the third study shows that competition has a positive association with audit quality, but only for clients that engage in income reducing earnings management. This suggests that regulators need to ensure that the market for audit services remains competitive, because competition is positively associated with audit quality. Furthermore, the findings of the third study underline the importance of public oversight in maintaining audit quality.

5.4 Limitations and suggestions for future research

There are a number of limitations to this dissertation. Some are general limitations that relate to all three studies, while some specifically relate to an individual study. The first general limitation relates to the fact that audit fee data were not publicly available in Belgium at the time of the study. This limitation affects each of the three studies. As a result of this limitation, the first study is required to measure industry experience based on the sales revenues and total assets of the audit clients instead of audit fees. The second study measures auditor-client economic bonding based on client revenues instead of audit fees. Similarly, the measures of competition used in the third study are computed based on client asset data instead of audit fee data. However, the natural logarithms of client revenues and client assets are found to be highly correlated with audit fees (e.g. Francis 1984, Moizer and Turley 1987, Craswell et al. 1995, Reynolds and Francis 2001). In addition, the Belgian Institute of Auditors requires a direct relationship between the level of the audit fees and client characteristics. Every auditor has to report an overview of its clients, the audit fees and the amount of hours to the Belgian Institute of Auditors, who verify the appropriateness of

the audit fees. Therefore, the use of client revenues or client assets instead of audit fees does not seem to be a major concern. Although the proxies provide a reliable estimation of auditor-client economic bonding and relative market share distributions, they do not control for possible changes in the level of audit fees. Hence, it would be valuable to replicate these studies in a setting where regulators require both public and private companies to disclose audit fees.

The second general limitation relates to the external validity of the studies. Belgium has a relatively low litigious environment compared to commonly used settings in audit research, such as the U.K. and the U.S. Even though prior research has shown that there are mechanisms other than litigation in place to ensure that audit quality is maintained at a sufficiently high level regardless of a relative lack of litigation (Gaeremynck and Willekens 2003), external validity of the results may be considered an issue. The implication of this lack of litigation for the findings of the first study is that it is even more likely for audit partner expertise to be used as a risk management strategy in more litigious environments where the possible impact of unmanaged risks is greater. Regarding the second study, it is possible that auditors would constrain downward earnings management even further in a high litigious environment than in a low litigious environment. In contrast to the reported findings related to upward earnings management, however, it is possible that auditors will not acquiesce to pressure from their most influential clients to allow upward earnings management in a setting with a higher risk of litigation. Future research could benefit from separately examining the effect of litigation and public oversight on the likelihood that auditors acquiesce to client pressure to allow upward earnings management in more litigious environments. It is unclear whether the association between competition and audit quality would be different in a setting with relatively higher litigation risk (e.g. Chaney et al. 2003).

In addition to these general limitations, there are a number of limitations specific to individual studies. A specific limitation to the first study is the use of public data. Because the study is based on public data, it is not possible to control for all alternative risk management strategies that audit firms may use. To overcome this problem, the study uses a sample in which most of the other risk management strategies are unlikely to be used, and in which the use of partner expertise as a risk management strategy is most likely to occur. However, it would be worthwhile for future research to simultaneously examine the different risk management strategies that audit firms can use to manage client risk, as well as the extent to which audit firms use different risk management strategies based on different client risk characteristics.

The use of public data results in an additional limitation for the first study. The measures of risk used in this study are based on public data as opposed to private data, which may potentially provide more accurate estimations of client risk. Private data, however, might be biased by auditor judgments. The use of public data to measure client risk does therefore not necessarily result in a less reliable measure of risk than a measure of risk based on private data.

A limitation related to the third study is that the local markets in this study are defined based on the geographical locations of client and audit partners and an arguably arbitrary cut-off. Although robustness checks show that the results variations in the cut-off distance do not affect the results in any significant way, it is still worthwhile for future research to study the association between competition and audit quality using differently defined local audit markets.

The final limitation, which also affects the third study, relates to the measure of local competition developed in this study. This measure is developed at the audit partner level. It therefore implicitly assumes that audit partners working for the same audit firm also compete for clients. Competition amongst partners that are employed at the same audit firm is however likely to be very limited. Although sensitivity tests suggest that this issue does not have a significant impact on the results, it would be valuable if future research could develop a measure of local competition which takes local office capacity in account, as well as the limited competition amongst audit partners that work for the same audit firm.

Finally, there is one additional suggestion for future research. Belgian audits are based on three year renewable contracts, referred to as mandates. Auditors might be more likely to acquiesce to client pressure to allow earnings management in the last year of the mandate than in the prior two years in the hope of renewing the contract for an additional three year. Hence, audit quality is possibly lower during the last year of the mandate than during the first two years of the mandate. However, no relationship between the year of the mandate and earnings quality was observed. Future research could analyze data on the subsequent fiscal year to examine whether more earnings management discretion was given to clients that subsequently switched to another audit firm, because the auditor might have been under pressure to allow client earnings management in order to increase the likelihood of mandate renewal. Because of data restrictions caused by the need to measure auditor tenure, the study did not analyze whether clients switching to another audit firm in the subsequent year showed increased earnings management behavior during the year prior to the switch.

