

Economic Consequences of (Mandatory) Joint Audits

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1. Introduction

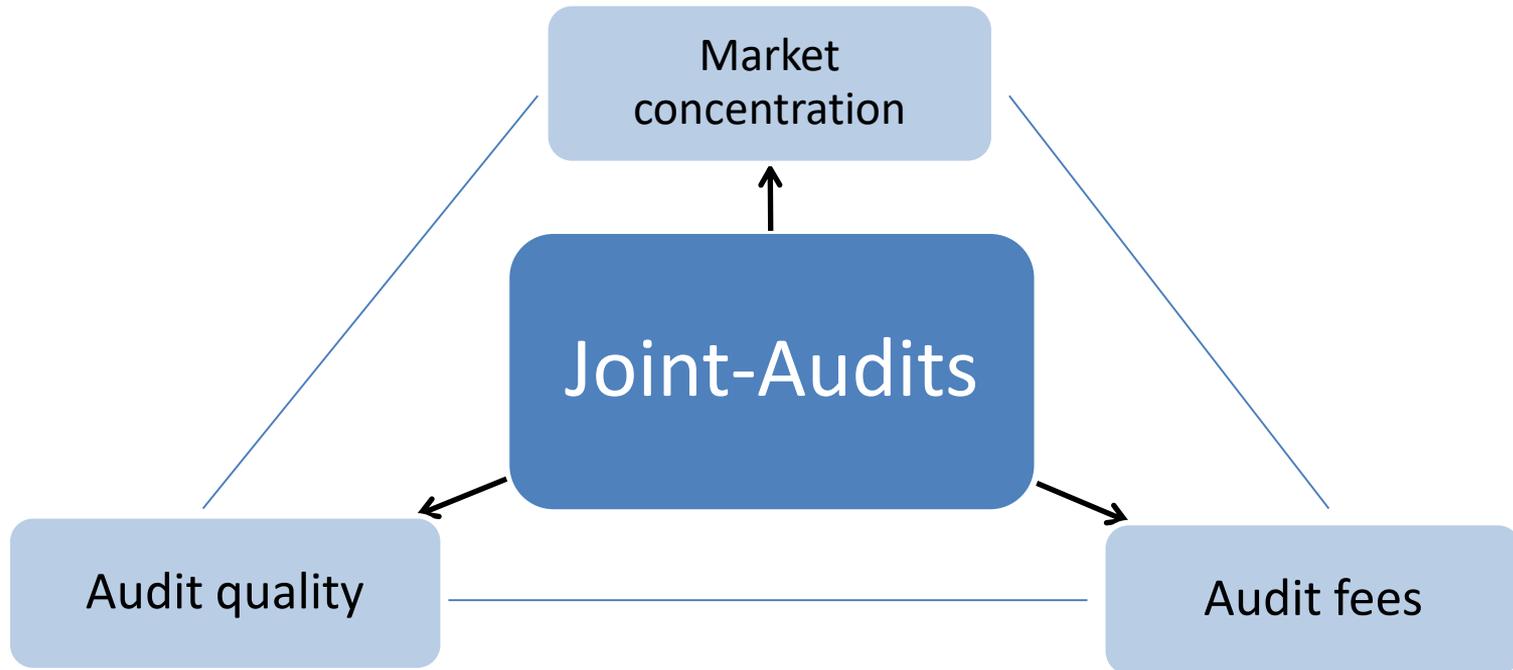
- Mandatory joint audits (i.e., companies appoint two different audit firms, who share the work and sign the audit report):
 - Exists in France since 1966
 - The French Code de Commerce (art. 823-2) stipulates that: *“People and entities required to publish consolidated accounts appoint at least two statutory auditors”*.
 - Existed in Denmark until 2005 and in Canada until 1991 for banks.
 - Was suggested by the European Commission in the Green Paper entitled “Audit Policy: Lessons from the Crisis” (2010), based on the French experience [but it was not adopted by the European Parliament in the new regulation passed in 2014].

- Was recently discussed in the Netherlands by the Dutch Authority for the Financial Markets, in the report entitled “*Vulnerabilities in the structure of the audit sector*” (November 2018). Two ideas were suggested (p. 69):
 - ***Intermediate variant 1:*** *In a more moderate variant, the joint audit model could be applied only to listed, multi-national PIEs rather than the entire PIE population.*
 - ***Intermediate variant 2:*** *Consideration could be given to formulating the joint audit model more as a peer review, in which an independent audit firm that has not been involved in the statutory audit first carries out an overall peer review of the audit before the auditor in question signs off.*

2. Key questions

- Should other countries (e.g., the Netherlands) introduce mandatory joint audits?
 - What would be the economic consequences of its introduction?
 - Should we expect different consequences for the different pairs of auditors (i.e., 2 Big Four; 1 Big Four & 1 No Big Four; No Big Four)?
- (or) Should France abandon joint-audits?

