

A Review of Theories on Auditor Industry Specialisation

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Abstract

Auditor industry specialisation is a strategy adopted by audit firms to differentiate themselves from competitors in fulfilling clients' demands for better financial reporting quality. The concentration of resource and technology investments in a particular focus industry or a number of industries allows them to build their reputation as an industry expert. Hence, providing them with a competitive advantage and greater market power over their rivals. The aim of this paper is to discuss the various theories which explain the role of the industry specialist auditor in promoting financial reporting quality. A company's financial reporting quality is normally associated with the company's quality of reported earnings and the quality of its audit. The product differentiation theory, production efficiency theory, reputation theory, and spatial competition theory each have their own merit and relevance in providing distinct explanations on the demand and supply side of industry specialist auditors, and how industry specialisation strategies could have differential effects on the auditor's fees and quality of services offered by the industry specialist auditors. In terms of implication and contribution, our paper would be of interest to academicians, practitioners, regulators, and policymakers in trying to understand the auditor industry specialisation phenomenon. Our paper also contributes to the literature as this is the first paper that comprehensively provides a synthesis and a holistic view of how these four theories complement each other in explaining the role of the industry specialist auditor in promoting financial reporting quality.

Keywords: Auditor Industry Specialisation, Industry Specialist Auditor, Theory, Product Differentiation, Production Efficiency, Reputation and Spatial Competition

Introduction

In addition to the important role of a company's board of directors and audit committee, the external auditor plays a crucial role in promoting financial reporting quality. Under the U.K.

Companies Act (2006), the external auditors are appointed by the shareholders to form and express an opinion on whether the company's financial statements give a true and fair view of its financial position and comply with the applicable financial reporting framework. The external audit adds value and credibility to the financial reports prepared by the management (Power, 1996), through the auditor competencies and independent verification (DeAngelo, 1981). Regulators have also emphasised the importance of an auditor being able to understand the client's industry setting before proceeding with auditing work (Knechel *et al.*, 2007). For example, *ISA 315: Understanding the Entity and its Environment and Assessing the Risk of Material Misstatement* states that an auditor needs to establish an understanding of the client's industry setting before planning their audit strategies.

DeAngelo (1981, p.186) defines audit quality as the "*market-assessed joint probability that a given auditor will both detect a breach in the client's accounting system and report the breach*". DeFond and Zhang (2014) assert that audit quality is a component of financial reporting quality, because high audit quality increases the credibility of the financial reports. According to Watts and Zimmerman (1981), the supply of audit quality is affected by both the auditor's competency and incentives for independence. Auditor competency refers to the ability of the auditor to deliver high audit quality, which includes training, skills, and expertise (DeFond and Zhang, 2014). On the other hand, auditor independence is driven by market-based incentives such as litigation risk and concerns over reputational capital. Auditor competencies and auditor incentives are somehow interdependent. Greater incentives to supply high audit quality also motivate auditors to develop competencies that facilitate the delivery of high quality audits. Similarly, greater competency in delivering high quality audits is expected to increase the auditor's reputation capital, which consequently provides greater incentives to supply high audit quality (DeFond and Zhang, 2014).

Findings from prior auditor choice studies suggest that the auditor's differentiation strategy (such as auditor's industry specialisation) is valued by the board of directors, audit committee and shareholders as signalling a higher quality audit, as they are more likely to choose industry specialist auditors instead of relying just on a blanket brand name (Abbott and Parker, 2000; Kane and Velury, 2004). The aim of this paper is to discuss the various theories which explain the role of the industry specialist auditor in promoting financial reporting quality. The next section of this paper provides a review of the literature about the external auditor competencies through industry specialisation. This is followed by a discussion of the different theories: the product differentiation theory, production efficiency theory, reputation theory, and spatial competition theory, where each has its own merit and relevance in providing distinct explanations on the demand and supply side of industry specialist auditors, and how industry specialisation strategies could have differential effects on the auditor's fees and quality of services offered by the industry specialist auditors. Our paper contributes to the literature by providing a synthesis and a holistic view of how these four theories complement each other in explaining the auditor industry specialisation phenomenon.

Literature: The External Auditor Competencies through Industry Specialisation

Auditors are likely to specialise if they perceive benefits such as increased fees or market share from higher quality audits and/or economies of scale. Industry specialists are expected to provide higher audit quality due to having superior knowledge of the industry's business and accounting practices than non-specialists. This suggests that specialists have greater

competencies to deliver high quality audits. In addition to that, industry specialists have higher reputational capital at stake which continuously motivates them to deliver high audit quality.

