

**Study on the Economic Impact of
Auditors' Liability Regimes
(MARKT/2005/24/F)**

Final Report

To

EC-DG Internal Market and Services

By

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Executive Summary

To allow the reader to find easily the sections in the main body of the report corresponding to the various parts of the executive summary, cross-references to these sections are provided below in the executive summary.

Introduction (Section 1, pp. 1 to 13)

- Under the 17 May 2006 Directive¹ of the European Parliament and the European Council on the statutory audit of annual accounts and consolidated accounts and amending Council Directives 78/660/EC and 83/349/EEC (8th Company Law Directive), the European Commission is to table before 1st January 2007 a report on:

“The impact of the current liability rules for carrying out statutory audits on the European capital markets and on the insurance conditions for statutory auditors and audit firms, including an objective analysis of the limitations of financial liability.” (see p. 1 of report)

- The purpose of the present study is to assist the European Commission in its preparation of the report, and the specific issues to be addressed by the study are the following:
 - An analysis of the economic impact of potential auditor liability regimes, including a review of the market as it stands at the present time;
 - An assessment of the likely effects if one or more of the Big-4 firms were to disappear;
 - An evaluation of the impact of imposing alternative liability regimes; and
 - An analysis of the auditor liability insurance market (see p. 2 of report).
- In terms of the scope of the study, the terms of reference specified that the focus is on statutory audit services provided to companies, mainly those listed on a regulated market within the meaning of MiFID (see page 2 of report).

¹ Directive 2006/43/EC.

- The study takes as given the current legal and regulatory framework governing audit activities by audit firms. This framework is undergoing changes in a number of Member States and these are not yet reflected in the data reported in the present study (see p. 2 of the report).
- The information presented in this report comes from a wide range of sources: academic literature, reports and studies from governments and regulators, surveys of audit firms, companies and institutional investors, interviews of a number of representatives of audit firm networks, auditor organisations, the insurance sector, annual reports of companies, and databanks such as Amadeus from Bureau Van Dijk and Bloomberg (see p. 4 of the report).

Part I: The State of the International Market for Audit Firms in the EU (Sections 2 to 11, pp.15 to 71)

Patterns of concentration of the audit market (Section 3, p. 16)

- Our analysis of concentration of the statutory audit market in the EU25 focuses on three market segments, namely the domestic companies included in the main index of the stock exchange, all domestic companies listed on the regulated market of the stock exchange and all companies for which information on the auditor is available in the Amadeus databank (see p. 17 of the report)
- The market shares of the four largest audit firms (C4) and the Herfindahl-Hirschman Index (HHI) are the two concentration indicators used predominantly in the study to assess the degree of concentration in the segment of the statutory audit market (see p. 18 of the report).
- As, in many Member States, information on audit fees paid by companies is not available, we use both the number of audit mandates and the size of the companies being audited as proxies for audit fees. Concentration estimates based on the size of companies give implicitly a greater weight to larger companies. Thus, any divergence between the concentration figures based on the two types of metric will reflect the greater role played by middle-tier firms in providing audit services to medium-sized and smaller listed companies (see p. 18 of the report).
- In 2004, in all but two Member States, the C4 figure for the market including only the companies of the main stock exchange index ranges from 83 to 100 and in fourteen of these countries, the C4 figure ranges

from 90 to 100 (see p. 19 of the report).

- In all cases, with the exception of Denmark and France, the computed HHIs exceed, often by a significant margin, the threshold typically giving rise to concerns about the level of concentration in the marketplace (see p. 19 of the report).
- The market for statutory audit services to all listed companies on the regulated markets of the national stock exchanges is somewhat less concentrated when one focuses on the number of mandates. In a number of cases such as Belgium, the Czech Republic, Denmark, Germany, Greece, France, Hungary, Latvia and Poland, the C4 measure is below 70. The HHI is also below the "concentration concern" threshold in these countries as well as in Ireland, Lithuania and Luxembourg (see p. 21 of the report).
- However, when concentration is measured on the basis of the size of companies, concentration remains high and, in 2004, in all but three countries, the HHI was above the "concentration concern" threshold level (see p. 21 of the report).
- A similar difference between concentration figures based on the number of audit mandates and the concentration figures based on the size of companies is observed when the market is extended to include all public companies (see p. 24 and p. 26 of the report).
- The bottom line is that the market segment of the provision of audit services to large companies is highly concentrated and dominated by the Big-4 firms throughout the EU25 (see p. 26 of the report).
- The concentration of the market for statutory audit services was already high a number of years ago. But, mergers among the major audit firm networks over the last 20 years have contributed to significantly increase the level of concentration, and this was exacerbated by the demise of Arthur Andersen (see p. 28 of the report).

Specialisation of the Big-4 networks (Section 4, p. 31)

- In some EU Member States, the market for statutory audits of large companies appears to be further segmented in that, across the EU25, the Big-4 hold practically 90% of the audit mandates of all banks and insurance companies listed on the regulated markets of the stock

exchanges while they hold only slightly more than 2/3 of all the audit mandates of companies (other than banks and insurance companies) listed on the regulated markets (see p. 31 of the report).

