Economic consequences of (mandatory) joint audits: the joint audit does not (yet) offer clear benefits

Presented by Alain Schatt (University of Lausanne, Switzerland). Co-author is Jean Bédard (Laval University, Canada).

Abstract

Alain Schatt presented a literature review on the use of joint audits in France. The use of joint audits has recently been brought up in the Netherlands, as a result of the publication of the 2018 AFM report 'Kwetsbaarheden in de structuur van de accountancysector' ('Vulnerabilities in the structure of the accountancy sector'). Schatt elaborated on the potential economic consequences of the joint audit in terms of market concentration, audit costs and audit quality. As also concluded in the AFM report, the current approach to the joint audit in France is not working as desired. In practice, the joint auditors simply divide the audit work and the smaller parties perform the easiest part.

'Voluntary joint audits actually don't exist', says Schatt. This makes sense, he thinks, since overall, audit research hasn't found evidence that joint audits have a positive effect on audit quality, but audit fees are higher. For example, in Denmark the audit quality didn't decrease after the joint audits were abandoned, but audit fees decreased. Hence, Schatt concludes that there are no clear benefits of a joint audit, in the current applications. For example, joint audits don't change the market concentration. The big firms still serve the major part of the market. However, according to Schatt, probably you simply need large offices to control large companies. Further research should show whether and how the joint audit model could contribute. That is also a recommendation in the recent report of the Commissie toekomst accountancysector ('Committee on the future of the accountancy sector').

Mandatory joint audit and possible consequences

A mandatory joint audit entails that companies must appoint two different audit firms, which share the total audit work and both sign the audit report. Joint audits exist in France since 1966. The joint audit was also mandatory in Denmark until 2005 and in Canada until 1991 (for banks). It is interesting that some regulators and authorities suggested a broad introduction of joint audits in Europe, as also stated by the European Commission in the Green Paper entitled 'Audit Policy: Lessons from the Crisis', in 2010.

In the Netherlands, the topic has recently been discussed by the Dutch Authority for the Financial Markets (the AFM), in their report 'Kwetsbaarheden in de structuur van de accountancysector' ('Vulnerabilities in the structure of the audit sector'), as published in November 2018. This leads to the question whether mandatory joint audits should be introduced in other countries than France, or whether France should abandon joint audits.

Our project tries to provide some answers to this question by analyzing the economic consequences of mandatory joint audits. We particularly look at three potential (economic) consequences of joint audits: (1) audit market concentration (do joint audits lead to lower market concentration?); (2) audit quality (do joint audits lead to higher audit quality?); and (3) audit fees (do joint audits lead to lower audit fees?).

Hence, we try to understand whether joint audits break the oligopolistic market and lead to a better price-quality ratio of audit services for clients, or not.

The impact of joint audits on market concentration

The first important question is whether joint mandatory joint audits decrease the market concentration of the Big Four audit firms, which is a key objective of regulators. Regulators often consider that the concentration of audit services offered to listed companies has become too high over time: the market share of the Big Four firms for listed companies exceeds 90 percent in most of the European Union member states (i.e., the audit market is an oligopolistic market). The idea is that a decrease in the market share of Big Four firms would lead to the fact that listed firms would 'automatically' demand more audit services from smaller/local audit firms.

The European Commission stated that joint audits '*should be developed further to dynamise the market to allow mid-tier non-systemic firms to become active players in the market segment of the audits of large corporations, which until now has proven elusive. To encourage the emergence of other players and the growth of small and medium sized audit practices, the Commission could consider introducing the mandatory formation of an audit firm consortium with the inclusion of at least one non-systemic audit firm for the audits of large companies*' (European Commission, 2010; p.15-16).

But why should market concentration be limited, theoretically? This notion is based on the idea that an oligopolistic market is associated with lower competition. However, we know that this idea does not necessarily hold true. Francis, Michas and Seavey (2013) adopt a cross-country perspective (including 42 countries) and report that the Big Four country-level market share is positively associated with earnings quality. Furthermore, the disequilibrium in market shares among the Big Four (i.e., intra-Big Four concentration, as proxied by so-called Herfindahl indices) is negatively associated with earnings quality. Such findings suggest that joint audits contribute to earnings quality, if it really leads to more competition between the Big Four, and not if it simply attenuates the global Big Four position.

Another argument of regulators is that the market share of Big Four firms leads to a high systemic risk, which can lead to market disruption if one of the Big Four firms fails. The question then is whether joint audits would reduce the systemic risk. However, the reduction of systemic risk depends on the development of large non-Big Four firms (second-tier) and these don't exist in practice at this moment.