Industry specialisation can arise at different organisational levels for different reasons. Global and national-level specialisation provides greater opportunities for knowledge sharing, while office-level specialisation leverages client-specific knowledge or local business conditions. On the other hand, partner-level specialisation may capture knowledge that is difficult to transfer while also providing stronger individual incentives. Prior literature measured specialisation based on the auditor with the largest industry market share or based on a certain arbitrary percentage of the market (usually 10 to 30 percent), which is calculated based on either sales, size, fees or number of clients (Ferguson *et al.*, 2003; Neal and Riley, 2004; Francis *et al.*, 2005; Reichelt and Wang, 2010; Kharuddin and Basioudis, 2018; Kharuddin *et al.*, 2019; Kharuddin *et al.*, 2021). The Big N¹ auditors are usually the national-level specialists because they dominate most (if not all) industries. In addition, many studies controls for brand name by restricting their analysis to Big N auditors only (Basioudis and Francis, 2007; Francis *et al.*, 2005; Kharuddin and Basioudis, 2018; Kharuddin *et al.*, 2019; Kharuddin *et al.*, 2021). Thus, industry specialisation often refers to specialisation among the Big N auditors.

The literature takes several approaches to test whether industry specialists provide higher quality audits. A large number of studies find that national-level specialists are associated with high audit quality proxies including discretionary accruals, earnings response coefficient, going concern reporting, benchmark beating, disclosure quality, and analyst forecast accuracy (e.g. Balsam *et al.*, 2003; Dunn and Mayhew, 2004; Behn *et al.*, 2008; Lim and Tan, 2008; Payne, 2008), with relatively limited evidence that city level specialists provide higher quality (Reichelt and Wang, 2010; Sun and Liu, 2013). Prior studies in Taiwan documented that clients of partner industry specialists have lower financial restatements (Chin and Chi, 2009) and have a higher likelihood of receiving modified audit opinions (Chi and Chin, 2011). Another approach examines the market reaction to auditor switches and finds a positive reaction for switching to a specialist, which is consistent with the perception that specialists offer higher audit quality (Knechel *et al.*, 2007).

While early studies find a fee premium charged only to larger clients, recent studies conclude that national-level industry leaders earn a fee premium, but only when they are also city-level industry leaders; global-level industry leaders earn fee premiums irrespective of whether they are also national-level specialists; and partner-level industry leaders earn a fee premium, but only when they also work for an audit firm specialist (for early studies, see Palmrose, 1986; Ettredge and Greenberg, 1990; O'Keefe *et al.*, 1994; Pearson and Trompeter, 1994; Craswell *et al.*, 1995; Menon and Williams, 2001; for more recent studies, see Ferguson *et al.*, 2003;

¹ The Big N audit firms started with the Big 8 comprised of Arthur Andersen, Coopers & Lybrand, Ernst & Whinney, Deloitte Haskins and Sells, Peat Marwick Mitchell, Price Waterhouse, Touche Ross and Arthur Young. But then the Big 8 became the Big 6 following the merger of Peat Marwick with the Klynveld Main Goerdeler (KMG) group in 1987 to become what was later known as KPMG, the merger of Ernst & Whinney with Arthur Young in 1989 to form Ernst & Young, and the merger of Deloitte, Haskins & Sells with Touche Ross to form Deloitte & Touche in August 1989. The Big 6 became the Big 5 in July 1998 with the merger of Price Waterhouse with Coopers & Lybrand to form PricewaterhouseCoopers, and finally after the collapse of Arthur Andersen in 2002 following the Enron financial scandal, the Big 5 became the Big 4.

Francis *et al.*, 2005; Basioudis and Francis, 2007; Carson, 2009; Zerni, 2011; Goodwin and Wu, 2014; Nagy, 2014; Mohd Kharuddin and Basioudis, 2018; Kharuddin *et al.*, 2019). Furthermore, another dimension is brought into the literature, namely the degree of audit market competition, and some recent evidence suggests that the degree of audit market competition impacts the specialisation premium. Numan and Willekens (2012) found that the specialisation premium increases with the distance between the auditor's market share and the market share of the next closest competitor, and Mayhew and Wilkins (2003) find comparable results in the IPO market. This suggests that the fee premiums may accrue to auditors with superior bargaining power. But, in contrast, the fee premium declines when it is the clients that have the strong bargaining power (see Casterella *et al.*, 2004; Huang *et al.*, 2007; Fung *et al.*, 2012). Additionally, auditors may alternatively grant fee discounts when specialisation produces economies of scale (DeFond *et al.*, 2000).