Summary in Dutch
Nederlandse Samenvatting

Dit proefschrift onderzoekt drie verschillende onderwerpen. Het eerste empirische stuk bestudeert of accountantskantoren gebruik maken van expertise van partners om risico's te beheersen die verbonden zijn aan accountantscontroles. Het tweede empirische stuk onderzoekt of economische afhankelijkheid van klanten de kwaliteit van accountantscontroles beïnvloedt. Het derde en laatste empirische stuk analyseert of de mate van concurrentie tussen accountants van invloed is op de kwaliteit van accountantscontroles.

Aangezien accountants, zoals aangetoond door Simunic en Stein (1990), hun complete klantenbestand in beschouwing nemen bij het nemen van beslissingen met betrekking tot individuele klanten is het van belang voor de empirische onderzoeken in dit proefschrift om gebruik te maken van een dataset waarin volledige portfolio's van klanten beschikbaar zijn. Bovendien is een vereiste voor het samenstellen van klantenbestanden dat het mogelijk is om te identificeren welk accountantskantoor, vestiging en partner verantwoordelijk zijn voor een accountantscontrole. Verder zijn gegevens over de expertise van accountants alsmede financiële gegevens vereist. Ten slotte zijn gegevens nodig over de geografische locaties van accountants en klanten, om de mate van concurrentie binnen lokale markten te bepalen. Aangezien de Belgische markt voor accountantscontroles aan al deze eisen voldoet, is dit een geschikte markt voor de studies in dit proefschrift. Voor de onderzoeken is daarom een dataset verzameld bestaande uit gegevens over alle accountantscontroles die uitgevoerd zijn in België tussen 1998 en 2006. De benodigde gegevens zijn verkregen via drie verschillende bronnen. Financiële gegevens zijn beschikbaar in de Bel-First databank. Gegevens over accountants zijn verkregen middels ledenlijsten van het Belgische instituut van de bedrijfsrevisoren (IBR). Tenslotte is gebruik gemaakt van Google Earth om geografische locaties van accountantskantoren en klanten te bepalen.

Zoals aangegeven onderzoekt het eerste empirische stuk of accountantskantoren gebruik maken van de verschillen in ervaringsniveaus van partners als een strategie voor risicobeheersing. Accountantskantoren kunnen de risico's verbonden aan accountantscontroles beheersen door middels van het toewijzen van partners met hogere mates van expertise aan meer risicovolle klanten. Bovendien vereisen controlestandaarden dat controleteams over voldoende ervaring beschikken. Ondanks dat het voor accountantskantoren van belang is dat partners met de meeste expertise worden toegewezen aan de meest risicovolle klanten, is het nog maar de vraag of dit in de praktijk gebeurt. Ten eerste is het toewijzingsproces van partners aan klanten erg complex vanwege de verschillen in ervaringsniveaus van partners en de variatie in risico karakteristieken van klanten. Tevens is risico aversie van partners mogelijk van negatieve invloed op hun bereidheid om risicovolle klanten te controleren. Dit zou er toe

kunnen leiden dat relatief onervaren partners worden toegewezen aan de meeste risicovolle klanten.

Gebaseerd op voorgaand onderzoek onderscheidt deze studie twee verschillende maatstaven van expertise: algemene ervaring en branche specifieke ervaring. Drie verschillende typen risico's worden geanalyseerd: accountantscontrolerisico, ondernemingsrisico van klanten, en ondernemingsrisico van accountants. Accountantscontrolerisico en ondernemingsrisico van klanten worden gemeten aan de hand van financiële gegevens. Ondernemingsrisico van de accountant is afhankelijk van de vraag of een klant al dan niet beursgenoteerd is.

De resultaten laten zien dat accountants gebruik maken van algemene ervaring van partners, om het ondernemingsrisico van de accountant te beperken. De toewijzing van partners met meer branchespecifieke ervaring wordt gebruikt als strategie voor beheersing van accountantscontrolerisico. Er is geen bewijs gevonden voor de verwachting dat expertise van partners wordt gebruikt om het ondernemingsrisico van klanten te beperken. In zijn geheel genomen tonen de resultaten dat accountants gebruik maken expertise van partners als strategie voor risicobeheersing. Hier moet wel de kanttekening bij geplaatst worden dat ervaren partners wellicht ervoor kiezen om klanten met een hoog ondernemingsrisico voor de accountant te controleren vanwege prestige en carrière ontwikkelingsmogelijkheden verbonden met de controle van beursgenoteerde ondernemingen.