From a more practical viewpoint, joint audits may have a different impact on market concentration, when concentration is measured based on number of clients as compared to audit fees. For two reasons, the results may change significantly - in a context of mandatory joint audit - when audit fees (instead of the number of clients) are examined. First, the Big Four firms may audit the largest companies (paying higher fees), because small audit firms lack the operational resources to audit large firms (i.e., production constraints). Second, for a given audit client, the Big Four firms may appropriate a greater proportion of the fees when the second auditor is a non-Big Four firm (this reflects joint-audit imbalance). Thus, Big Four also capture a very large part of the audit fees paid by public firms, even in a context of joint audit that allows smaller audit firm to audit some public firms.

What does academic research teach us about the effects of joint audits on market concentration, looking at results from the academic literature on joint audits in France? When we use the number of clients as a measure of concentration, the French audit market seems less concentrated than other European markets (the Big Four firms conduct a significantly lower percentage of audits). However, if the percentage of fees paid to Big Four firms in France as a concentration measure, concentration is nonetheless quite similar to that paid in other countries.

With support of the Foundation for Auditing Research, we have collected additional evidence for the French market regarding the period 2002-2017. Our sample includes French companies listed on the Paris Exchange (Euronext), with annual reports available on the AMF-website (L'Autorité des marchés financiers) or on company websites.

For about 10,000 audited companies, we find that the market share of the Big Four firms and the next two largest firms has increased between 2002 and 2017. For the Big Four firms only, the market share in terms of number of clients was 46 percent in 2002 and 55 percent in 2017, meaning that the market share of small firms declined. For audit fees, Big Four took 76 percent in 2002 and 82 percent in 2017. In 2017, the small firms only had 3 percent of the audit fees. So, even in the context of mandatory joint audit, Big Four firms had huge market shares, particularly in terms of audit fees.

If we look at the pairs of auditors in the joint audits, almost 60 percent of the companies are audited by a pair composed of a Big Four firm and a non-Big Four firm. Joint audits imbalance is greater for this type of dyad: Big Four capture a large part of the fees here. We also see that the proportion of companies audited by two Big Four firms has increased (from 17 percent to 26 percent). These results suggest that the market is really concentrated and that market share of the Big Four firms increased in the examined period.

The impact of joint audits on audit quality

An important issue is whether mandatory joint audits increase audit quality (and, therefore, earnings quality). Audit quality is generally defined as the joint probability that

an auditor will detect and subsequently report a breach in financial reports (DeAngelo, 1981). Joint audits may be associated with more knowledge/competencies (resulting in a higher probability of detection of a breach), and greater independence (resulting in a higher probability of reporting of a breach) because it is easier for two auditors to resist managerial pressure (Francis et al., 2009).

A question that can be asked is whether shareholders require a higher audit quality. That depends, for example, on the presence of macro and micro mechanisms that curb opportunistic behavior of managers (i.e., earnings management). And what is the price that needs to be paid for higher quality? Another issue is the measurement of audit quality. Currently, only 'imperfect' measures are used in the academic literature, such as abnormal accruals, going-concern opinions and restatements, as noted by Ratzinker et al. (2013) and DeFond and Zhang (2014). Better measures are needed, but this requires the collaboration of audit firms.

So, what does academic research teach us about the effects of joint audits on audit quality, looking at results from the academic literature on joint audits in France? Audit quality (captured by earnings reliability metrics) is not higher in France than in other European countries. Hence, the idea that four eyes are better than two is not true in French auditing practice.

The impact of joint audits on audit fees
The last key question is whether mandatory joint audits decrease audit fees. Economic theory predicts lower prices for audit services, if joint audits favor competition. However, the coordination costs between the two auditors, as well as the burden created by the cross-review may increase audit fees. Even if audit quality would increase, it is unclear whether shareholders want to pay more audit fees, as discussed.

Results from the academic research on the joint audits in France show that audit fees are significantly and substantially higher in France than in other European countries.

The impact of joint audits on the auditors
It is interesting to analyze whether the impact of joint audits on market concentration is sensitive to the specific combination of audit firms working on the joint audits.

The choice of the pair of auditors is not random. Ownership structure is a key determinant of the presence of one or two Big Four firms. Empirical studies suggest that the probability of having at least one Big Four firm is higher for firms with diffuse shareholding. The specific use of two Big Four firms increases with the presence of institutional investors (Francis et al., 2009), but decreases in the presence of family shareholding (Marmousez, 2012). So, the choice is driven by agency costs. Empirical research does not support the idea that the pair of joint audit firms overall influences audit quality. However, in their study focusing on impairment of the goodwill, Lobo et al. (2017) document that firms audited by a Big Four firm and a non-Big Four firm are more

likely to book an impairment and book a larger impairment than firms audited by two Big Four firms (when low-performance indicators suggest a greater likelihood of impairment).