Factors which have contributed to the current patterns of concentration (Section 5, p. 33)

- A number of reasons have contributed to the consolidation among the larger networks. Obviously, the mergers of some of the larger networks and the demise of Arthur Andersen were significant factors (see p. 28 of the report).

- But, underlying the drive towards consolidation among the larger networks were globalisation and the growing geographical spreads of clients, technological innovations in the auditing profession in combination with a lack of access to external capital and the need to develop deeper industry and technical expertise (see p. 33 of the report).

- To shed light on why the concentrated statutory audit industry structure persists, audit firms and companies were asked to provide their views on the dimensions on which audit firms compete and factors having contributed to the current state of concentration (see p. 35 of the report).

- While a number of aspects affect the competitiveness of their offerings, Big-4 firms essentially compete against each other on price as their broader characteristics and attributes are very similar. Obviously, individual mandates will be won and retained on the basis of factors such as the quality, expertise and experience of the proposed audit team and engagement partners (see p. 35 of the report).

- In contrast, the middle-tier firms view reputation as the key competition driver in the market for statutory audit services to larger, listed companies. Next come price, quality in terms of reliability and capacity (see p. 35 of the report).

- While a number of factors are said to have contributed to the current state of concentration, "changing client needs" is viewed by audit firms and companies as the single most important factor. Other important factors are the disappearance of one of the major firm networks and the need to achieve economies of scale (see p. 37 of the report).

Barriers to entry into the audit market segment served by the Big-4 firms (Section 6, p. 40)

- Middle-tier firms face a number of barriers to entry into the statutory audit market served typically by the Big-4 firms. Some of these barriers are attitudinal and some are more structural (see p. 41 of the report).

- Foremost among these barriers is the attitudinal barrier related to reputation. The selection of a Big-4 firm is often viewed as “safer” because of the reputation of the Big-4 firms and easier to defend should a problem arise down the road (see p. 42 of the report).

- This attitudinal barrier is compounded by client inertia and only limited switching from one statutory auditor to another (see p. 43 of the report).

- Structural barriers which are more directly under the control of the middle-tier firms are their smaller capacity and geographical spread (see p. 41 of the report).

- These barriers are unlikely to be overcome in the very near term as the build-up of reputation, capacity and geographical spread take time and resources. That being said, a change in attitude from the larger corporate sector (and the institutional investors) may encourage some middle-tier networks to undertake the necessary investments to overcome the structural barriers (see p. 46 of the report).

- According to the survey results, the combination of unlimited auditor liability and very limited availability of professional indemnity insurance is not reported by middle-tier firms as being a major issue (see p. 46 of the report). However, this observation appears more likely to be related to the current statutory audit market served by middle-tier firms

- In follow-up discussions with some of the major middle-tier firms on the challenges faced by such firms in the market for statutory audits of large and very large companies, unlimited auditor liability combined with only very limited availability of liability insurance was stated as being a very important factor (see p. 46 of the report).

What factors determine a company's choice of auditor? (Section 7 p. 48)

- The survey results regarding the importance of various factors taken into account by companies in selecting an auditor confirm the previously reported survey results regarding competition in the market place and barriers to entry. Reputation is judged by both companies and audit firms to be the major factor. Other important factors, from the companies' perspective, are the geographical spread of the network and the company's previous experience with the firm (see p. 48 of the report).

Influence of various stakeholders on a company's choice of auditor (Section 8, p. 54)

- In terms of who exerts the strongest influence on the choice of auditor, as distinct from the body that formally appoints them, the Board's audit committee and the company's Finance Director were cited most frequently while, in the case of groups, the parent company is said to exert the strongest influence on the appointment(s) of auditor(s) at domestic and foreign subsidiaries (see p. 54 of the report).
- About a third of companies having responded to the survey indicated that shareholders have a strong influence on the choice of auditors. However, a majority of these companies also noted that there was one shareholder or a group of shareholders with a strong interest in the company (see p. 55 of the report).
- Shareholders, in particular institutional investors, may also have an indirect influence in the sense that they are perceived by large companies in some countries to have a preference for Big-4 audit firms. In countries such as the UK, institutional investors are currently working on changing such a perception (see p. 55 of the report).

What factors influence a company's decision to change auditor? (Section 9, p. 57)

- In practice, companies do not frequently change auditor. Indeed, more than half of the companies responding to the survey indicated that their auditor had served the company for more than 7 years (see p. 57 of the report).
- Of those companies which had changed their auditor, only 12% did so in

response to the demise of Arthur Andersen, and 85% simply switched from one Big-4 firm to another Big-4 firm, 13% switched from a middle-tier firm to a Big-4 firm and 2% switched from a Big-4 firm to a middle-tier firm (see p. 57 of the report).

