

## Audit Specialisation in Malaysia

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### Abstract

By applying audit firm industry market share measure as proxy for audit firm industry expertise or specialisation, the focus in this study is on trends in industry specialisation from 1999 to 2002. With data coming from annual reports of companies listed at the Kuala Lumpur Stock Exchange (KLSE – now, Bursa Malaysia) and industry specialists defined as market leaders with market share greater than 20 percent of audit services (in terms of the number of clients) within a client specific industry, it is found that Ernst and Young specialising in construction and plantation, KPMG in industrial products, PricewaterhouseCoopers in finance and Arthur Andersen in finance, plantation, technology and trading/services.

**Keywords:** Auditor Industry Specialisation, Market Share, Big 5, Kuala Lumpur Stock Exchange

### 1. Introduction

In the United States, claims by large auditors suggest that industry specialisation is a goal of increasing importance for some, if not all, of them (Hogan and Jeter, 1999, p. 1). This implies that the concerned audit firms have perceived a benefit from specialisation, whether increased market share, profits, audit quality or merely the maintenance of market share in a competitive environment. That specialisation in the audit market is considered of utmost important in the United States is also reflected by the fact that in 1998 a sample of the nation's accountants had viewed it as critical for the future survival of the audit firms (AICPA, 1998). Thus, not surprisingly, the same study has identified specialisation as one of the five top issues impacting the CPA profession in the 21<sup>st</sup> century.

The 1993 KPMG Peat Marwick's restructuring of its organisation along industry service lines (Emerson, 1993) was the forerunner of all Big 5 firms implementing industry service line restructurings (Greene and Barren, 1994; Hogan and Jeter, 1999). As mentioned by Gramling and Stone (2001, p. 1), these restructurings are consistent with a growing emphasis in professional auditing standards on understanding the client's industry and business. A decade later, the United States General Accounting Office survey conducted in 2003 with top officers from the nation's largest publicly held companies on audit firms' consolidation and its impact on competition (among other things) provided the data that the nation's public companies preferred firms with established records of industry-specific expertise (GAO, 2003, p. 27). Specifically, 80 percent (118 of 148) of the public companies responding to its survey said industry specialisation or expertise would be of great or very great importance to them if they had to choose a new auditor. Overall, industry specialisation or expertise was ranked third in importance behind quality of service offered (99 percent) and reputation or name recognition (82 percent). Also, when asked why they would not consider an alternative to the Big 4, 91 percent (117 of 129) of public companies responding cited technical skills or knowledge of their industry as a reason of great or very great importance.

When it concerns Malaysia, little is known regarding its auditor industry specialisation (hereinafter AISpec) except for a study done by Takiah et al. (2000) which shows that there is no industry specialisation for the auditors in the country. In an internet search done in early 2005, it was found that that the nation's big audit firms have failed to provide any information on their possible industry specialisation in their websites. This is not the case when it concerns their counterparts operating in some other countries in the region. All this happens in a national surrounding where there is a decline in the relative importance of audit services as a proportion of total audit firm revenue and an increase in litigation concerns. There is also a recent increase in the awareness of globalisation and

liberation impacts on audit services among audit interested parties. In this environment, auditors may strive to maintain or increase market share by increasing quality and/or reducing costs via their specialisation efforts.

## **2. Literature Review**

There are around at least three proxy measures of audit firm industry expertise. These are (1) audit firm industry market share measures; (2) audit firms' self-identified market specialisation that may be found at the firm's website (Hogan and Jeter, 1999); and (3) percentage of an audit firm's total audit revenue (as proxied by square root of client size) generated by clients in an industry relative to the total audit revenue earned by that audit firm across all industries it serves (Yardley et al., 1992; Kwon, 1996). Compared to the latter two, research to date most frequently applies audit firm industry market share measures as proxies for audit firm industry expertise or specialisation. Specifically, the market share approach assumes that by observing the relative market shares of the audit firm servicing a particular industry, one can deduce those which may be known as industry specialists. These audit firms have the largest market shares within the industry which they are able to develop due to significant investments in industry-specific audit technologies. With such investments it is also assumed that they achieve increased economies of scale and improved audit quality.