Regarding audit fees, several studies find that the presence of at least one Big Four audit firm increases audit fees. Furthermore, more balanced work between joint audit firms enhances the audit fees.

Summary of the academic literature from France

The French audit market, where mandatory joint audits exist since 1966, is less concentrated in appearance than other audit markets. When one focuses on the number of clients, that is. However, the level of concentration is effectively not very different in France (in comparison to other European countries), when one focuses on audit fees.

Overall, audit/earnings quality is not better in France than in other European countries, and it is not sensitive to the pair of auditors (e.g., two Big Four firms vs. two non-Big Four firms), which is probably due to the fact that different pairs of auditors are in charge of different clients (i.e., two Big Four firms audit larger and complex companies). Furthermore, higher audit fees are charged by auditors in France, in comparison to other European countries. And the amount of audit fees is sensitive to the pair of auditors (i.e., higher audit fees are charged when Big Four firms are hired).

Two other relevant studies

Before answering the initial question whether joint audits are effective and efficient, two studies from the UK and Denmark are relevant.

A very interesting 'simulation' conducted by Guo et al. (2017) suggests that the introduction of joint audits in the UK would significantly increase audit fees and decrease consumer surplus, which is not good news. Second, findings based on Danish data (Holm and Thinggaard, 2014, 2018; Lesage et al., 2017) suggest that the abandonment of mandatory joint audit increases audit market concentration (i.e., higher market shares of Big Four firms), because only a few Danish firms voluntarily adopt joint audits (i.e., non-Big Four firms are not hired anymore as the second auditor). However, it has no significant impact on audit quality and it leads to a significant decrease of audit fees. This is ultimately good news for investors.

Implications of the literature review

The general conclusion from existing research is that joint audits should be abandoned in France and should not be introduced in a similar fashion in other countries. For investors, it is relevant that the French experience shows that mandatory joint audit is not necessarily an efficient system (i.e., the quality-price ratio is low). Audit quality is similar but at a higher cost (i.e., more audit fees), when French firms are compared to other European firms.

For auditors, it is important that the French experience shows that mandatory joint audit provides some financial advantages. Big Four firms can charge higher audit fees and non-Big Four firms may have access to (medium) public companies. For non-French regulators, it is difficult to compare their situation with the French experience, because many other 'rules' (or regulations) interact with joint audits. For example, in France six-year audit contracts between auditor and client are signed. The auditor cannot be fired during this period. So, it is important to note that the institutional context is relevant: specific rules may substitute or complement the joint audit system in France. In other words, joint audits may have different consequences in other countries.

For more information, please refer to the related FAR practice note:
https://foundationforauditingresearch.org/files/joint-audit.pdf

***

Q&A-session

Lucas Konijn of EY Young Professionals chaired the Q&A session after the presentation.

Should the education of auditors be geared towards working as a joint auditor for public interest entities?
'Usually the joint auditors split up the work. So, in practice there actually is no real joint audit. There is no duplication of work. And one auditor is not controlling the other auditor. The question then is what the practical significance of joint audits is. If there is no real joint audit, there is also no need for specific education. This specific education also doesn't exist in France.'

How is the work divided between the joint audit firms?
'There is no research evidence on this, but it is a key question. That is the responsibility of the audit committee. Basically, when the joint auditors are a Big Four and a non-Big Four firm, the Big Four firm decides on who is doing what, for practical reasons. When you audit large group companies, the small auditor firms cannot go abroad and it is difficult for them to do complex tasks, for example. Small firms have less resources and do the 'easier' part of the work. But we need more research on these topics.'

What were your initial expectations when you started the project?
'Often, researchers expect that the joint audit is useful, because of the four-eyes-principle. But the question is what the higher quality will cost. When Jean Bédard and I started studying the joint audit, we tried to have an objective look on this issue. Few results show that audit quality is a bit higher in the case of a joint audit, but other studies find this doesn't hold. So, on average most findings show that joint audits do not lead to higher quality. …

What do medium and large non-PIE French corporations do? Do they have voluntary joint audits?
'In France joint audit is mandatory when you publish consolidated financial statements, so there is no choice for about 95 percent of the listed firms. The other 5 percent usually do not choose two auditors. When the joint audit became not mandatory anymore in Denmark in 2005, a very large majority of companies abandoned the joint audit.'

