International Audit Firms as Strategic Networks – The Evolution of Global Professional Service Firms

Hansrudi Lenz and Marianne L. James[1]

Abstract. The evolution of large international audit firms was driven by client needs and legal regulations specific for the audit industry. The organizational structure of these professional service firms can be characterized as a specific form of a strategic network. The national member firms have to adapt to their different legal, cultural, and economic national environment. In particular, the legal rules in the audit sector establish barriers of entry for foreign competitors and prevent more common forms of market entry, e.g. the acquisition of another audit firm or the establishment of a subsidiary in a foreign country.

Networks of audit firms are a prime example of hybrid governance structures between markets and hierarchies and are organized by contractual relationships between legal and economically autonomous partnership entities from different countries. These networks are controlled by a committee structure. Strategic decisions are made by one or more lead firms.

This article describes the governance structure of international audit firm networks. Furthermore, we analyse how coordination and incentive problems, e.g. hold-up and moral hazard situations are dealt with in these network structures. Exclusive rights, referral work, brand names, network-specific investments, and profit pooling are means to ensure that network members cooperate.

Keywords. Audit firms, strategic networks, professional service firms

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1 Introduction: Accounting Firms as Global Professional Service Networks

The leading international accounting firms describe themselves as global networks of professional service firms providing audit, tax, and advisory services:

"KPMG International … is the coordinating entity for a network of independent member firms that provides audit, tax and advisory services to a wide variety of public and private sector organizations."[2]

"PricewaterhouseCoopers firms come together through their membership of PricewaterhouseCoopers International Limited, a membership based company organised in the United Kingdom. Upon joining the PricewaterhouseCoopers global network and becoming members of PricewaterhouseCoopers International Limited, member firms have the right to use the PricewaterhouseCoopers name and to gain access to common resources, methodologies, knowledge and expertise. In return, they are bound to abide by certain common policies and to maintain the standards of the global network as formulated by the CEO of PricewaterhouseCoopers International Limited and approved by its Global Board."[3]

"BDO International is a world wide network of public accounting firms, called BDO Member Firms, serving international clients. Each BDO Member Firm is an independent legal entity in its own country. Nothing in the arrangements or rules of BDO International shall constitute or imply a partnership between BDO Member Firms."[4]

Despite the offering of a multitude of service lines, the *core service* remains the auditing of financial statements, which is a highly regulated service line in most developed countries. An audit of financial statements enables the auditor to express an opinion whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework (e.g. International Financial Reporting Standards (IFRS)[5], U.S. Generally Accepted Accounting Principles (US-GAAP)). Audits are a subset of assurance engagements, i.e. engagements in which a practitioner expresses a conclusion designed to enhance the confidence of intended users other than the responsible party, about the outcome of the evaluation or measurement of a subject matter against specific criteria.

The evolution of large international audit firms was driven by the emergence of multinational enterprises, which needed an audit of their foreign operations[6], spe-

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2 KPMG International (2005, 1).

3 PricewaterhouseCoopers International (2004, 45).

4 BDO International (2005, 2).

5 International Standard on Auditing (ISA) 200.2.

6 Klaassen/Buisman (2000, 439-444) discuss reasons for the internationalization of audit firms.

cific legal regulations for the audit industry, and cultural factors. Clients of audit firms often have subsidiaries in different countries around the world with different cultural, social, and legal norms and rules, e.g. accounting and tax laws. Therefore, the clients of an audit firm in their home country need audit and consulting services with respect to their subsidiaries abroad. “Generally speaking, especially when multinational enterprises prepare consolidated financial statements, they will need audits of those statements on the basis of rules of the home country of the multinational enterprises.”[7]

The organizational form of an international accounting firm is heavily influenced by regulations. In most countries the right to practice as a certified audit firm is granted only to national firms in which locally qualified professionals have majority or full ownership. Therefore, member firms of an accounting network are locally owned and managed. The control of the network members can not be exercised via majority ownership. Furthermore, the detailed national rules concerning corporate law and accounting require a high degree of local knowledge, which creates a natural barrier of entry for foreign audit firms without local knowledge.

The organizational structure of these professional service firms can be characterized as a specific form of a strategic network. The national member firms have to adapt to their different legal, cultural and economic national environment. Especially the legal rules in the audit sector establish barriers of entry for foreign competitors and hinder more common forms of market entry, e.g. the acquisition of another audit firm or the establishment of a subsidiary in a foreign country.