- In general, the most frequent reason having led companies to change auditor is the appointment of a group auditor (see p. 57 of the report).
- In contrast, dissatisfaction with the quality of the audit work and the price of the audit services were not major reasons for changing auditor among the companies having actually changed auditor over the last ten years (see p. 57 of the report).

Mergers and acquisitions and collaboration among middle-tier networks as a mean to increase competition to the Big-4 networks (Section 10, p. 61)

- Mergers between middle-tier networks and/or the development of collaborative arrangements between such networks are sometimes viewed as a way for middle-tier networks to create a new global network similar in size and geographical reach to the Big-4 networks (see p. 61 of the report).
- However, the size gap between the Big-4 firms and the middle-tier firms is substantial and will not be easily closed. In many EU25 Member States, 3 or more of the largest middle-tier firms would have to merge or brought together in a collaborative arrangement to be similar in size to the smallest of the Big-4 firms in that country (see p. 61 of the report).
- The survey results suggest that, under the current legal framework for statutory audit activities, mergers and acquisitions within the middle-tier firm segment are unlikely to result in the near future in a new network that, in terms of size and geographical and product scope, could become a major challenger to the Big-4 networks (see p. 54 of the report).
- The survey findings raise doubts about the plausibility of mergers and acquisitions between middle-tier firms as a mean for increasing choice of service provider in the audit market for large companies. It also suggests that, in the near future, middle-tier networks, even merged or consolidated, are unlikely to be able to substitute for a Big-4 network should one of these networks fail. This point is discussed more extensively below (see p. 67 of the report).

- Nevertheless, mergers among middle-tier firms could help address to some extent some of the barriers to entry identified earlier and increase the attractiveness of their offer to companies, although not necessarily the very large ones (see p. 67 of the report).

- Overall, the audit firm survey results suggest that some limited consolidation of middle-tier firms may occur in a few countries over the coming years, in particular in Austria, Denmark, France, Luxembourg and the Netherlands (see p. 67 of the report).

- The key obstacles to a consolidation of the industry within the middle-tier segment are under the control of middle-tier firms as they relate to their partners' willingness to give up some independence and business influence, and to adapt and change the organisation of their activities. No or only few substantial regulatory and legal obstacles are said to exist (see p. 68 of the report).

Key Conclusions of Part I (Section 11, p. 71)

- Overall, the key conclusions which emerge from this first part of the study are that:
 - While the market for statutory audits is highly concentrated in the market of statutory audits of large companies, in many cases the middle-tier networks are not viewed at the present time as a real alternative to the Big-4 firms, both because of reputational reasons and perceived lack of breadth and depth in comparison to the Big-4 firms (see p. 74 of the report).

 - Middle-tier firms may make some inroads into the market dominated by the Big-4 but any gains are likely to be limited (see p. 74 of the report).

 - Moreover, because of significant differences in size between the Big-4 firms and the middle-tier firms, in many countries a merger between 3 or more middle-tier firms would have to occur to achieve a size similar to that of the smallest Big-4 firm. In some countries the prospects for some consolidation among middle-tier firms are said to be good but the consolidation is unlikely to be of the magnitude necessary to achieve a size comparable to that of the Big-4 firms (see 74 of the report).

Part II The Insurance Market for Statutory Audit (Sections 12 to 19, pp. 77 to p. 119)

Risks faced by firms (Section 13, p. 78)

- Firms face a range of claim sources. Some claims may originate from the firm's home country. Other claims may originate from abroad either because the client has a connection (such as a dual listing) linking it to foreign country, or the audit services were provided as part of the audit or group audit of a client domiciled in a foreign country (see p. 79 of the report).

- In addition, a firm may in the future also face a transnational risk from a claim filed against a network as a separate entity from its constituent members. At the present time it is not clear whether such a risk will effectively materialise as, so far, no court has found a network liable. However, this is an issue in two cases currently heard in the U.S. This may also become an issue under the 8th Company Law Directive which, for the first time at the EU level, introduces the formal concept of a network (see p. 80 of the report).

- In addition to potentially increasing the risk faced by the larger networks (Big-4, BDO and Grant Thornton), the possibility of such a risk may also deter middle-tier firms from establishing stronger networks than their current looser structures (see p. 80 of the report).

- Moreover, firms belonging to one of the major networks are also exposed to potential reputational damages arising from a claim against an affiliated firm in the network (see p. 81 of the report).

- In the past, certain elements of the legal community acting for plaintiffs were interested in being able to pursue cases repeatedly against audit firms and therefore did not aim for awards or settlements which would compromise the survival of the firm. However, nowadays, there is a risk that these elements might be solely interested in maximising recoveries without any particular considerations for the sustainability of the firm (see p. 81 of the report).

Costs of claims (Section 13.3, p. 82)

- The actual annual costs of the claims (i.e., the annual costs to the firms and insurance companies of the awards, settlements or reserves against

unresolved claims) against EU firms show only a small upward trend. But this cost has fluctuated widely over the last 20 years, reaching in 1991 a peak of almost € 470 million (U.S. \$ 600 million) (in 2005 prices) (see p. 86 of the report).