Zeff and Fossum (1967) in the United States profile audit firm industry market shares, based on several different bases, in 38 industries comprising 526 companies. In what appears to be the first ever study on AISpec, they find across-firm variability in market leadership and identify one Big 8 firm that is not a leader in any studied industry. Replication and extension of Zeff and Fossum's work include Rhode et al. (1974), Schiff and Fried (1976), Dopuch and Simunic (1980, 1982), Danos and Eichenseher (1982), Beelde (1997) and Hogan and Jeter (1999). All in all, they have made it clear that individual audit firms have high levels of market share within specific industries, and that between-firm market shares vary across industries. It is also notable that the audit firm industry market share conclusions of these replications differ by the period examined.

Thus, for example, Dopuch and Simunic (1981, 1982) and Hogan and Jeter (1999) have found that changes in industry market shares among the large audit firms. In particular, the former find that in many industries, the dominant firm as of 1964 lost market share during the subsequent ten years. As for Hogan and Jeter (1999) who examine changes in audit firm industry market shares between 1976 and 1993, their findings suggest that firms with large market shares increased their industry market shares, while the market shares of firms with smaller market shares decreased. In contrast to Danos and Eichenseher (1982), Hogan and Jeter (1999) observe this trend in not only regulated but also unregulated industries. Gramling and Stone (2001) provide excellent review on these and other research works related to audit firm industry expertise in the United States.

The numerous studies conducted in the United States over the years on audit firm industry market shares used as proxy for audit firm industry expertise parallel similar efforts conducted in many other countries around the world. For a good example, Craswell and Taylor (1991) analyse auditor industry specialisations for all 23 Australian Stock Exchange industry classifications. Their analysis indicates that only Big 8 auditing firms has industry specialisations. Weets and Jeger (1997) include a summary of the literature in table form for studies conducted as early as in the early 1960s and as recent as a decade ago in the United States and other countries in the West.

Just about every study on AISpec shows that the audit of large firms in many industries located in various countries is dominated by one or a few of the Big 8/6/5 audit firms. Thus, the question asked for this research is whether we would observe similar pattern in Malaysia since the same audit firms also operate in the country. But the market for audit services differs by country. Gramling and Stone (2001) say this in reference to two works – Hancock (1996) and Beelde (1997) - in their study of archival literature on audit firm industry expertise. If that were true, there is a question about the generality of those results using one nation's data to the other audit markets.

Probing over the Malaysian accounting profession and audit practice in its first four decade after the nation's independence in 1957, Azham (1999) shows that when one goes beyond the structural form, in many ways they hardly resemble those in countries such as the United States or Australia. This is perhaps understandable considering the distinctive socio-economic and political contexts that audit in Malaysia is operating in. Therefore, there could be reasons why the results reported overseas could not be discerned in the Malaysian context. The Malaysian audit market is just not comparable to those found in countries such as United States and Australia – though it may be comparable to the rest of developing countries or countries in the region considering their similar stages of economic and political development and socio-cultural values.

Nonetheless, available evidence to date provides the picture that the big audit firms have over the years accounted much of the audit fees paid out by the listed companies in Malaysia (Azham, 1999) if not also perhaps for the whole audit market in the country. So, the gap in the literature that we hope to address is this: would we find evidence of audit firm specialisation in specific industries in a segment of the audit market comprising of listed companies in Malaysia? Specialisation of auditors would result in an overrepresentation of a given firm in a given industry and, consequently, underrepresentation in other industries.

### 3. Problem Statement

In the United States, standard setters and quasi-regulatory bodies have suggested on several occasions that industry expertise results in higher quality audits (e.g. AICPA, 1983, 1997; Panel on Audit Effectiveness, 2000). So, is there such expertise in Malaysia considering the fact that Malaysia just like the United States needs high quality audit? Takiah et al. (2000) do just that and more for data coming for the years 1991-1996. But the following may be found in the concluding section of their work (Takiah et al., 2000, p. 110): "Hence, it can be concluded from this study that a specialisation by industry among auditors does not exist in Malaysia. Audit firms provide services to a wide range of clients in different industries rather than specialised services in any particular industry. Consequently, audit firms gain general audit knowledge rather than industry specific knowledge ..." Would the same conclusion be found for a new set of data? Thus, the study attempts to find answer to the following question: Is there industry specialisation for the period 1999-2002 for the segment of audit market in Malaysia comprising of the KLSE listed companies?