International audit and consulting firms proved to be extremely successful organizations in the last decades, some realizing double-digit growth rates. Today, most middle and large audit firms are members of an international network of independent firms, which enables the support of clients who operate in different countries.[8] For example, the audit of consolidated financial statements requires the cooperation of audit firms and auditors with knowledge of different country-specific cultural and legal rules, accounting and auditing principles. The efficient management of the local and global needs of a multinational client is of crucial importance.[9] One gets an impression of the importance of audit firm networks, if one looks at the largest audit firm networks. During 2004, worldwide fee income of the 15 leading global accounting networks was 80.4 billion dollars and total staff was 619,616 (see Table 1).

7 Klaasen and Buisman (2000, 439).

8 See Fisher (2005).

9 See for a detailed field study of the linkage between the local and the global under a structuration perspective Barrett et al. (2005).

Table 1. Fee and staff data for leading global accounting networks (Source: IAB, No. 360, 17. Dec. 2004: 9-10; KPMG data: KPMG International 2004 Annual Report; www.kpmg.com).

International network	Fee income 2004 ($ m)	Partners 2004	Professional staff 2004	Total staff 2004
PricewaterhouseCoopers	17,600.0	7,753	88,471	122,471
Deloitte Touche Tohmatsu	16,400.0	7,711	84,364	114,932
Ernst & Young	14,500.0	6,973	70,070	100,601
KPMG	13,400.0	6,448	70,095	93,983
BDO International	3,017.5	2,222	17,690	25,118
Grant Thornton	2,092.0	2,026	14,257	20,486
RSM International	2,088.0	2,140	13,187	20,371
Baker Tilly International	1,815.0	2,199	12,749	18,583
Horwarth International	1,777.0	2,282	13,046	18,776
Moores Rowland Int.	1,735.5	2,113	12,169	19,176
Nexia International	1,608.0	1,614	12,560	15,902
PKF International	1,169.6	1,646	8,387	12,627
Kreston International	1,128.0	1,128	7,447	11,471
HLB International	1,114.0	1,617	7,920	12,060
Moore Stephens Int.	880.2	1,516	8,837	13,059
Total	80,324.8	49,388.0	441,249.0	619,616.0

The purpose of this study is (a) to identify the key determinants of the evolution of international audit firm networks, (b) to characterize their governance structure, and (c) to investigate how coordination and incentive problems (e.g., hold-up and moral hazard situations) are dealt with. Legal regulations specific for the audit and accounting industry seems to be a main factor, which has shaped the organizational form of international audit firms. The study finds that international audit firm networks can be categorized as strategic networks. Exclusive rights, referral work, brand names, network-specific investments and profit pooling are means to ensure that network members cooperate.

Our study contributes to the existing literature in several ways. The prior audit literature, predominantly written by audit practitioners, has addressed the subject of our study primarily in a descriptive manner, whereas until now organizational theorists have not discussed audit firms as a specific and economically important network organization in detail. Thus, we contribute to the existing literature by trying to bridge the gap between audit and organization research. Furthermore, we attempt to provide a full picture of audit firm networks including the identification of potential external and internal factors, which determine the organizational form.

Our study also provides a basis for the development and subsequent tests of hypotheses concerning audit firm networks.

The remainder of the paper is organized as follows. In Section 2 internalization strategies of audit firms are described. Section 3 argues that distinctive features of the audit market influence competition and organizational structure of audit firm networks. Section 4 analyses in detail the organizational structure of global audit firm networks and shows how coordination and inventive problems are solved within the networks. The last section summarises and concludes the study.

2 Internationalization Strategies of Audit Firms

We differentiate between two general modes of service delivery in foreign countries: Going-alone and cooperation (see Fig. 1).

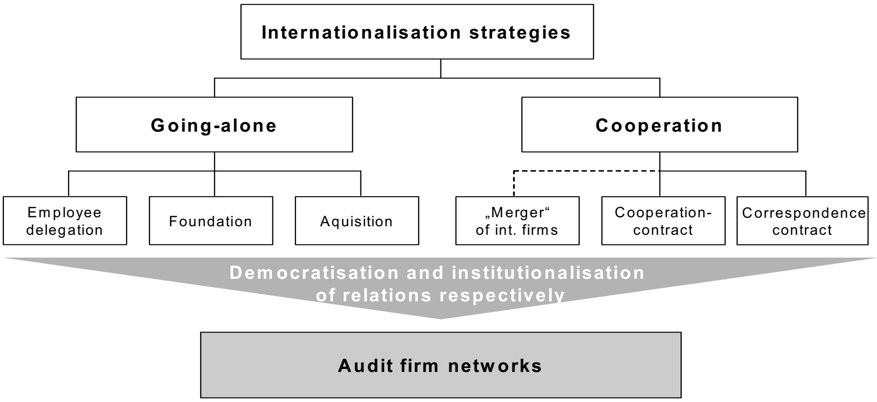

Fig. 1. Evolution of international audit firm networks (Source: Lenz and Schmidt 1999, 116)