- Over the period 1981 to 2003, the average annual cost was €117 million (U.S. \$149 million) (in 2005 prices) (see p. 86 of the report).
- Moreover, as already noted, the number of high-value actual or potential claims facing a number of EU firms is high. As of 31st October 2005, there were 28 claims in excess of €79 million (U.S. \$100 million), of which 16 were in excess of € 160 million (U.S. \$200 million) and 5 were in excess of €785 million (U.S. \$ 1 billion) (see p. 88 of the report).

Insurance programs (Section 14, p. 91)

- To manage the liability risks, firms and the larger networks have implemented internal risk management processes. Firms can also buy low level insurance, typically up to the legal domestic requirements, in the domestic insurance market place. It should be noted that when audit firms buy professional indemnity insurance, they do so for the whole of their activities and not separately for each line of business. (see p. 91 of the report).
- In response to declining availability of professional indemnity insurance and rapidly rising insurance premiums, the major networks set up captives which provide some insurance to the member firms of a network. These captives obtain a very limited amount of re-insurance from the single remaining lead re-insurer with an established program for auditors. In some cases all of a firm's insurance is provided by the captive and, in other cases, the insurance bought from the captive complements the insurance bought directly from commercial insurers. (see p. 92 of the report).
- Any award or settlement in excess of the cover provided by a captive has to be assumed by the firm directly (see p. 92 of the report).

Availability of commercial insurance (Section 15, p. 99)

- The availability of commercial insurance for high tranches of insurance has fallen sharply to the point that such insurance would cover less than 5% of some of the large claims some firms face nowadays. At the same

time, premiums have risen sharply. For example, they doubled over the last 5 years in the case of the reinsurance provided to the captives of the Big-4 while the cover became more limited and restricted (see p. 99 of the report).

- The main reason for this trend is the large losses sustained by the insurance industry in the underwriting of auditor professional insurance in the eighties and nineties. For example, over the period 1981 to 1992, the loss ratio, that is the ratio of the sum of the claims incurred over the period 1982 to 1992 to the sum of the premiums received over the same period, was 266% in the world excluding the U.S. and 305% in the U.S. (see p. 101 of the report).
- Moreover, the lack of risk diversification opportunities and the unpredictability of the occurrence of claims and of their eventual award/settlement quantum make it impossible to develop proper insurance programs for auditor liability (see p. 102 of the report).
- The reduction in commercial insurance coverage combined with the risk that a case is pursued by a plaintiff interested only in maximising recovery gives rise to the very real possibility that one of the major actual or potential claims will result in a major draw on the firms' resources (see p. 104 of the report).

The tipping point (Section 16, p. 104)

- As firms have practically no assets of their own which could be mobilised, the partners of the firm would in such a case bear the cost of the adjustment.
- Partners of firms of a network outside the jurisdiction of a network firm facing a catastrophic claim may also be called upon to bear part of the cost of the catastrophic claim faced by that firm if financial assistance to the threatened firm is deemed essential for the survival of the network (see p. 104 of the report).
- At issue is the size of the financial burden that partners would be willing to bear before the firm collapses (see p. 104 of the report).
- While there exist no precise estimates, discussions with representatives of the Big-4 networks suggest that a 15% to 20% income cut for 3 to 4 years would be bearable. The Big-4 have suggested that anything in

excess of this range would lead partners to leave in droves with a collapse of the firm very likely soon after (see p. 105 of the report).

- The problems experienced by the firm Laventhol in the U.S. in the late 1980s and early 1990s are very instructive in this regard. Following a number of large awards against the firm, the firm implemented in April 1990 a 50% reduction on partners' draws. Partners' started to leave in large numbers and the firm had to further reduce partners' draws by 80% in October. By November 1990 the firm had to file for bankruptcy (see p. 105 of the report).

- If one assumes in addition that, as a result of the mega-claim against the firm, some audit business will be lost to other firms and overall profitability falls by 10%, the tipping point at which a firm would fail ranges in the case of the four largest firms in the U.K.:
 - from €170 million to €365 million depending on the firm in the scenario with a 15% cut in income over three years; and,

 - from €255 million to €540 million in the case of a 4-year cut of 20% (see p. 105 of the report).

- This would be the maximum amount (single claim or multiple claims not exceeding that amount) a firm could afford to pay in award or settlement without gravely endangering its survival once the limited insurance coverage through the captive is exhausted. It would not be able to sustain a second claim of such a size in the immediate period following the settlement of the first claim as its resources and those of the captive would need to be rebuilt over a number of years (see p. 105 of the report).

- While one might question the assumptions underlying these calculations of the tipping point, the fact that U.K. firms face 3 claims or potential claims in excess of €160 million clearly illustrate the risks faced by these firms (see p. 116 of the report).

Public oversight bodies (Section 17, p. 108)

- The existence of public oversight bodies is judged by the majority of respondents to the audit firm, company and institutional investor surveys to yield an improvement in the quality but no change in audit liability risk, and no increase in commercial insurance availability (see p.