Three potential (economic) consequences



3. Impact on market concentration

- Do mandatory joint audits decrease market concentration?
 - Do joint audits lower the market shares of Big Four firms?

Regulators (often) consider that the range of audit services offered to listed companies has become insufficient over time, because the market share of the Big Four firms for listed companies exceeds 90% in most of the European Union member states (i.e., the audit market is an oligopolistic market).

- Do the market shares of «Local» firms increase?
(Which may suggest that listed firms would ‘automatically’ demand more audit services from smaller/local audit firms).

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).

- Why should we limit market concentration?

- Market concentration does not mean lower competition

Francis, Michas and Seavey (2013) adopt a cross-country perspective (42 countries) and report that:

- the Big 4 country-level market share is positively associated with earnings quality,
- and the disequilibrium in market shares among the Big 4 (i.e., intra-Big 4 concentration, as proxied by Herfindahl indices) is negatively associated with earnings quality.

Such findings suggest that joint audit would not contribute to earnings quality if it simply attenuates the global Big 4 position. However, if it reinforces the competition between the Big 4, then it may have a positive contribution to audit quality.

- Would J.A. lead to a reduction of the systemic risk?

“[Audit market] concentration might entail an accumulation of systemic risk and the collapse of a ‘systemic firm’ or a firm that has reached ‘systemic proportions’ could disrupt the whole market” (European Commission, 2010; p.4). “The concept of joint audit could also be one way of mitigating disruption in the audit market if one of the large audit networks fails” (European Commission, 2010; p.16).

However, the reduction of systemic risk depends on the development of large non-Big Four firms (Second-Tier) and on the composition of the pair of auditors.

- How should we measure market shares?

- The proportion of mandates held by Big Four firms

The traditional measure of audit market concentration (CR4) is based on the proportion of mandates held by Big Four firms.

- The proportion of audit fees charged by Big Four firms

The results may change significantly - in a context of mandatory joint audit - when audit fees (instead of the number of mandates) are examined, for two main reasons:

- 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);
 - (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 (i.e., joint-audit imbalance).

- Key results from the academic literature on joint audits in France

- The French audit market is less concentrated, *in appearance*, than other European markets (the Big Four firms undertake a significantly lower percentage of audits)

Before IFRS adoption (period 2002-2004), Ballas and Fafaliou (2008) observe that France ranks 15th (and last) in the European Union according to its four-firm concentration ratio (CR4)

...but Piot (2007) shows that the CR4 rose significantly between 1997 and 2003, knowing that one large national audit firm (Mazars) has emerged in France (Kermich and Piot, 2018).

In a recent study based on a large sample of firms, Willekens et al. (2019) confirm the lower market shares of Big Four firms in France in comparison to the other European countries (especially the Netherlands or the U.K.), for the period 2013-2017.

- The percentage of fees paid to Big Four firms in France is nonetheless quite similar to that paid in other countries.

Broye (2007) observes a CR4 of 86.6% based on audit fees collected by the Big Four firms in 2005, whereas they perform only 45.1% of the audits (EY is the leader with about 30% of the market shares).

Broye and Schatt (2012) show that this result is partially due to the fact that Big Four firms appropriate (on average) about 70% of the audit fees during the period 2005-2010, when the pair of auditors is composed of a Big Four firm and a non-Big 4 firm (i.e., imbalanced distribution of fees).

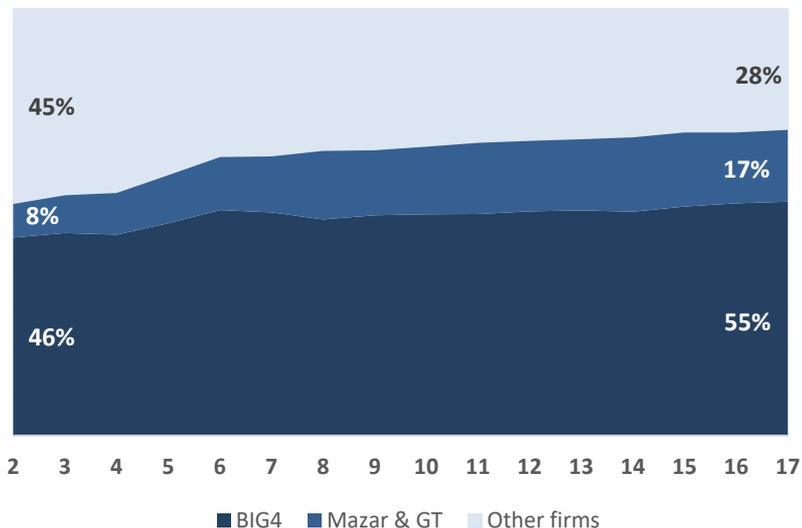
Additional evidence for the period 2002-2017

- Our sample includes French companies listed on the Paris Exchange (Euronext), with annual reports available on the AMF website or on company websites.
- All data are hand collected from the annual reports.