A form of a going-alone-strategy is the cross-boarder delivery of services where employees of professional accounting firms located in one country move temporarily to another country (employee delegation). Because of the high costs of the appropriation of local knowledge, of the national accreditation as auditor, and of travelling, in the long run this strategy is inapplicable.[10] A further form is the establishing of a commercial presence in another country in form of a regional office or a (wholly owned) subsidiary (formation of an audit firm) or the acquisition of an existing audit firm (direct foreign investments in audit firms). Well-defined property rights enable directive and control rights and therefore the enforcement

[10] See Havermann (1993a, 173f.), Lanfermann (1995, 381f.); Linden (1989, 336); Lück and Holzer (1981, 2037).

of a worldwide uniform strategy and audit quality. A possible disadvantage is that these strategies are time and cost intensive and many developed audit markets don't allow the majority acquisition of a local audit firm through non-locally licensed audit firms or auditors.

We differentiate between the following basic forms of cooperation between audit firms: Correspondence contracts, cooperation contracts and (as special form) mergers of audit networks on an international level.

Correspondence contracts: Small-sized national audit firms with a small number of international oriented clients agree with audit firms in other countries to represent each other if required. The exclusive or non-exclusive correspondence contract typically does not regulate explicitly audit quality and audit standards. National audit guidelines govern the audits and in each individual case the guidelines are individually agreed upon between the partners of the cooperation. With exclusive correspondence contracts referred foreign work is assigned exclusively to the network firm in the respective country. Non-exclusivity means that multiple network firms are domiciled in a country.[11] Partner meetings at regular intervals, the exchange of employees between network firms and continuous quality controls do not take place. For branding purposes a common international name can be chosen but for the provision of audit services the local name is used. Many small or medium-sized networks utilize this contract form.

Cooperation contracts: These contracts, which regulate the rights and duties of the member firms, e.g. use of the network name, exclusive representation in a specified territory, quality standards, funding, create a stronger institutionalised structure (see Section 4.2 for details).

A separate discussion is needed for *mergers of international networks*. The strategic leaders of two international networks propose a worldwide merger. If the proposal is accepted by the partners of the national member firms a merger of national firms usually follows. On the international level the merger is realized via contractual cooperation agreements whereas on the national level depending on the jurisdiction the purchase or exchange of shares can be used to form a group of audit firms.

The European Commission investigated the merger between Price Waterhouse (PW) and Coopers & Lybrand (C & L) because the European merger regulation required an approval by the Commission. The Commission described the merger as follows: "As both organisations are international networks of national offices, overseen by international bodies, their merger will achieved by a series of transactions and contractual arrangements through which the two networks will be combined worldwide. In practice, the parties will accede to a new integrated structure (the 'Combination Agreement') which will reflect the existing structure of the "PW Combination Agreement'. In practical terms, the PW firms carrying on business in any particular territory will merge with the C & L firms, which carry on business in the same territory. Depending on national laws concerning the provision of audit and accounting services, in some cases integration will be effected by

[11] See Linden (1989, 342f.).

a formal merger of the relevant firms, in other cases by the acquisition by one entity of the business and assets of the other, while in some other cases the firms will be formally dissolved and a new successor firm created."[12]

For example, in Germany the resulting entity PwC Deutsche Revision AG is a non-listed stock corporation whose shares are held by the partners which is the parent entity for 29 subsidiaries. According to German rules the parent company has to present consolidated financial statements for the group. In the UK the parent is PricewaterhouseCoopers LLP with only five principal subsidiary undertakings.[13]

Audit firms as strategic networks historically evolved on the one hand from a democratisation of more hierarchical group-like structures, i.e. subsidiaries were taken over from local audit partners, and on the other hand through an increasing institutionalizing of former more loosely connected relationships such as networks that used mainly correspondence contracts.

We postulate the following testable hypothesis: Going-alone-strategies are more successful in countries with less developed audit markets, which do not regulate the foundation or acquisition of an audit firm. In developed audit markets where regulatory requirements grant the right to practice as an auditor only to national firms in which locally qualified professionals have the majority ownership and control the management we expect to observe forms of cooperation.