Het tweede empirische stuk bestudeert of economische afhankelijkheid van klanten de kwaliteit van accountantscontroles beïnvloedt. Accountantshonoraria kunnen leiden tot een economische band tussen de accountant en de klant. Dit zorgt er mogelijk voor dat de accountant minder onafhankelijk is van de klant, wat een lagere kwaliteit van de accountantscontrole ten gevolge zal hebben. Dit probleem speelt voornamelijk bij klanten die een relatief hoog honorarium betalen. In het geval dat de jaarrekening zoals goedgekeurd door de accountant materiële afwijkingen bevat kan dit nadelige effecten hebben op de reputatie van de accountant en bovendien kan de accountant aangeklaagd worden. Deze mogelijke gevolgen geven een stimulans voor de accountant om zich onafhankelijk op te blijven stellen, ongeacht de hoogte van het controlehonorarium (Reynolds en Francis 2001).

Aangezien problemen met betrekking tot verminderde onafhankelijkheid zich eerder voordoen op partner of lokaal kantoor niveau dan op het niveau van de gehele accountantsorganisitie, bestudeert deze studie de gevolgen van economische afhankelijkheid op de kwaliteit van de accountantscontrole op deze drie niveaus. Verder onderscheidt de studie ondernemingen die hun winsten naar boven sturen van ondernemingen die hun winsten naar beneden sturen. Dit verschil is van belang, aangezien de belastingdienst een hogere prioriteit geeft aan het controleren van jaarverslagen van ondernemingen controleert die hun winsten naar beneden sturen dan aan het controleren van jaarverslagen van ondernemingen die hun winsten naar boven sturen. Gegeven dat de Belgische markt een beperkt aansprakelijkheidsrisico kent, creëert dit de mogelijkheid om te bestuderen of reputatie effecten voldoende zijn voor accountantskantoren om zich onafhankelijk op te stellen, of dat er een behoefte is aan een publieke toezichthouder.

Gebaseerd op eerder onderzoek maakt deze studie gebruik van een lineaire regressie om het effect van economische afhankelijkheid op de kwaliteit van de accountantscontrole te onderzoeken. Economische afhankelijk wordt gemeten op basis van de relatieve grootte van klanten binnen het klantenbestand van een accountant. De kwaliteit van de accountantscontrole wordt gemeten aan de hand van korte termijn accruals.

De resultaten van deze studie tonen aan dat economische afhankelijkheid een lagere kwaliteit van de accountantscontrole ten gevolge heeft. Deze bevinding is echter alleen van toepassing voor ondernemingen die hun winsten naar boven sturen. Accountants laten niet meer ruimte toe voor ondernemingen die hun winsten naar beneden sturen. Deze bevinding suggereert dat er een rol is weggelegd voor een publieke toezichthouder om de kwaliteit van accountantscontroles te garanderen. De resultaten tonen geen bewijs dat problemen qua onafhankelijkheid zich eerder voordoen op het niveau van de partner dan op het niveau van de accountantsorganisatie. Dit kan mogelijk verklaard worden door de geringe groottes van accountantskantoren in België.

Het laatste empirische stuk bestudeert het effect van concurrentie op de kwaliteit van de controle. Vanwege de hoge mate van concentratie wordt de markt voor accountantscontroles vaak bekritiseerd als zijnde een markt met beperkte concurrentie (e.g. Government Accountability Office 2003; Financial Stability Forum 2006). De algemene verwachting is dat een beperkte mate van concurrentie op een markt leidt tot een lage kwaliteit. Het is echter onduidelijk of dit ook van toepassing is op de markt voor accountantscontroles. Voorgaand onderzoek heeft aangetoond dat een hoge marktconcentratie niet per definitie gelijk staat aan een lage mate van concurrentie (Buijink et al. 1998). Bovendien is het niet duidelijk of standaard economische theoriën betreffende concurrentie en kwaliteit van toepassing zijn op accountantscontroles aangezien de kwaliteit van accountantscontroles niet direct waarneembaar is en bovendien is de markt voor accountantscontroles strikt gereguleerd.

In lijn met voorgaand onderzoek maakt de studie gebruik van de Herfindahl-index om de mate van marktconcentratie te meten. Tevens wordt een maatstaf van marktaandeel mobiliteit gebruikt om de mate van concurrentie te meten. Een tweede maatstaf van concurrentie, concurrentiedichtheid, wordt in deze studie geintroduceerd. Net zoals in de tweede studie maakt deze studie gebruik van korte termijn accruals om de kwaliteit van accountantscontroles te meten.

De resultaten van deze studie laten een negatief verband zien tussen marktconcentratie en de kwaliteit van accountantscontroles. Teven toont de studie een positief verband tussen de mate van concurrentie op de markt voor accountantscontroles en de kwaliteit van accountantscontroles. Deze bevinding suggereert dat concurrentie op de markt voor accountantscontroles mogelijk is, ongeacht de hoge mate van marktconcentratie.

Deze en verdere conclusies en aanbevelingen worden in hoofdstuk 5 weergegeven. Dit hoofdstuk geeft tevens een overzicht van de beperkingen van het onderzoek en suggesties voor toekomstig onderzoek.