108 of the report).

Possible solutions (Section 18, p. 112)

- A number of alternative risk protection solutions are discussed in the report. These solutions deal with the lack of commercial insurance availability, the lack of risk diversification and the lack of risk predictability (see p. 113 of the report).
 - The first involves the creation of an international pool.
 - The second involves shifting the burden of the cost of the insurance to the investor in capital markets or the company buying the audit services.
 - The third shifts the burden of high awards/settlements to the government;
 - The fourth and last envisages some form of liability limitation.
- None of the approaches discussed above are free of problems and a full cost benefit analysis would need to be undertaken to determine whether, overall, such approaches yield a net social benefit (see p. 113 of the report).

Part III: Likely Short- and Long-Run Effects of the Possible Disappearance of One or More of the Big-4 Firms (Sections 20 to 23, pp. 119 to 133)

- The analysis of the survey results and the review of the actual migration patterns of the former clients of Arthur Andersen suggest that, under current circumstances, middle-tier firms are unlikely to become a major substitute for one of the Big-4 firms if one of these Big-4 firms were to disappear (see p. 134 of the report).
- Middle-tier firms would in all likelihood gain some new large company audit mandates from the client base of the failed Big-4 firm (see p. 120 of the report).

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- But, the bulk of the large companies would still aim to stay within the now Big-3 firms (see p. 120 of the report).

- A similar point of view was expressed in discussions with a number of middle-tier firms. According to their representatives, not all middle-tier firms would have the scale and resources necessary to provide the required audit services to large public companies and some could be reluctant to undertake the necessary investments if, in all likelihood, they would gain only a few large client mandates (see p. 134 of the report).

- Moreover, middle-tier firms may view the risk of providing audit services to such large public companies as too high in light of their financial resources and the limited availability of liability insurance (see p. 134 of the report).

- A failure of one of the Big-4 networks may result in a significant reduction in large company statutory audit capacity if partners and other senior staff at the failed firm, the remaining Big-4 firms, and possibly even some middle-tier firms, were to decide that auditing is a too risky activity and therefore shift to other business lines. This would obviously create very serious problems for companies whose financial statements need to be audited (see p. 134 of the report).

- In such circumstances, a major increase in the price of statutory audits would be required to restore the equilibrium between demand for and supply of statutory audit services (see p. 134 of the report).

- The survey results show that, while Big-4 firms are concerned about the possibility that companies in high-risk industries may be unable to find an audit firm willing to undertake the audit in the case of the failure of a Big-4 firm, middle-tier firms and companies themselves do not share this view (see p. 122 of the report).

- Obviously, the adjustment to the market structure could be stressful and challenging and, during the transition phase to the new equilibrium, the completion of statutory audits may be delayed as clients may have to queue for the services of the remaining audit firms (see p. 134 of the report).

- Financial institutions in particular could face serious transition problem as the special skills their audits require and the independence rules may severely restrict their range of choice for a new auditor (see p. 134 of the report).

report).

- There could also be an impact on capital markets, especially during the transition phase. If the disappearance occurs close to the end of the financial year, investors may have to wait longer for the release of audited accounts. They may also be less familiar with the new auditor. Whether this would lead to significant perturbations in capital markets is an open question (see p. 134 of the report).
- Depending on which network were to disappear, financial institutions in particular could face very serious transition problems as the special skills, knowledge and cross-border reach their audits require may severely restrict their range of choice for a new auditor. This limitation of choice is likely to be exacerbated by the independence rule which may further restrict the range of potential replacement auditors (see p. 134 of the report).
- As noted in Section 4, the major financial institutions in the EU are almost exclusively audited by Big-4 firms and, in a number of countries, two Big-4 firms dominate the market for statutory audits of financial institutions. In contrast, across the EU, the Big-4 audit only about 2/3 of the non-financial companies listed on regulated stock markets (see p. 134 of the report).
- The capitalisation of financial institutions has grown considerably in recent years and so has their cross-border reach, especially that of the larger financial institutions. Middle-tier firms may find it difficult, if not impossible, to substitute for the failed Big-4 network due to the high liability risk and lack of required expertise (see p. 134 of the report).
- The cost of capital is unlikely to be impacted much directly even if audit fees increase sharply as the share of audit fees in total operating costs is typically very small. Even a doubling or a trebling of audit fees is unlikely to affect much profitability of companies, except those whose profitability was borderline (see p. 134 of the report).
- But, the cost of capital could be affected indirectly if the loss of one of the Big-4 was to make investors lose confidence more generally in capital markets (see p. 135 of the report).
- While such an impact could be potentially very substantial, it is difficult, if not impossible to quantify it precisely as the magnitude of the impact

will ultimately depend on the perceptions and mood of the investors at the time the failure occurs. If such a shock were to occur in already unsettled markets the impact could be much larger than in normal market conditions (see p. 135 of the report).