Stylized facts are compatible with this hypothesis:[14] Former audit firms Arthur Andersen (AA) and Price Waterhouse (PW) have chosen going-alone strategies. In Europe AA had a market share above 20% in the following countries: Greece, Italy, Portugal and Spain. The five countries with the highest market share of PW were: Ireland (19.6%), Spain (18.6%), Great Britain (15.8%), Portugal (14.8%) and Italy (12.6%). With the exception of Great Britain these are relatively less developed audit markets.

An interesting example of a fast-growing German mid-tier network, which pursues a form of a going-alone strategy, is Rödl & Partner.[15] Rödl & Partner tries to build-up an international network grounded in Germany under a common brand name.[16] At the same time, this firm is a member of another mid-tier network (Rödl & Partner in Germany is member of CPA International Associates). These networks are used in countries where Rödl & Partner itself is currently not represented. Through the future formation of its own global network in such countries there is a potential rivalry between these two networks. Furthermore, audit engagements are only referred to member firms of the CPA International Associates network if Rödl & Partner itself is not represented in a respective country. It can be expected that such a relationship is only possible with a network, which is characterized by loose ties between its member firms.

12 European Commission (1999, 28).

13 PricewaterhouseCoopers LLP, Annual Report for the year ended 30 June 2004.

14 See Lenz and Schmidt (1999, 117f.).

15 Another example is Haarmann Hemmelrath. See for details Lenz (2002, 125-127).

16 See for a short description of Rödl & Partner International Accounting Bulletin, No. 363, 3 March 2005, p. 4.

3 Audit Services, Regulation, Organization Structure and Competition

According to DeAngelo (1981b, 186) the quality of audit services is defined “to be the market-assessed joint probability that a given auditor will both (a) discover a breach in the client’s accounting system, and (b) report the breach.” The first feature depends on the auditor’s technological capabilities (competence); the second feature depends on the auditor’s independence from a given client.[17]

Audits of financial statements are services of differing quality, which are offered by audit firms and demanded by markets. Agency costs vary from entity to entity. In general, it is assumed that the higher the agency costs the higher the demand for high-quality audits. An ex ante evaluation of the quality of an audit is not possible. Audit services are experience goods for the members of the supervisory board or an audit committee and trust or credence goods for the shareholders of public companies. This results in the well-known information asymmetry problems between buyers and sellers of audit services. Regulatory authorities try to overcome this problem with mandatory requirements, which shall secure a minimum quality of audit services. The regulation covers the admission and registration of auditors, ethics and independence rules, auditing standards, quality assurance and public oversight about the profession. In the end, the audit profession is one of the most highly regulated professions, at least in developed countries.

An instructive example of regulation is the Eighth Council Directive of the EU. In conformity with this directive most member states have introduced legal requirements that the majority of the voting rights and the majority of the administrative or management body should be only in the hands of statutory auditors or audit firms that are approved in that specific member state. Apparently such rules restrict cross-country competition because an entry barrier is created. A proposal of a new directive seeks to remove such entry barriers and “states very clearly that the majority ownership of an audit firm should be held by statutory auditors or audit firms approved in *any* Member State. This change enhances compatibility with internal market rules and will allow also for the creation of more fully integrated EU audit firms.”[18]

What follows from these considerations with respect to the organizational form of audit firms? Differences in language, culture, corporate, business, tax and professional law are a natural barrier of entry for a cross-border foundation of an audit firm from abroad. The acquisition of local knowledge through the purchase of a national audit firm is often not possible, because business or professional laws do not permit the majority acquisition of a foreign audit firm. In some countries only the partnership is a permitted legal form for audit firms, this further restricts the acquisition possibilities and the separation of ownership and control. If the ac-

[17] See also DeAngelo (1981a).

[18] European Commission (2004, 4).

quisition of a foreign audit firm would be possible then the required local knowledge could be bought and the global organizational audit know-how of a parent firm could be transferred to the subsidiary and thereabouts combined with the local knowledge. At the same time the organizational knowledge can be protected via the control rights, which offer the majority ownership. In markets where the mandatory services could not be substituted through other services substitutability on the supplier side is of major importance for the demand side.[19] Then, demanders will get the option to switch to a cheaper foreign supplier of audit services.