The economic analysis of audit outcomes is important for two reasons. First, it demonstrates that auditing in general is valuable and has material economic consequences for the financial statement users. Second, outcomes provide evidence of the effects of differential audit quality. Audits are perceived to be of higher quality by debt and equity markets when companies are audited by large accounting firms or firms with industry expertise (Francis, 2011). In the next section, we discuss the various different theories related to auditor industry specialisation strategy.

Theories on Auditor Industry Specialisation

An industry specialist auditor is expected to produce a higher quality audit due to their competency and in-depth knowledge of the client's business environment (Kharuddin *et al.*, 2021). Positioning themselves as a market leader in a particular industry (either at the firm-wide level, office level or audit partner level) allows the auditors to command a higher audit fee premium above and beyond the brand name premium alone enjoyed by the audit firms who are not industry leaders (Ferguson *et al.*, 2003 in Australia; Kharuddin and Basioudis, 2018; Kharuddin *et al.*, 2019 in the U.K.; Francis *et al.*, 2005 in the U.S.). There are a number of theories in the literature that have been used to explain the demand and supply of industry specialist auditors in the audit market, and how the industry specialist auditor contributes to higher audit quality. In particular, the product differentiation theory, production efficiency theory, reputation theory and spatial competition theory are discussed in greater detail below. It is important to highlight that these theories may appear to be related to one another in explaining auditor industry specialisation.

Product Differentiation Theory

Mayhew and Wilkins (2003); Casterella *et al.* (2004) applied the Porter (1985) five forces model to explain product differentiation from the supply perspective. Using the Porter (1985) model, they suggested that industry specialist auditors strive to obtain a competitive advantage over their rivals by offering differentiated products or services through channels such as economies of scale, brand name reputation, product differentiation, or combinations of these. Mayhew and Wilkins (2003); Cahan *et al.* (2008) assert that the payoff for the investment is at its highest through servicing a homogenous group of clients within the same industry and is based on how successful the audit firm has differentiated itself from competitors. The degree of differentiation between the audit firm and its competitor plays an

important role in determining the level of audit fees that the audit firm can charge as well as the bargaining power that the audit firm may have with its clients relative to its competitors. An audit firm that possess significantly higher market shares than its industry competitors earns fee premiums, suggesting that audit firms that have successfully differentiated themselves retain a stronger bargaining position over their clients. Clients are also unlikely to switch to other audit firms because they cannot obtain similar quality services from competing audit firms (Mayhew and Wilkins, 2003). When the degree of differentiation is not obvious, the auditor loses its bargaining power with its clients, and the clients may also bargain for part of the cost savings by threatening to switch to another auditor which they perceive to be offering a similar quality of services. This would then result in market share driven price competition between audit firms with similar market shares in their effort to chase and obtain clients.

The market share dominance of an audit firm within a particular industry offers it two competitive advantages. Firstly, the high industry specific training costs could be spread over a larger client base, resulting in economies of scale which are not easily possible to be achieved by audit firms with a smaller market share. The benefit of economies of scale could be passed as savings to the clients either through an absence of a fee premium or as fee discounts charged by the industry specialist auditor (see Eichenseher and Danos, 1981; Danos and Eichenseher, 1982; Ettredge and Greenberg, 1990; Cairney and Young, 2006; Giroux and Jones, 2007). Secondly, audit firms with a large market share develop more industry-specific knowledge and expertise by focusing their resources and technologies in a particular industry, thus allowing them to deliver services of a higher quality relative to what can be offered by an audit firm with smaller market shares in the industry. Evidence of fee premium attached to successful differentiation strategy is widely available in the literature based on findings from different countries (Defond *et al.*, 2000; Ferguson *et al.*, 2003; Mayhew and Wilkins, 2003; Francis *et al.*, 2005; Basioudis and Francis, 2007; Carson, 2009; Cahan *et al.*, 2011; Fung *et al.*, 2012; Kharuddin and Basioudis, 2018; Kharuddin *et al.*, 2019). According to Willenborg (2002), these competing effects make it difficult to predict how audit fees will be related to industry specialisation.

The Porter's (1985) analysis of competitive forces is relevant as it helps to explain how an industry specialist is able to differentiate itself from competitors through market share, and predict the conditions under which the audit firm will earn fee premiums or offer fee discounts.