### 4. Research Design

Several researchers test for evidence of industry specialisation but there is a lack of consensus as to the definition of a specialist. This is not surprising since defining industry specialisation is such a subjective task (O'Reilly and Reisch, 2002). This in turn leads to a situation where academic researchers have taken up a variety of approaches in measuring specialisation.

#### 4.1 Measuring Specialisation

In identifying specialist audit firms, the market share rule, the market share bases, the industry classification scheme and the industry size need to be spelt out first of all. For each one of these, different researchers may define them differently. See Gramling and Stone (2001). As a result, there is more than one way in determining those who are auditor specialists.

Following Hogan and Jeter (1999), the present study defines auditor industry specialist as market leaders with market share greater than 20 percent of audit services within a client specific industry. This 20 percent cut-off for Big 5 audit firms is based on modification of the Craswell et al. (1995) 10 percent rule applied to Big 8 audit firms, given the mergers that reduced the Big 8 prior to late 1980s to Big 5 in the late 1990s. It is notable that the 20 percent are also the industry specialisation measure taken up by Chen and Elder (2002) and Mayhew and Wilkins (2003).

As for the market measure, it is the number of clients like in the case of Craswell et al. (1995) and that of each of the three early works in the AISpec field: Rhode et al. (1974), Gilling and Stanton (1978) and Campbell (1981). Also, following Krishnan and Yang (1998), industries included in the study need to have at least 10 companies in number. This is an arbitrary inclusion rule to avoid unreasonable results because of too few firms in an industry (Minyard and Tabor, 1991, footnote 22). Note however Ferguson et al. (2003) who designate as industry specialists auditors who earn the highest percentage of industry audit fees regardless of the number of public company clients in the industry or city.

Finally, for industry classification, the industry classification scheme used by the KLSE (now Bursa Malaysia) is adopted in this study. There are thus 13 industries. But since five of them – closed-end funds, hotel, infrastructure project companies, mining and trusts – have each fewer than 10 companies for each of the years covered, the total number of industries relevant for analysis is downed to 8: construction, consumer products, finance, industrial products, plantation, properties, technology and trading/services.

#### 4.2 Data

The market for audit services is recognised to be segmented into distinct submarkets in a hierarchical way (Beattie et al., 2003). At the national level, the private (for profit) and public (not-for-profit) sectors can be distinguished with the former split into listed and unlisted companies. The listed company market can be further split based on (1) stock market indices (e.g. Composite Index, First Board, Second Board); (2) industry sector; and (3) city markets. As in so many previous studies, the present study is limited to a submarket: the publicly listed companies. Only listed companies are studied because their annual reports are easily available. In addition, this group represents the most economically significant group of companies in the country.

All the data collected come from the annual reports of KLSE listed companies. No additional information or opinions from companies or audit firms were obtained. For each company, the data is consisted of the type of industry, the identity of the company auditor, audit fee and turnover as found in the published financial statements of the companies for the accounting periods ending in 1997, 1998, 1999, 2000, 2001 and 2002. Annual reports of companies are mainly drawn from the KLSE website. In cases where the website has failed to provide them, annual

reports of companies found in the form of printed pages are searched for in either the KLSE in Kuala Lumpur itself or a securities firm in Penang.

Companies chosen to be analysed are those listed in 1999, 2000, 2001 and 2002. The exclusion is made for the data in 1997 and 1998 in order to avoid problems associated with the merger between Price Waterhouse and Coopers & Lybrand. The merger was announced 18 September 1997, effective August 1998 (Wall Street Journal 19 September 1997, pp. A3, A4.) The number listed differed over the 1999-2002 period ranging from 755 to 838. Unlike Hogan and Jeter (1999) and Velury et al. (2003), no exclusion is made regarding companies in regulated industries. But for the research question related to auditor industry specialisation compared to the other two on audit market share distribution, exclusion of companies in industries with fewer than 10 observation in each sample year is done.