- So far, the discussion focused on the disappearance of a single Big-4 network. Given the limited availability of insurance and the large actual and potential claims faced by a number of Big-4 firms, it cannot be ruled out that a second network would fail too (see p. 135 of the report).
- Such a situation would obviously be dire and any market adjustment would be rendered much more difficult. In all likelihood, investor confidence would fall significantly and capital markets will most probably react much more negatively than in the case discussed above. The audit market adjustment to such a shock will also in all likelihood be much more difficult and chaotic, especially if such an event causes experienced audit staff and audit partners to leave the industry in light of the heightened risk (see p. 135 of the report).
- First of all, investors' confidence may be seriously shaken by such an event as they are likely to raise many questions about the value of audits and the audit profession, and capital markets will most probably react much more negatively than in the case discussed above. Investors' trust in audited accounts of companies likely will be severely undermined by such events and the costs of capital will likely rise as a result (see p. 135 of the report).
- There is also a considerably higher likelihood that a number of experienced audit staff and partners will leave the audit activity (see p. 135 of the report). As companies whose auditors have failed will need to find new auditors in a context of shrinking supply, the market for statutory audits will likely be very seriously perturbed and many audits may not be completed in a timely fashion. This is particularly likely to be the case for companies whose statutory audits require special skills and expertise (see p. 135 of the report).
- The price of statutory audits will also in most likelihood increase markedly, and this not only temporarily, as the surviving firms are likely to price a higher risk in their audit fees (see p. 135 of the report).
- The disappearance of one or two Big-4 networks may also seriously erode the reputation of the surviving Big-4 networks more generally. It is not clear, however, whether this would benefit middle-tier firms (see

p. 135 of the report).

- It all depends on whether the loss of reputation and confidence affects only the surviving Big-4 firms or whether there are spillovers to the middle-tier segment. In the former case, middle-tier firm could benefit as a barrier to entry would be reduced while in the latter case, the relative ranking, in terms of reputation, of the surviving Big-4 firms and the middle-tier firms may not change much with both groups suffering a loss in reputation. Perversely, a flight to safety and perceptions about quality could even make it more difficult for some middle-tier firms to enter the audit market typically served by Big-4 audit firms (see p. 135 of the report).

Part IV Economic Impact of Alternative Auditor Liability Regimes (Sections 25 to 35, pp. 119 to 177)

Liability regimes and incentives – a theoretical perspective (Section 26, p. 139)

- This fourth part begins with a theoretical assessment of the economic effects of auditor liability rules taking into account the interdependencies between auditors, company managers and investors (shareholders and creditors) (see p. 139 of the report).

- First, with respect to the incentives to increase audit efforts, the theoretical analysis shows that a negligence-based liability system has a number of advantages relative to a strict liability system. Under a negligence-based system, an auditor is liable only if there are errors in the financial system and he/she has failed to deliver a certain level of due care while under strict liability, an auditor is always liable if there are errors in the financial statements. Under a negligence-based system, an auditor has greater incentive to increase the audit effort than under a strict negligence system as it increases the probability that errors are detected, which leads to a reduction of the expected damage payments and it decreases the probability that the audit effort is viewed as negligent in a trial. Under a strict liability system, only the first effect is present. The overall benefit of either regime depends on how the legal costs are determined and the possibility of settlements. The superiority of either regime depends on the institutional arrangements (see p. 142 of the report).

- Second, the theoretical analysis shows that choice between joint and several liability and proportional liability needs to take account of the

various interactions between auditors, investors and company managers. For example, under proportional liability, an auditor may have a reduced incentive to deliver high audit efforts but the overall impact on the quality of the financial statements is not necessarily negative as managers may have a reduced incentive to engage in earnings management. Conversely, under joint and several liability the auditor will deliver a higher audit effort. However, because of joint and several liability, investors have higher expectations of recovery in case of problems and, everything else being equal, this pushes up the price of the securities issued by the company due to the larger damage payments investors can expect in case of problems with the audit. This in turn raises the incentive for managers to engage in earnings management such that the final outcome may be a reduction in the quality of the financial statements (see p. 143 of the report).

- Third, the theoretical analysis shows that unlimited liability may result in a situation where the economic costs of unlimited liability exceed the benefits. It is important to note that, in equilibrium, investors bear ex-ante the costs of any damages expected to be paid by auditors because the latter will include such costs into the fees charged to companies. Hence, in some sense the expected liability payments and the respective part of the audit fee cancel out in a market context. In fact, the extent of auditor liability has to take account of the incentives for audit efforts, the related audit and expected legal costs, and the resulting gross benefits from improved information in the capital market (see p. 141 of the report).