Production Efficiency Theory

Assuming perfect competition, studies generally deduce a positive association between industry specialisation and audit fees as the client is willing to pay for the auditor's expertise and reputation (e.g. Craswell *et al.*, 1995; Ferguson *et al.*, 2003; Mayhew and Wilkins, 2003; Francis *et al.*, 2005; Numan and Willekens, 2012; Mohd Kharuddin and Basioudis, 2018; Kharuddin *et al.*, 2019). This premium is further evidenced when higher audit quality is associated with industry specialisation (e.g., Balsam *et al.*, 2003; Dunn and Mayhew, 2004; Reichelt and Wang, 2010; Kharuddin *et al.*, 2021). However, there is not always a direct relationship between fees and auditor specialisation because auditors in certain industries may experience economies of scale. When there are legitimate increases in efficiencies due to specialisation, firms benefit from technical economies of scale (Yardley *et al.*, 1992).

Differences and similarities in the auditor's client characteristics can affect audit production costs (e.g. on both labour and audit technology). Several experimental studies found that industry specialisation is related to auditor efficiency; specialist auditors are found able to understand incomplete patterns that are descriptive of misstatements (Hammersley, 2006), have greater non-error knowledge (Solomon *et al.*, 1999), identify more conceptual errors (Owhoso *et al.*, 2002) and have better risk assessments (Low, 2004).

Since cost data for audit firms are not publicly available to analyse efficiency in an archival setting, prior archival studies investigated possible scale economies in the audit market by employing the survivorship approach and by examining audit fee behaviour² (Danos and Eichenseher, 1982; Yardley *et al.*, 1992). Studies using the survivorship approach provide evidence that high concentration allows audit market leaders to develop expertise-related economies of scale which over time allow the firm to gain a larger market share in certain industries (e.g., Eichenseher and Danos, 1981; Danos and Eichenseher, 1982; Hogan and Jeter, 1999). These empirical findings are in line with Doogar and Easley's (1998) model which predicted that auditors with smaller market shares have production constraints which make it difficult for them to compete with the large market share auditors. On the other hand, studies have examined audit fees based on Simunic's (1980) widely-used model in which fees are a function of direct production costs ("*effort*") and expected future losses that might arise as a consequence of an audit ("*risk*"). Previous literature has confirmed significant positive relationships between effort and risk factors with audit fees (Hay *et al.* 2006; Causholli *et al.* 2010). If a specialist audit firm achieves economies of scale in the production of its services, then such production efficiencies could reasonably be expected to manifest as fee discounts.

A few archival studies find evidence of audit fee discounts for specialists in regulated industries that the authors attribute to economies of scale resulting from focused knowledge in these industries (e.g., Pearson and Trompeter, 1994; Fields *et al.*, 2004). Using proprietary data in a Belgian setting, Fung *et al.* (2012) assert that economies of scale also benefit the audit firm in terms of more efficient resource allocation, knowledge sharing and intra-firm networking.

In general, client homogeneity within the same industry facilitates the transfer of industry-specific knowledge across clients, making it easier for auditors to spread the costs of acquiring industry expertise across their client base in a given industry, leading to potential economies of scale. Furthermore, less planning and oversight is required from the auditors and the auditor can benefit from the knowledge overlap from doing repetitive tasks, leading to more efficiency in terms of time and staffing and efficiencies from shared audit technology. Cairney and Young (2006) expand on previous studies by introducing a more general definition of industry homogeneity by using the operational cost structures of the industry in which the clients operate. Based on this premise, they report evidence that auditor industry specialisation and clients' industry homogeneity are positively related, as auditors prefer to audit new clients in similar industries. This demonstrates that industry specialist auditors compete on economies of scale as a competitive advantage in a homogenous industry where they can effectively spread their cost and expertise through such homogeneity.

² The survivorship approach assumes that only cost-effective auditors will gain market share over time (Danos and Eichenseher, 1982; Yardley *et al.*, 1992)