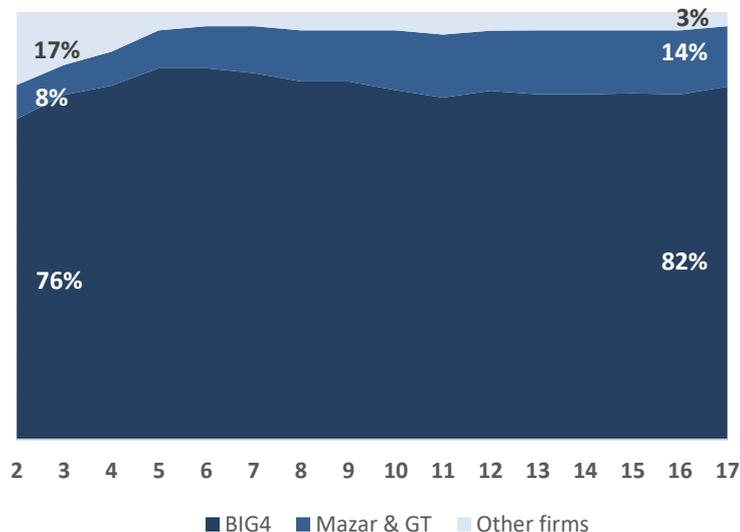
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
Number of companies	184	237	255	242	259	262	353	364	370	366	353	365	369	375	379	370	5,103
Number of mandates	368	474	510	484	518	524	706	728	740	732	706	730	738	750	758	740	10,206

Fig. 1 - Evolution of the market shares by types of firms

Proportion of mandates (2002-2017)



Proportion of audit fees (2002-2017)