## **5. Findings**

At different times within the accounting community, certain terminology has evolved to describe the top firms in the industry. At one time, they might have been described as the Big 8, later the Big 6 and later still the Big 5. (Since middle of 2002 with the collapse of Enron and the fall of its external auditor Arthur Andersen, the top firms are known as the Big 4.) As a result, different scholars use different designations in their works in describing the top audit firms depending on the time periods that they are concerned about. In this paper, for convenience, the names of the Big 5 audit firms are abbreviated as follows: Arthur Andersen (AA), Deloitte Touche Tohmatsu (DT), Ernst & Young (EY), KPMG (KPMG) and PricewaterhouseCoopers (PwC).

With 20 percent as the cut-off point for industry specialisation measure, it may be seen from Table 1 that four industries – construction, consumer products, properties and technology – have failed to have auditor specialist at some point during the four-year period covered by the study. Consumer products has in fact failed to have auditor specialist for the last three years of the four-year period. Also, for these four industries and majority of the rest, at various points during the four-year period, there is no more than one single auditor specialist. In two industries – industrial products and plantation – the auditor specialists stay the same throughout the four-year period. It is KPMG for industrial products and AA and EY for plantation. In the case of finance, AA and PwC are the auditor specialists for each of the last three years of the four-year period. In the case of construction and technology, EY and AA have been the auditor specialist over the last two years of the four-year period. For trading/services, it is interesting to find that AA is the auditor specialist for the last three years of the four-year period. However, PwC is also the auditor specialist in one of these years.

During the four-year period, it is only the year 1999 when each of the eight industries possesses auditor specialist. The year 2000 sees three industries (construction, consumer products and technology) failing to have their auditor specialists. That is also the year that sees the highest number of industries failing to have auditor specialists. In 1999, KPMG is the auditor specialists in four industries, while AA in four other industries. As for EY and PwC, there are auditor specialists in one and two industries, respectively. For EY that position in plantation has to be shared with AA. As for PwC, in one of the two industries that it is auditor specialist, it has to share the position with KPMG. For the rest of the three-year period, AA appears to be auditor specialist in more times than the rest of the Big 5 firms. Second place is taken up by EY.

All in all, it may be safely said that there is industry specialisation in the listed company segment of the audit market with EY specialising in construction and plantation, KPMG in industrial products, PwC in finance and AA in finance, plantation, technology and trading/services. With the fact that there is no industry specialist found in consumer products for the last three years of the four-year period, it may be said that this very sector is without auditor specialist. It is also notable that DT has failed to be considered as auditor specialist for any of the industries for the years covered. (Note however that when the 20 percent as the cut-off point for industry specialisation measure is reduced to 15 percent, DT is finally able to be one for the technology industrial sector. That position is however shared with the other four Big 5 audit firms.) (See Table 1)

## **6. Discussion**

Prior research has used Big 8/6/5 non-Big 8/6/5 dichotomy without regard to differences between large audit firms in industry market share and expertise (Pike, 2003, p.10). But there is linkage between industry market share and industry specialist/expertise (Solomon et al., 1999). That is, industry experts have a deeper knowledge than non-experts due to greater experience in the industry which enables experts to make more accurate audit judgements. So, in those cases where audit firms have more clients or earned more fees in an industry, they may safely be said to have more opportunities to acquire deep industry knowledge which leads to industry expertise.

Recently the United States General Accounting Office which conducted survey in 2002-2003 on audit firms' consolidation and its impact on competition (among other things) mentions in its report that audit firm 'industry specialisation' can be captured by a firm's relatively high market share, in terms of client assets or client sales, in a

given industry (GAO, 2003, footnote 18). Thus, the assumption held is that a firm does not have sufficient expertise and staff resources if it audits only a small share of industry assets (GAO, 2003, Appendix IV, footnote 3).