When auditors choose to specialise in homogenous industries due to economies of scale, it is reasonable to expect that industry specialists will be able to pass along cost savings in the form of lower audit fees to clients in these industries (Cahan *et al.*, 2008). Even more, cost efficiencies can be achieved when the industry specialist auditor operates in a homogenous industry with complex accounting practices. The high risk of material misstatements in the accounts leads to higher audit risk, which has to be compensated by the auditor by exerting more audit effort. Such a response from the auditor would normally result in greater resource investment by the audit firm (e.g. longer working hours, more senior auditors, investment in audit technologies). This would then lead to higher audit fees and greater demand for industry specialist auditors for their expertise in handling industry specific accounting complexities (Bills *et al.*, 2015). Given that the industry specialist auditor serves a larger proportion of the industry market, they could realize some cost savings with more homogenous operations and capitalise on their resource investments to address the high audit risk due to the specific industry accounting complexities of their clients. Consistently, results from studies by Bills *et al.* (2015) demonstrate that clients of industry specialists are being charged lower audit fees in industries with both complex accounting practices and homogenous operations. This finding is important as it indicates that a fee discount does not necessarily mean compromised audit quality, as it could simply be a manifestation of economies of scale that the auditor is passing on to clients, particularly to those clients with high bargaining power (Bills *et al.*, 2015)

The production efficiency theory is relevant as it provides an explanation for industry specialist auditors when there is an inconsistency between the effect on fee premium and audit quality. The theory explains the reason why an industry specialist auditor is still able to deliver a high quality audit despite the fee discount charged.

Reputation theory

Certain accounting firms willingly invest in higher levels of resources and expertise beyond the professional standards' minimum requirements, as an incentive to maintain their reputations as the producer of higher-quality audits. The costly investment by the Big 4 audit firms in building reputation through brand name recognition and industry expertise is worthwhile given the higher audit fees return (Craswell *et al.*, 1995). Studies by Green (2008) offer evidence that an industry specialist auditor is more efficient and effective in performing analytical procedures whereas Moroney (2007) reports that the industry expertise of the auditor improves their efficiency in making audit judgments.

According to Scitovsky (1945); Ferguson *et al* (2003), market leadership is a mean to signal product quality which enables market leaders to charge higher prices or premiums to further signal their differentiated product quality. When product quality is uncertain, consumers infer product quality based on the supplier market share (Smallwood and Conlisk, 1979; Caminal and Vines, 1996). This is the case in auditing, where clients can only assess the service quality through experience.

Lucrative prices charged for high quality experience goods symbolise market returns on sellers' reputations, and also can be seen as a control mechanism so that suppliers do not shirk on product quality (Shapiro, 1983). In the audit market, given that the Big 4 industry specialist auditors are able to extract a fee premium, this shows that their reputation as

industry experts is valued and priced in the audit market above the Big 4 brand name reputation (Francis *et al.*, 1999). From the demand side, clients' willingness to pay a fee premium to industry specialists indicates their commitment to higher quality financial reporting given that they are willing to hire expensive specialists to conduct the audit with superior reputations in the industry (Titman and Trueman, 1986). Furthermore, firms are more likely to choose industry specialist auditors to portray to public investors their concerns over agency issues (Mayhew and Wilkins, 2003). Studies on auditor industry specialisation infer industry leadership based on the audit firm's market share of clients' sales, total assets, audit fees or number of clients, as these measures represent an auditor's depth and breadth of knowledge, expertise, experience, and investment in that particular industry (Neal and Riley, 2004; Basioudis and Francis, 2007; Francis *et al.*, 2005; Kharuddin and Basioudis, 2018; Kharuddin *et al.*, 2019; Kharuddin *et al.*, 2021).

From the supply side, this theory provides an explanation as to why auditors make reputation investments in certain industries while, on the demand side, this theory explains why clients are willing to pay higher audit fees (fee premium) to industry specialist auditors for their services.

Spatial Competition Theory

The theory of spatial competition found in the economics literature (Hotelling, 1929; Shapiro, 1989), which focuses on oligopoly market competition, suggests that price competition among suppliers only takes place in the market once firms have established their product entry and space decisions. Only those suppliers that have successfully differentiated their products may earn a price above the marginal cost in equilibrium without losing market share. The theory suggests that the product-space locations of the competitors also have an effect on the supplier's price elasticities. In other words, whether the supplier could charge a higher (lower) price would depend on how huge (small) is the distance of the competitor's product-space location in the market.

Prior studies on auditor industry specialisation (e.g. Craswell *et al.*, 1995; Ferguson *et al.*, 2003; Basioudis and Francis, 2007; Kharuddin *et al.*, 2019) have mostly relied upon the application of neoclassical theory by Simunic (1980). Simunic's theoretical work assumes that the audit market is perfectly competitive, and it shows how the fee premium earned by the industry specialist auditor is merely derived from a client's willingness to pay for a superior and differentiated service quality. However, Numan and Willekens (2012) assert that competition in the concentrated audit market is more accurately characterised as an oligopoly in nature, thus a more suitable theory is needed to recognise the supplier payoff interdependency. Numan and Willekens (2012) study is the first to apply the spatial competition theory of oligopoly to the audit market and propose an empirical method of analysis that could separate between the effects of competition and auditor industry specialisation on audit fees.