Other factors driving audit quality (Section 27, p. 147)

- Obviously, the financial incentives of a given liability regime are not the only factors which drive audit efforts. Reputation and the actions of the supervisory and enforcement bodies are equally important (see p. 148 of the report).
- Independent public oversight bodies and regulatory enforcement bodies are additional important features of the regulatory environment for statutory audits which, jointly with reputational effects, complement the direct incentive effects of the different liability regimes and which may in some instance reinforce the case that the costs of unlimited liability exceed the benefits (see p. 148 of the report).
- In contrast, the difference in effects of rules-based standards and principles-based standards on audit quality are less clear-cut. It is an open question whether the reported earnings will be more or less

conservative by more relying on principles instead on specific rules, and the answer eventually depends on the efficacy of the entire system of governance and the way courts act under a specific liability regime. Especially the latter point is hard to assess in advance and is an empirical question that can only be answered after a change of the standards-design (see p. 150 of the report).

Impact of different auditor liability regimes on audit quality - an empirical assessment (Section 29, p. 154)

- The vast majority of survey respondents from both the Big-4 and the middle-tier firms were of the opinion that a limitation on auditor liabilities would have no effect on how accounts audited under such a regime would be viewed by capital markets. In other words, a limitation of auditor liability is not expected to affect the “value” of the audit . (see p. 154 of the report).

- Similarly, a majority of companies are of the view that the liability regime has no impact on the quality of the audit (see p. 155 of the report).

- However, the majority of institutional investors having responded to the survey, as well as representatives of organisations representing institutional investors, are concerned that a limitation of auditors’ liability will affect audit quality negatively (see p. 155 of the report).

- Finally, our own detailed empirical analysis of one dimension of audit quality, namely earnings management as proxied by accruals management, does not appear to be affected by the existence of a limitation on auditor liability (see p. 156 of the report).

- Obviously, audit quality cannot be reduced to a single dimension and encompasses many more factors. However, there exists no or only limited information on other aspects of audit quality (such as the quality of advice regarding internal audit and control processes, restatements of accounts, richness of letters or reports to the audit committee, etc) and we relied therefore on the approach typically taken by the academic literature on determinants of audit quality (see p. 157 of the report).

Impact of different auditor liability regimes on claims against auditors (Section 30, p. 159)

- In the EU25, there exist neither comprehensive, publicly available, data

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on court awards against audit firms regarding matters related to statutory audits nor on settlements by firms of such claims against them (see p. 159 of the report).

- However, for the purpose of the present study, AON has assembled information on all outstanding matters (formal legal claims and issues that have not yet given rise to formal claims but are likely to do so) involving the Big-4 firms plus Grant Thornton and BDO as of 31st October 2005 (see p. 159 of the report).

- About a third of these matters are in the range of U.S. \$10m to U.S. \$30m, 11 are in the range of U.S. \$200 million to U.S. \$ 1 billion, and 5 are in excess of U.S. \$ 1 billion. Italy is the country with the highest number of outstanding matters (21), followed by the U.K. (13), the Benelux (7) and Spain/Portugal (7). In total there are 69 such matters (see p.159 of the report).

- However, the information on outstanding matters does not provide any conclusive evidence, one way or another, about the effect of a liability limitation on the size of claims and awards firms face in Europe (see p. 159 of the report).

- Reflecting the riskiness of their activities, a large majority of audit firms (83% in the case of Big-4 firms and 70% in the case of middle-tier firms) indicated that the level of fees varies with the riskiness of the assignment (see p. 162 of the report).

- However, an even slightly larger majority (87% and 77% respectively) was of the view that the risk was not fully priced into the fees because of the intensity of competition among audit firms. Obviously, over the longer run, this is not a sustainable situation and audit fees would have to rise to reflect the growing liability risk of statutory audits (see p.162 of the report).

- The responses from firms in countries with a liability cap were either almost identical or very similar to those from countries with no liability cap (see p. 162 of the report).

Impact of different auditor liability regimes on audit market structure (Section 32, p. 164)

- With regards to the impact of the auditor liability regime on the structure

of the market for statutory audits, we do not find any significant differences in concentration, as measured by the HHI, in the narrow market of the top 20 companies between the group of countries with an auditor liability limitation and the group of countries with no limitation (see p. 164 of the report).

- However, when the HHI is computed for the top 50 companies, the countries with an auditor liability limitation show, on average, a significantly lower concentration figure than the countries without a limitation (see p. 164 of the report).
- This suggests that the existence of an auditor liability limitation may help middle-tier firms breaking into the market segment that is largely dominated by the Big-4 firms in many countries. The very small size of the sample with an auditor liability cap, however, does not allow one to draw strong inferences from the data. Moreover, many other factors may influence the presence of middle-tier firms in that particular segment (see p. 164 of the report).
- Differences in liability regime do not appear to affect significantly the firms' attitude towards risk within the market segment they serve. . Indeed, the survey results show that firms from countries without a limitation on auditor liability are only marginally more inclined to decline or resign from an audit mandate because of potential liability risk than firms from countries with a limitation (see p. 167 of the report).
- Moreover, in terms of the geographical distribution of such audit mandate declines and resignations, the differences in auditor liability regime do not appear to be a major factor (see p. 168 of the report).