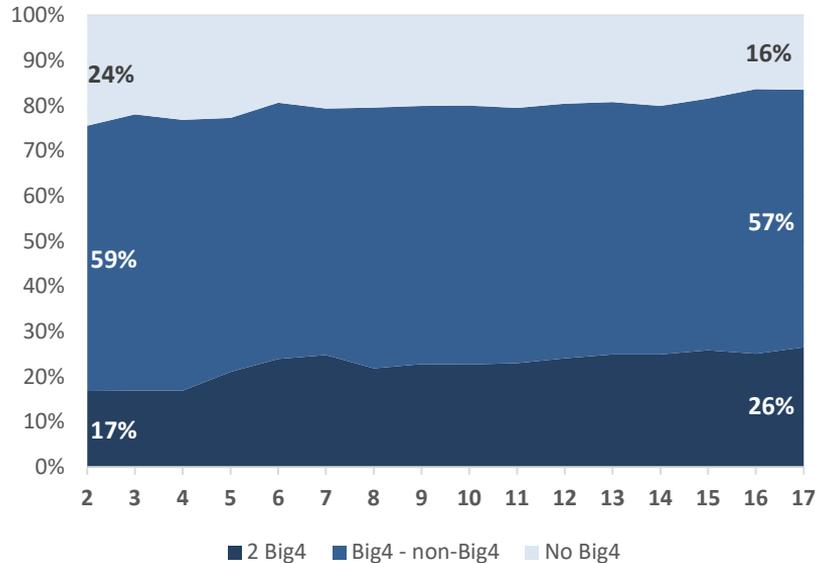


Evolution of the market shares: Key results

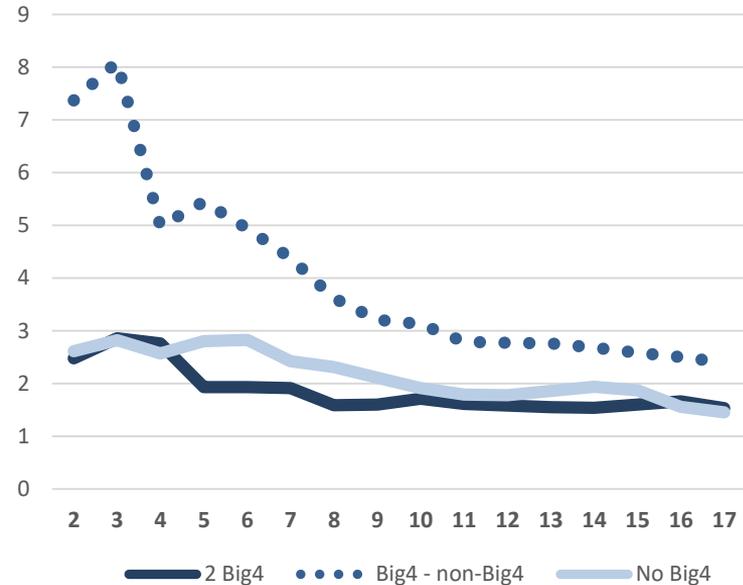
- The Big Four firms capture more than $\frac{3}{4}$ of the audit fees, but hold about half of the audit mandates.
- Evolution over time:
 - The market share of the Big Four firms and next two largest firms (Mazars and GT) has increased, both in terms of mandate and fees.
 - Smaller firms market shares, in terms of audit fees, has significantly decreased from 17% to 3%.

Fig. 2 - Evolution by pair of auditors (2002-2017)

Proportion of companies



Average audit fees ratio (fees of the leading auditor/fees of the second auditor)



Results by pair of auditors: Key results

- Almost 60% 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.
- Evolution over time:
 - The proportion of companies audited by two Big Four firms has increased (17% to 26%).
 - Joint audits imbalance has decreased, particularly for the pair composed of a Big Four firm and a non-Big Four firm.

4. Impact on audit quality

- Do 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 report a breach in financial reports (DeAngelo, 1981).
 - The *four eyes* principle: Joint-audits may be associated with more knowledge/competencies (*detection of a breach*), and greater independence (*reporting of a breach*) because it is easier for two auditors to resist managerial pressure (Francis et al., 2009).

- **Do (all) shareholders want higher audit quality?**
 - Not necessarily for firms with blockholders (e.g., family firms)
 - Not necessarily, if others (macro- and micro-) mechanisms curb opportunistic behavior of managers (i.e., earnings management)

- **How do researchers measure audit quality?**
 - Only «imperfect» measures are used in the academic literature, such as abnormal accruals, or going-concern opinions, or restatements, as noted by (Ratzinker et al., 2013; DeFond and Zhang (2014)
 - Better measures are needed... but such studies are impossible to perform without the collaboration of audit firms.

- Key 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:
 - France and Germany exhibited similar conservatism profiles in the 1990s (Ball et al., 2000; Giner and Rees, 2001).
 - Similar earnings smoothing in France and in countries with a similar institutional context in terms of investor protection (Leuz et al., 2003).
 - After IFRS adoption, André et. al (2016) also focus on earnings quality in France, Italy and the UK, and find no significant difference between these three countries.

5. Impact on audit fees

- **Do 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.
- **Do shareholders want to pay more audit fees?**
 - Not necessarily, ...especially if other costly mechanisms already curb opportunistic behavior of managers (i.e., earnings management)?

- Key results from the academic literature on the joint audits in France
 - Audit fees are higher in France than in other European countries
 - André et al. (2016) find that French companies pay higher audit fees than Italian companies (evolving in a relatively similar institutional context) and British companies (operating in a less favorable context for auditors in terms of liability and lawsuits). The difference is about 30%, which is statistically and economically significant.
 - This estimation differs from that provided by Mazars: *“According to data provided in the Mazars case studies, increases due to increased coordination costs range from 2.5% to 5% of total audit costs (overall audit costs increase by 10-15% with coordination costs accounting for 1/4 to 1/3 of this increase)”* (European Commission, 2011, p. 250).

6. Impact of the pair of auditors

- The choice of the pair of auditors is not random:
 - The French market is segmented.
 - The presence of two Big Four firms may better solve agency problems (i.e., potential conflicts of interests between insiders and outsiders) related to external financing.
 - Empirical studies suggest that the presence of one or two Big Four is positively associated with agency costs of debt (Piot, 2001).

- Ownership structure is also 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 4 firms increases with the presence of institutional investors (Francis et al., 2009), but decreases in the presence of family shareholding (Marmousez, 2012).

- **What is the impact of the pair of auditors on audit quality?**
 - In the 1990s, firms audited by one or two Big Four firms did not have lower earnings quality (Maijor and Vanstraelen, 2006; Piot and Janin, 2007).
 - For the year 2003, Francis et al. (2009) find that the number of Big Four firms matters in mitigating the upward manipulation of earnings.
 - Based on more recent data (i.e., post IFRS adoption), André et al. (2016) and Bédard et al. (2019) do not find that the presence of one or two Big Four firms impacts earnings 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 4 firm are more likely to book an impairment and book a larger impairment than firms audited by a two Big Four firms (when low-performance indicators suggest a greater likelihood of impairment). Moreover, firms audited by a two Big Four firms reduce impairment disclosures when they book impairments, suggesting lower transparency for firms audited by such pair of auditors.