Applying the spatial competition theory by Hotelling (1929) to the audit market, Numan and Willekens (2012) assert that the industry specialisation strategy pursued by the audit firm contributes to greater market power relative to other rivals within the audit market. This will eventually put pressure on the specialist pricing, with the closest rival being the one who exerts the greatest pressure on price (Hotelling, 1929; Chan *et al.*, 2004). However, this price

competition can be softened by differentiation in terms of service quality provided by the industry specialist to the market. Whether the fee premium remains with the industry specialist auditor depends on how successfully they have managed to differentiate their services from their competitors, as clients will no longer be willing to pay a fee premium where substitute suppliers of similar service quality are available in the market. Nevertheless, the increased competition among the audit firms may offer the incumbent auditor incentives to distinguish him/herself from their closest competitor on other factors - it is then anticipated that this may result in higher quality audits (Numan and Willekens, 2012).

In their research, Numan and Willekens (2012) distinguish between two sources of market power: power arising from auditor-client alignment (measured by the close-fit between the auditor preference and the client's industry preference), and power arising from a firm's differentiation from its closest competitors (termed as competitive pressure from the closest competitor and measured based on the distance between the market share of the industry specialist auditor and their closest competitor in the audit market), in which both are assumed to have an effect on the fee premium charged by the auditor.

According to Numan and Willekens (2012), each of these sources of market power represents the effect of differentiation and competition, respectively, on audit fees. Consistently, the study of Numan and Willekens (2012) in the U.S. audit market documented that audit fees increase in both auditor-client industry alignment and industry market share distance to the closest competitor. They also found that the fee premium of the industry specialist auditor drops as the distance with the closest competitor becomes smaller. Consequently, the auditor effort might be reduced following the drop in the fee premium, and this, thus, may affect audit quality in a negative way. As the audit quality drops due to competition, clients' tendency to switch to similar quality auditor increases.

Subsequently, Numan and Willekens (2014) examined the effect of competitive pressure from close competitors on audit quality provided by the industry specialist auditor. They found that audit quality diminishes with increased competitive pressure from close competitors within the city-industry audit market. This is evidenced by lower likelihood of issuing a going concern opinion to a financially distressed company, higher discretionary accruals and higher likelihood of financial restatements as the market share distance with the close competitor becomes smaller. They also found that the market share dominance that an industry specialist auditor has over their closest competitor is the primary driver of audit quality, instead of industry leadership *per se*.

In short, the spatial competition theory provides an explanation for how differentiation and competition can both have an effect on the fee premium and audit quality of the industry specialist.

Conclusion

The aim of this paper is to discuss the relevance of various theories in auditor industry specialisation research in explaining the role of the industry specialist auditor in promoting financial reporting quality. The theories discussed are product differentiation theory, production efficiency theory, reputation theory and spatial competition theory. These theories are able to provide distinct explanations of the demand and supply of industry

specialist auditors, and how industry specialisation strategies could have differential effects on the auditor's fees and quality of services offered. Product differentiation theory explains the motivation for industry specialist auditors to meet client demands for a quality-differentiated audit in certain market segments of the audit market, by competing on the service rather than price alone. Production efficiency theory explains how the investment of resources and technology in a particular industry could result in economies of scale as auditors are able to spread their costs over huge client bases, while at the same time improving their knowledge and expertise in the domain industry. The reputation theory suggests that suppliers who hold a large market share are able to generate positive reputation effects and perceived value among buyers as market leadership signals product quality, which enables market leaders to charge higher prices. Firms with effective corporate governance which are concerned about agency issues normally select auditors that are costly, in order to signal to the public their financial reporting quality, given the auditor's superior reputation. Finally, the spatial competition theory asserts that auditors derive some market power from industry specialisation. The two sources of market power arise from auditor-client alignment and from the market share distance with its closest competitors, which, have an effect on the fee premium and audit quality offered by the industry specialist auditor. In terms of implication and contribution, our paper would be of interest to academicians, practitioners, regulators, and policymakers in trying to understand the auditor industry specialisation phenomenon. Our paper also contributes to the literature as this is the first paper that comprehensively provides a synthesis and a holistic view of how these four theories complement each other in explaining the role of the industry specialist auditor in promoting financial reporting quality.

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