In the Malaysian context, from the analysis undertaken, there is evidence suggesting that four of the five large audit firms show a pattern of strong presence in specific industries. This might be related to the fact that these four firms use different audit approaches and have incomparable industry knowledge within their audit teams. As a result, there is competitive advantage for these firms, and auditor choices have become less than “random”. This very finding is comparable to that which can be found in so many other research conducted over the years in many other parts of the world (see the above Literature Review). It is also the very opposite found in Takiah et al. (2000) as mentioned above. Having said all that, there is a need to take into account that there exist different approaches to identify firms as industry audit specialists. This lack of consistent measurement, as stated by Neal and Riley (2004), has made it difficult to compare and evaluate findings on auditor industry specialisation in studies.

The finding that there is auditor industry specialisation in the country brings out the picture that though Malaysia is a developing country with a different socio-economic and political background from that of western developed countries, certain things are still the same the world over. This is probably due to the relaxation of competitive barriers in recent time and increasing participation of foreign investors in financial markets. Furthermore, due to the Asian Financial Crisis 1997-98, the large audit firms with affiliated firms located in developing countries faced pressure from various parties to have their audit philosophy and audit approach harmonised on a world-wide scale. Differences in audit practices between local offices of the Big 5 firms, which existed due to national factors, may have been replaced by a more unified approach within each of these firms. All in all, audit market in the country that concerns with the listed companies segment may not be so different when compared to those in western developed countries. For other audit market segments and other matters in audit besides audit market, there is still however a need for the conduct of research in order to find out whether similarities are also abound.

## **7. Conclusions**

The presence of the demand for industry specialisation drives audit firm investments in specialisation and leads to industry-based clienteles. The presence of this type of clienteles is the rationale for using market share data to infer specialisation for research in auditor industry specialisation. In the market of audit services, the suppliers come in the form of top tier, second tier and third tier firms. Those in the latter two categories may have long histories and some may also have developed specialisation to capture economies of scale (Godfrey and Hamilton, 2005, p. 13). Nonetheless, a client seeking a high-quality audit has two main methods of identifying a specialist auditor (other than in relation to the specific types of contracts audited) (Godfrey and Hamilton, 2005, p. 12).

The first is top tier designation. The second is a reputation for being an industry specialist. The first signal is easy to recognise because top tier auditor designation is common knowledge. Awareness of industry audit specialisation requires more specific knowledge of which audit firms specialise in which industries. The auditee's senior management would be likely to have this knowledge (see Shockley and Holt, 1983). More importantly, though, the signal provided by a specialist auditor depends upon investors' knowledge of auditor expertise. For these reasons, the auditor specialisation has two tiers and that top tier designation dominates the specialisation signal. Furthermore, top tier audit firms are likely to not only be perceived as specialists, but also to be specialists. Top tier audit firms have enough resources to employ individual auditors and audit teams with industry specialisations.

In the Malaysian context of listed companies segment of the audit market in recent years, four of the Big 5 audit firms gave the picture of being industry specialists like their counterparts in other parts of the world. This means well for the country, for it has been found in several research conducted overseas that audit quality as well as earnings quality increase with the auditor industry specialisation (Craswell et al, 1995; Balsam et al., 2003; Dunn and Mayhew, 2004).

Though several benefits may be derived with the presence of industry specialisation by the auditors, there is a need to be aware that when a specialist audit firm becomes a dominant force in the supply of sectoral audits, it has the potential to extend considerable influence over audit pricing within the sector. Knowledge of its presence may thus assist relevant parties to be more on the watchout of the possibility of the use of such power and the kind of actions that they may need to take in dealing with it.

## **8. Limitation of the study**

There are more than a few limitations associated with this descriptive study. First, the sample studied is limited to listed companies. Thus, the findings may not be generalisable to the entire market for audit services in Malaysia, which includes private companies, unlisted public companies, the public sector, etc. Second, since sample chosen is not directly comparable to those used in prior studies of the western developed economies, comparisons between the study's findings and theirs should be made with caution. Third, the definition of auditor industry specialisation is

arbitrarily based on a 20 percent market share rule and the results are sensitive to this definition. Fourth, the use of the number of clients as a basis for calculating market share has its limitations. As stated Neal and Riley (2004), this particular basis may misrepresent the potential for increased economies of scale and/or improved quality. They explain that an auditor with two small clients would be considered to have twice the market share of an auditor with one large client. See Weets and Jager (1997) for studies that use concentration measures other than number of companies.