Impact of different auditor liability regimes on the cost of capital of companies (Section 33, p. 171)

- Overall, the majority of all respondents from the four survey groups (Big-4 firms, middle-tier firms, companies and institutional investors) does not believe that the cost of capital is impacted by a limitation of auditors' liability (see p. 172 of the report).
- Moreover, in our extensive empirical analysis of the determinants of the cost of capital we also failed to find any statistically robust evidence of a differential impact on the cost between unlimited liability and capped liability regimes (see p. 174 of the report).

- However, within the sub-group of respondents believing that financial statements audited under a limited liability regime are providing a less true and fair view, a majority of middle-tier firms, companies and institutional investors are of the opinion that a limited liability regime results in a higher cost of capital for companies (see p. 171 of the report).

Impact of different auditor liability regimes and staffing (Section 34, p. 176)

- Finally, an unlimited liability regime or a very high liability regime is viewed by the vast majority of audit firm respondents as making it more difficult to attract new talent into the profession and more importantly, to retain experienced staff with a view to make them partners. Overall, the unlimited liability regime is perceived by audit firms as having a potentially significant impact on the capacity of firms to supply the audit market (see p. 176 of the report).

Key conclusions of Part IV (Section 35, p. 177)

- Overall the key points to note from this third part of the study are (see p. 177 of the report):
 - From a theoretical point of view, when one takes account of the impact of auditor liability on the incentives faced by auditors, the management of the company being audited and capital market participants as well as the costs of the audit efforts and the legal costs of liability, an unlimited liability regime may result in a situation where the costs of unlimited liability exceed the benefits.;
 - With the exception of institutional investors, differences in liability regimes are not perceived as having a significant impact on audit quality. Moreover, a majority of Big-4 firms, middle-tier firms, companies and institutional investors is of the view that an auditor liability limitation will have no impact on the cost of capital of companies. The results of our empirical analysis support this point of view;
 - A limited liability regime may contribute to reducing concentration in the market segment of statutory audits for large (but not very large) companies;
 - Finally, a limited liability regime may also help firms address

some of their staffing pressure points (in particular retaining experienced staff, especially partners).

***Part V How to limit the auditors' statutory audit liability
(Sections 36 to 39, pp. 183 to 207)***

- A number of countries (Austria, Belgium, Germany, Greece and Slovenia) have through legislation introduced a limitation on auditors' liability while the draft law currently reviewed by the U.K. Parliament foresees the possible for the liability to be limited by contract between the audit firm and the company whose financial accounts are being audited. A number of other Member States permit the auditor to limit his liability by contract. However, in those countries the auditor has a wider duty of care to other third parties (e.g., banks or individual shareholders) than is the case in the United Kingdom such that contractual liability limitations only partly address the auditor's total exposure (see p. 183 of the report).

- Overall, there exist three broad types of statutory audit liability limitation (see page 186 of the report). These include:
 - An absolute limit (or absolute cap). This is the approach taken in Belgium, Germany and Slovenia. In both Belgium and Germany, the level of the cap is different for listed and unlisted companies;

 - A variable limit which varies with either the size of the company being audited or the size of the audit firm (variable cap). This is the approach taken in Austria where the level of the cap varies with the size of the company and in Greece where the level of the cap varies with the audit fee income of the audit firm;

 - A limitation of the liability to the contribution of the audit firm to the damage suffered by the plaintiff (proportionate liability).

- Some of these models can be combined. For example, it is possible to combine an absolute cap with a proportionate liability regime (see p. 198 of the report)

- The diversity in size of audit firms and companies across the EU is such that it is unlikely that a one-size-fit-all approach is the most useful (see p. 188 of the report).

- In the case of a joint and several liability regime, a statutory audit liability limitation will help address the “deep pocket” syndrome whereby the audit firm is typically viewed by plaintiffs as having the largest resources and is therefore the target of complaints irrespective of the contribution and responsibility of the firm to the event. Any limitation of the statutory audit liability will shift some of the liability risk to directors and officers of companies (see p. 201 of the report).

- In order to assess the different potential models for limiting auditors’ liability, the use of the following four assessment criteria is recommended (see p. 199 of the report):
 - Criterion 1: Impact on risk that one or several Big-4 firms disappear in the case of a catastrophic claim;

 - Criterion 2: Impact on insurability of statutory audit liability risk;

 - Criterion 3: Impact on competition and entry by middle-tier firms into the market for statutory audits of large companies;

 - Criterion 4: Impact on audit quality.

- That being said, the key policy challenge in terms of reduced risk for audit firms and increased competition by the audit firms is not so much the precise form of the limitation as the level of liability that firms face in a regime in which auditors’ liability is limited (see pp. 202 to 206 of the report).
 - A relatively high limit may be appropriate for the Big-4 firms as it provides incentives to audit firms to focus on audit quality but may not result in significant entry of middle-tier firms into the audit market served by Big-4 firms.

 - Conversely, a liability limit which is low enough to encourage middle-tier firms to audit larger companies may not provide the appropriate incentives to the Big-4 firms.