What would your advice be to the AFM on adopting mandatory joint audits?
'I would advise to not adopt a mandatory joint audit. I see from the studies in France and Denmark that the costs of joint audits are high, without seeing clear benefits. But, to be honest, we use imperfect measures of audit quality. If one can prove that joint audits improve audit quality, by using different measures of quality, the situation will change. But for now, I would say: don't use joint audits. As mentioned, after leaving the mandatory joint audit in Denmark, audit fees decreased while maintaining the same level of audit quality.'

Do you think joint auditors should review each other's work in key audit area's?
'This is what I call a *real* joint audit, which we don't do in practice. The auditors do their own tasks and put everything together at the end. There are meetings at the beginning and at the end of the audit, but there is no significant control of what the other auditor is doing.'

To what extent is a small group of worldwide audit networks, like we know today, not just the most efficient economic solution given the current regulatory context?
'I don't know. You need big audit firms and large networks to audit large multinational companies. It wouldn't make sense to have local auditors audit very large companies. It would be totally inefficient. So, the current situation of having a limited number of big audit firms might not be perfect, but we need big firms to audit big companies, because of their expertise and the economies of scale. It makes sense. Take the banking industry, for example. It is extremely complicated and requires specific expertise. Small audit firms are not able to do these audits.'

***

Extra Q&A-session with remaining questions, post-conference

To what extent do joint audits have any impact on and/or increase audit quality?
'The key idea of the joint audit is that four eyes are better than two eyes. However, audit firms doing a joint audit usually split the work load. It would probably take too much time to duplicate all audit work, which would also be costly. Therefore, the four eyes principle is not effectuated in practice. This might cause the fact that academic research is unable to detect higher audit quality in French joint audit system, as was also the case in Denmark. However, as stated earlier, the audit quality measures used by researchers are imperfect. Results might change if other measures would be used.'

To what extent are benefits of joint audit exported by the joining Big 4/5 firms to their international network?
'I don't think this happens and it is not surprising. The Big Four firms were never in favor of using joint audits, while smaller firms were proponents of the joint audit system. This is clearly written in the responses to the Green Paper. Big Four firms have weak incentives to share work with smaller firms.'

From US group audit research, we know that investors aren't in favor of a shared responsibility between auditors. (and the audited company is discounted). Do you expect a similar affect for joint audits compared to audits where one auditor takes responsibility?
'This is a difficult question. The institutional context matters a lot. Several studies have shown that the US context is very specific, because litigation risk is much higher than in other countries. The SEC and PCAOB also have more resources to detect fraud and error. This makes the context different. Transposing the results from such a setting to France is difficult. Research has not been done on the perception of this issue in France.'

In the US, the number of listed companies has decreased and the size of listed companies has increased. These tendencies would make it even more difficult for a small auditor to win a listed company as a client?
'In the US, the noted observations are a result of mergers and acquisitions. In France, the number of mergers and acquisitions is much lower than in the US. So, we don't have the same decline in the number of listed firms in France. However, we do know most companies want to benefit from globalization. As a result, business becomes more complex and the audit as well, because of activities in foreign countries. We need big audit firms with more resources to audit big companies. This results in higher market shares and audit fees for Big Four audit firms.'

What is your view on a model where an intermediary assigns clients to auditors?
'This is an interesting idea. It may improve audit independence. However, the disadvantage is that a third party might lack private information to allocate the best auditor to the client. The client's needs might not be met.

Could joint audits increase and broaden the knowledge of the auditors at smaller audit firms which explains the higher fees?
'It is obvious that small audit firms can learn from Big Four firms in a joint audit system. However, this transfer of knowledge could be costly for Big Four firms. It will cost them time, which they will want to charge to the client. This leads to two important questions. First, why would the client accept to pay higher fees for the knowledge improvement of smaller audit firms? Second, why should a Big Four firm help a potential competitor? Can you imagine happening that in another industry?'

Do studies provide inside information regarding the pricing strategy auditors deploy in joint audits?
'No. There is only public information analyzed, so far. What we have learned is that large companies with complex assets pay higher audit fees than other companies. It is a researcher's dream to have access to private information concerning pricing strategy of audit firms.'

One prediction is that joint auditors are going to wait for each other to raise difficult issues. As a consequence, audit quality may decrease. Do you see this in your study?
'This is an important issue, but we don't see it. We only know that there is no real benefit of the joint audit for audit quality. We do know that the audit costs are much higher than in the regular system without a joint audit. We conclude that the joint audit system is not effective: the quality remains the same and the costs are much higher. Why would an investor pay more for the same quality?'

Do Engagement Quality Reviews take place in both audit firms? Is there an 8-eyes principle then?
'Due to lack of data, this question is difficult to answer. However, even there would be an 8-eyes principle, then you could still ask who is monitoring the monitor. It might become a never-ending story.'