- **What is the impact of the pair of auditors on audit fees?**
 - Gonthier-Besacier and Schatt (2007) report that audit fees adjusted for company size are higher when a Big 4 is associated with another firm, than when a firm uses two Big 4 auditors.
 - Audousset-Coulier (2015) observes a fee premium of 38.5% in the presence of one Big Four firm, and a non-significant marginal premium when the second auditor is also a Big Four firm.
 - Based on more recent data (i.e., post IFRS adoption), André et al. (2016) and Bédard et al. (2019) find that the presence of one or two Big Four firms significantly increases audit fees.

- **Does balanced work impact the results?**
 - Unbalanced work (i.e., one audit firm has a larger stake in the audit work) may lead to many problems, such as free-riding, especially when the pair is composed of Big Four firm and a non-Big Four firm (Deng et al., 2014).
 - In a recent study, Haak et al. (2018) show that a more balanced audit work allocation between the audit firms reduces the audit quality and enhances the audit fees as compared to an unbalanced work allocation.

7. Summary of the academic literature

- 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 mandates.
- However, the level of concentration is *effectively* not very different in France (in comparison to other European countries) when one focuses on audit fees, for two main reasons:
 - The largest public firms usually hire Big Four firms;
 - The work is unbalanced when a pair of auditors is composed of a Big Four firm and a non Big Four firm.

- Overall, audit/earnings quality is: (1) not better in France than in other European countries, and (2) not sensitive to the pair of auditors (e.g., two Big Four firms vs. non Big Four firm), 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 firms).
 - *These results are based on a few 'imperfect' measures of audit quality.*
 - *One may argue that the absence in France of accounting restatements, for instance, is a signal of the relevance of the joint audits system. More work is needed on this issue.*
- 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).

- Finally, two additional streams of research complement the academic literature based on French data:
 - 1) a very interesting ‘simulation’ by Guo et al. (2017) suggests that the introduction of joint audits in the UK would increase audit fees and decrease consumer surplus.
 - 2) 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 adopt voluntarily joint audits (i.e., non-Big Four firms are not hired anymore as the second auditor),
 - (but) Has no significant impact on audit quality,
 - (and) Leads to a significant decrease of audit fees.

8. Implications

- What are the main implications of the empirical results?
 - **For investors:** The French experience shows that mandatory joint audit is not necessarily an efficient system (i.e., the quality-price ratio is low)
 - Because audit quality is similar at a higher cost (i.e., more audit fees) when French firms are compared to other European firms.
 - **For auditors:** The French experience shows that mandatory joint audit provides some financial advantages:
 - For Big Four firms, because they can charge higher audit fees,
 - For Non-Big Four firms, which may have access to (medium) public firms.

- **For regulators:** It is difficult to refer to the French experience because many other ‘rules’ (or regulations) interact with joint audits:
 - Ban on non-audit services; Six-year contracts; Legal liability of auditors (and risk of litigation);
 - » In the Marionnaud case, by sentencing only one of the two auditors (Autorité des Marchés Financiers, 2007), the French Court departed from the view that both auditors are jointly responsible for the audit opinion.
 - » Moreover, audit firms are relatively sheltered from investors’ lawsuits seeking damages and interest (‘deep pocket’ hypothesis).
 - Characteristics (i.e., independence, expertise or busyness) of audit committees, which are now in place in Europe and significantly interact with auditors (Bédard and Gendron, 2010; Poretti et al., 2018).
 - Such ‘rules’ may substitute or complement the joint audit system in France. In other words, joint audits may have different consequences in other countries.

- In addition, some practical issues must be considered by regulators when introducing of mandatory joint audits:
 - More or less flexibility regarding the choice of auditors (i.e., Only one Big Four firm and one «Local» firm?)
 - Definition of balanced distribution of work (50-50), based on quantitative (number of hours) and qualitative (expertise of audit teams) criteria?
 - Nature of work of each auditor: Understanding of the entity and its environment? Assessment of the risk of material misstatement? Development of a common audit approach and plan? Performing similar analytical procedures to review the overall consistency of the accounts?
 - » Such issues are defined in France by a professional standard (Norme d'Exercice Professionnel 100; CNCC, 2007).
 - These various 'practical' issues may greatly affect audit quality and audit cost (i.e., the amount of fees charged by auditors).

Thank you for your attention

Related Publications by the authors

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