To this end, natural and legal barriers lead to separate national audit markets, which are the relevant markets in the audit business and hinder cross-border exchanges of audit services. [20] The existence of international audit firm networks with a cross-border exchange of employees keeps this in effect unchanged because ultimately the activities are controlled by the local partners. Without these restrictions of cross-border competition eventually more integrated audit firm organizations with minor organization and control costs and better funding options would have evolved. In the related consulting business some suppliers are organized as hierarchical international groups, e.g. Computer Sciences Corporation CSC, EDS, Gemini Consulting, IBM Consulting, AT Kearny.

4 Strategic Global Accounting Firm Networks

4.1 Strategic Networks – A Working Definition

National and international networks are medium- to long-term, contractual forms of a co-operation between legally and economically autonomous entities for the joint task fulfilment. It is the aim of the cooperation to reach comparative advantages with respect to competitors, which are not members of the network through an efficient cooperation between network members.[21] The activities of the member firms are directed towards higher profitability. Sydow (1993, 82) characterizes a strategic network as “a polycentrical organization structure of economic activities between markets and hierarchies, aiming at the realization of competitive advantages, which is nevertheless strategically guided by one or more lead firms. The organizational structure is characterized by complex-reciprocal, more cooperative then competitive and relative stable relationships between legal autonomous, however economically mostly dependant firms.” Most networks are lead strategically by one or more so-called hub firms. Networks try to combine competitive market features like a high degree of specialization and pressure to seek efficient solutions with more cooperative features like trust and information integration, which are

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[19] See Ridyard de Bolle (1992, 34f.); Lenz (1998, 191).

[20] See European Commission (1996, 293-295); Buijink et al. (1996, 113-135); Maijor et al. (1996).

[21] See Sydow (1993, 96); Jarillo (1988); Gulati et al. (2000).

used to coordinate network activities.[22] Therefore, strategic networks are a hybrid organization form between markets and hierarchies.[23]

In our view, strategic networks in the audit sector have been developed, because on the one hand the competitive pressure has favoured the specialization on country-specific competencies and on the other hand regulatory measures up to now have prevented the choice of a more hierarchical organization form. A further main advantage of a network organization in the audit business is that it protects each member firm from liability risk resulting from deficient behaviour of other network firms. Because audit firms, depending on the respective jurisdiction, operate in a very litigious environment, this is a main argument in favour of the network organization. It should be kept in mind that due to the partnership form of audit firms in many countries the stakes are high for the partners.

4.2 Basic Features of Strategic Audit Firm Networks

The network organization

We define a contractual cooperation between legally and economically autonomous national audit firms, which are organized based on partnership principles under the strategic leadership of one or more member firms for the joint fulfilment of international client needs, as a strategic audit firm network (see Figure 2).

Legal autonomy means that each member firm in the network preserves his own legal status depending on the specific jurisdiction in which the firm operates. The national audit firms accept contracts independently and collect their own revenues.[24] The main argument in favour of a legally autonomous status of the member firms are the above-mentioned protection from liability risks which otherwise could put at risk the whole network and wealth of the partners. The disclaimer in the fine print of each brochure of global accounting networks makes this very clear. We use an elaborate recent example from KPMG's Transparency Report:

"KPMG International is a Swiss cooperative that serves as a coordinating entity for a network of independent firms operating under the KPMG name. KPMG International provides no audit or other client services. Such services are provided solely by member firms of KPMG International (including sublicensees and subsidiaries) in their respective geographic areas. KPMG International and its member firms are legally distinct and separate entities. They are not and nothing contained herein shall be construed to place these entities in the relationship of parents, subsidiaries, agents, partners, or joint venturers. No member firm has any authority (actual, apparent, implied or otherwise) to obligate or bind KPMG International or any other member firm, nor does KPMG International have any such authority to obligate or bind any member firm, in any manner whatsoever."

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[22] See Siebert (1991).

[23] See Hakansson and Lind (2004, 52-54).

[24] See Zeiss (1993, 54); Niehus (1992, 1061, 1063).