Fifth, the data contained in the report do not differentiate between those associated with consolidated amounts and others such as parent and/or subsidiary companies. There is acute difficulty in allocating audit fees amount to the right auditors when the consolidated figures do not distinguish between fees paid to the holding company auditor and those paid to other auditors (who are rarely identified). There is thus the risk of double counting of holding companies and their listed subsidiaries audit fees and other data.

Sixth, the audited companies' lines of business, not the business of the audit firms, define the market. The audit firms' understanding of industries may be totally different from that classified by the KLSE codes. This may lead to a situation where in those industries that an audit firm is not judged to be a specialist, it may in fact be one if only these industries (or some combination of them) are viewed together from the viewpoint of the audit firm. On the other hand, an audit firm that is judged to be a specialist in some other industries may not truly be the case from viewpoint of the audit firm when its own lens instead of that of the KLSE codes which is applied. Note that in the Australian context, Ferguson et al. (2001) mention that the 24 industry categories of the ASX are narrower in scope than the self-reported industry specialisations of the Big 5 auditing firm which were disclosed on their Australian web-sites in 1998.

## 9. Further Study

Prior literature (Palmrose, 1986a; Craswell et al., 1995) followed by the present study identify industry specialisation variable based on the market share of an auditor in the audit services market for each particular industry. A specialist shall have substantially higher market share than other auditors in the market. The research results are sensitive to the cut-off points used to define the "high market share". Thus, the linkage between the concept of specialisation and market share statistics is debatable (Ferguson and Stokes, 2002). It would be much better for future study to directly identify the auditor's specialisation through field interviews with its senior management.

The approach undertaken in this study could be extended using other databases to obtain information about larger samples of client companies or perhaps even complete industries. Combined with data on audit approaches and client knowledge present in audit firms, such analysis might give additional insight to the supply side of the audit market. Future research could also replicate this study in the audit markets in other common law countries, to investigate its generalisability across jurisdictions. Using a different time period would also reveal whether results observed are time specific.

Perhaps in the Asian context, industry specialisation may not be such an important factor for auditor selection. In Asia compared to the western developed economies, many companies are characterised by unique features such as family ownership, "interlocking firm relationships" and cross-chairmanship. Specifically, these companies including the listed ones are often controlled by a network of family companies, with only a minority of its voting, equity shares floated. The owners of listed companies would often exercise control by holding board chairmanships. The same may perhaps be said when the owners are not families but actually governmental bodies which would make sure that their representatives to be those holding the board chairmanships. In the context of Hong Kong in particular where family ownership of listed corporations is abound, Baydoun (1999) hypothesised that cross chairmanship lead to cross auditorship. While the evidence is circumstantial, it can be said that his study shows that auditor choice is not independent of personal connections between chairmen of companies. Thus, for a further study of auditor specialisation in Malaysia, perhaps one similar to that for Hong Kong by Baydoun (1999) may be one of the better alternatives for achieving an insight than any that has been mentioned above.

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Table 1. Auditor Industry Specialisation by Number of Clients

Industry	1999	2000	2001	2002
<b>Construction</b>	1	0	1	1
	(KPMG)		(EY)	(EY)
<b>Consumer Products</b>	1	0	0	0
	(AA)			
<b>Finance</b>	1	2	2	2
	(AA)	(AA, PwC)	(AA, PwC)	(AA, PwC)
<b>Industrial Products</b>	1	1	1	1
	(KPMG)	(KPMG)	(KPMG)	(KPMG)
<b>Plantation</b>	2	2	2	2
	(AA, EY)	(AA, EY)	(AA, EY)	(AA, EY)
<b>Properties</b>	1	1	1	0
	(AA)	(AA)	(AA)	
<b>Technology</b>	2	0	1	1
	(KPMG, PwC)		(AA)	(AA)
<b>Trading/Services</b>	1	1	2	1
	(PwC)	(AA)	(AA, PwC)	(AA)

Note:

1. The number of audit firms with a market share greater than or equal to 20 percent
2. AA = Arthur Anderson, DKC = Delloite Kassim Chan, EY = Ernst & Young,  
PwC = PricewaterhouseCooper, KPMG = Klynveld Peat Marwick Goerdeler