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Audit Regulations, Audit Market Structure, and Financial Reporting Quality

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Audit Regulations, Audit Market Structure, and Financial Reporting Quality

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ABSTRACT

In order to reduce the high level of concentration in the market segment of statutory audits of listed companies and to improve audit quality, new audit market regulations have been introduced (e.g., the mandatory rotation of the audit firm in the EU and the prohibition of single-provider auditing and consulting in the EU and in the U.S.). Other measures are currently discussed (e.g., joint audits or shared audits in the UK). However, the empirical evidence as to whether such regulations have the expected effects and whether there is actually a negative correlation between concentration and audit quality is mixed. This could be because the effects of regulatory measures on auditor and auditee incentives and their effects on market structure are interdependent, and, moreover, simultaneously determine audit quality. We therefore do not only provide a structured overview of the empirical literature on the effects of audit market regulations, but also discuss how to analyze these effects based on analytical models.
After the financial crisis beginning in 2007, regulators, practitioners, and academics have resumed their discussion regarding the advantageousness of different audit market regulations in restoring investors’, creditors’, and the public’s confidence in corporate financial disclosures. The main goals of regulators worldwide are to improve the quality of audited financial statements and to decrease the currently high level of audit market concentration.

The regulatory debate particularly focuses on designing incentives that increase the probability that auditors will exert sufficient effort to detect errors or intentional misstatements in their clients’ financial statements, and will refrain from issuing a clean audit opinion in case of detections (direct incentive effects of regulations). For example, the prohibition on single-provider auditing and consulting reduces the economic benefit auditors risk losing should they issue an unfavorable audit opinion. The fees earned from providing non-audit services (NAS) are not at stake if the joint supply of audit services (AS) and non-audit services is prohibited. By reducing the auditor’s maximum tenure, the mandatory audit firm rotation (MAR) after a pre-defined number of periods decreases the economic benefit auditors can earn from serving
a specific client. Audit fee caps (i.e., a maximum percentage of the fees earned from one specific client, in relation to the auditor’s total fees) directly restrict the relative economic importance of a client, and multi-period audit engagements protect the auditor from dismissal during a certain number of periods. Whereas all these measures mainly aim at improving independence, joint audits (JAs) make use of the dual control principle to increase both audit effort and auditor independence.

However, audit regulations also can have unintended direct incentive effects. For example, low effort can result because of free riding in a JA setting. Moreover, since a prohibition to offer NAS to audit clients eliminates advantageous knowledge spillovers flowing from NAS to AS, audit costs (and eventually audit fees) will increase if the auditor wants to keep the probability to detect irregularities constant. Alternatively, if the auditor cannot raise the audit fee, the detection probability will decrease. A similar effect will occur under MAR due to repeatedly occurring learning costs. The net effect of regulations on incentives is thus far from straightforward. It is therefore unsurprising that the empirical findings on the effects of regulations on audit quality are mixed.

In addition to their direct incentive effects, however, audit market regulations are likely to have (positive or negative) effects on the number of auditors who are active in the market, the distribution of market shares among audit firms, and the degree of competition between the suppliers of audit services (market structure effects of regulations). An example for a direct market structure effect is a regulation prescribing JAs with a Big 4 and a non-Big 4 audit firm, because the implementation of this regulation would directly transfer market shares from the market leaders to smaller audit firms. Another example would be the implementation of MAR, since MAR is expected to increase the dynamics of the audit market and thus to decrease audit market concentration.

However, there is also the potential for indirect market structure effects, that is, changes in incentives caused by a regulation can affect market structure. For example, the prohibition to provide NAS to audit clients can reduce audit firms’ profit contributions; given a certain amount of fixed costs, competition will force some audit firms to leave the market. However, market structure can also affect incentives
Introduction

Figure 1.1: Effects of audit regulations on audit quality.

(indirect incentive effect of regulations). The market shares of audit
firms determine the relative economic importance of a specific client,
and, thus, the auditor’s incentive to remain independent. Consequently,
to assess the effect of regulations on audit quality, researchers should
simultaneously take into account the incentive effects and the market
structure effects. Figure 1.1 illustrates the direct and indirect effects.

However, most of the empirical and the analytical literature on
audit regulations neglects the market structure effects of regulations,
although these effects are important for two reasons. First, decreasing
audit market concentration and strengthening competition are directly
among the regulators’ goals. Second, the structure of the audit market
can affect the quality of audited financial statements and, thus, intensify
or lessen the effect that altered incentives have on audit quality.

To date, little is known about the joint association between audit
regulations, incentives, market structure, and the quality of audited
reports. The idea of this monograph therefore is to discuss how these
interactions can be analyzed. Identifying the channels through which
audit regulations affect financial reporting quality is important for the
advancement of analytical and empirical audit research, the understand-
ing of the generally mixed empirical results, and the discussion of the
effectiveness of audit regulations.
In the following, we provide a structured overview of the empirical and analytical literature on the effects of audit market regulations. However, we would like to emphasize that—because the literature is very comprehensive whereas the scope of this monograph is limited—we had to make a selection from a literature that is too voluminous for us to review in its entirety. Moreover, we would like to point out that when we summarize the publications that we include in our overview, we present what we consider the papers’ main analyses in a compressed and stylized form to allow for comparisons between the studies (at least to a certain degree). We do, however, not include and discuss the numerous additional analyses and sensitivity checks provided in the original publication, and acknowledge that we might drop contents that researchers might deem essential. Further, to improve the readability of this monograph, we rename the variables used in the original regressions or analytical models.

The monograph is organized as follows. In Section 2, we address the structure of the audit markets of industrialized countries. We first give an overview of the concentration metrics that are usually used to describe the structure of an audit market or a market segment. We then present the empirical findings on audit market concentration at the national level and provide an overview of the main reasons that led to the currently high degree of concentration. In Section 3, we summarize the reasons why regulators worldwide consider a high degree of concentration to be a concern. In particular, we discuss the regulator’s assumption that a high degree of concentration inevitably leads to a low degree of competition and to the corresponding effects of low audit quality and high audit fees. We also give an overview of the empirical findings on the association between concentration and audit quality and fees, respectively. In Section 4, we briefly introduce the mandatory audit firm rotation, the prohibition on the joint supply of audit and non-audit services, and joint audits as examples for regulations that are likely to have both incentive and market structure effects. Section 5 summarizes the empirical findings on the effects of these regulations on audit quality and market structure. As the overview shows, the results are mixed. We believe that one reason for this observation could be that the market structure effects resulting from regulations so far have not
been taken into account sufficiently. Turning to analytical papers on the mandatory audit firm rotation, the prohibition on the joint supply of audit and non-audit services, and joint audits, Section 6 summarizes models that regard the market structure as given. The results from these models show that the effects of regulations are not straightforward, but depend on various factors related to the auditor, the client, and the legal environment. Section 7 gives an overview of analytical research that simultaneously considers incentive effects and market structure effects. It also provides a brief overview of industrial organization models that seem suitable to expand the models applied to investigate the effects of audit regulations. Section 8 concludes and highlights avenues for future research.


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