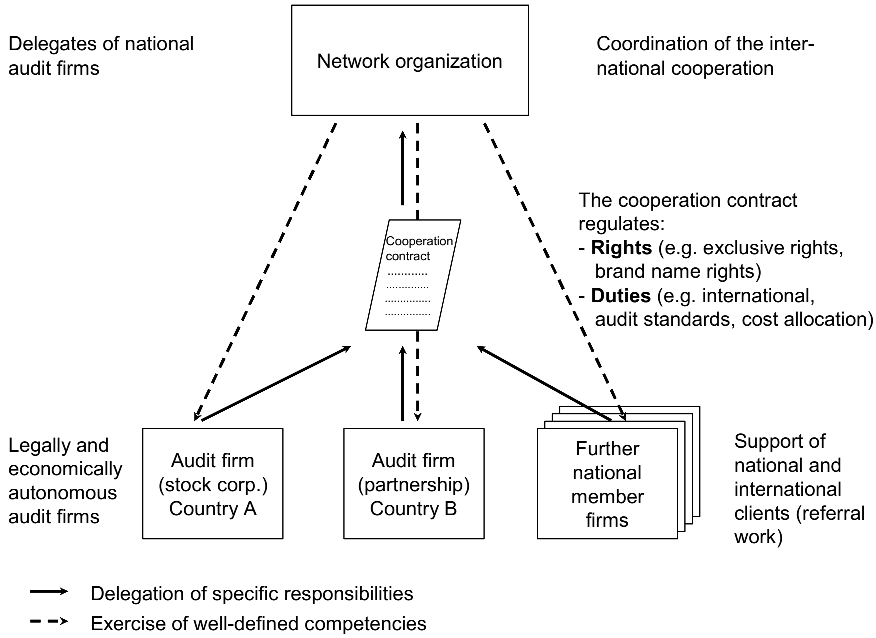

Fig. 2. Role of the cooperation contract within audit firm networks (Source: modified from Ziegler 1994, 8)

It should be noted that there is an apparent contradiction between the image of a global integrated accounting firm who delivers seamless services around the globe and the above-cited description in the fine print. A balanced trade-off between integration and autonomy has to be reached within each network.

Economical autonomy means that strategic decisions have to be made independently, e.g. national member firms decide autonomously without coercion about entry to and exit from a network. Network membership can be terminated from both sides, i.e. the member and the network. This is a marked difference between a network and a group whereby one entity takes control (as defined in IAS 27.4) of another entity mostly through the acquisition of a majority of the voting rights. This enables the acquirer to govern the financial and operating policies of the other enterprise so as to obtain benefits from its activities. International audit firm networks are not based on shareholdings between member firms and there is no entity, which has a significant influence as it is defined in IAS 28.2, on the member firm. Therefore, generally an audit firm network cannot be understood as a single economic entity.

In the cooperation contract the national audit firms transfer voluntarily specific rights to the international organization to assure an efficient international cooperation. So, there is a certain abandonment of autonomy. The intensity of the relationship between member firm and network varies. In audit firm networks the member firms give up their autonomy only insofar as the support of international clients is concerned.[25]

The cooperation contract specifies the following *duties* for the member firms:

- To consider the worldwide quality standards and admittance of quality reviews;
- To consider strategic aims including a worldwide corporate identity, e.g. the use of a joint name;
- Refer foreign audit work to member firms of the network in the specific country, i.e., normally a member firm has the exclusive right to operate in a specific geographic area or country;
- To act upon the client to engage foreign cooperation partners which are network members (best-effort-clause);
- To finance the network through an allocation of costs.

The cooperation contract specifies the following *rights* for the member firms:

- To use the international name;
- To use joint resources and know-how, e.g. specialized employees, audit manuals, databases and audit software;
- To deliver client services in national markets exclusively;
- To make own decisions with respect to the local market.

Details about contractual specifications of rights and duties are not publicly available.[26] In general, the audit firms emphasize in their brochures and annual reports their independence and autonomy.

Economically, the degree of dependence on the international network depends on the net present value of the stream of future additional income (revenues less marginal costs), which is generated through network membership. In principal, it is possible for a national audit firm to change to another international network. This limits the dependence from a specific network. However, for members of larger networks this is not always a viable alternative because normally the new network also has a member firm in the country and the change to another network would imply a national merger between the old and new member firm. Basically, there is a mutual dependency between network firms, because an audit firm has inward and outward engagements. The audit firm gets engagements from other member firms and it transfers engagements to other member firms. There is a symbiotic interdependency between the firms.[27]

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[25] See Mandler (1995, 32, 36); Havermann (1993a, 177f.); Niehus (1992, 1064).

[26] Some information is given in the recent KPMG's Transparency Report from March 2005. See also Deloitte Touche Tohmatsu (2004, 26-28).

[27] See Picot et al. (1996, 263ff.); Sydow (1993, 92).

Networks can be differentiated according to their degree of integration in networks with weak, middle and high degrees of integration (see Figure 3). The higher the degree of integration, the more autonomy is given up by the members. Ties between members can be created by high exit fees, material referrals, network-specific investments, e.g. a high degree of systems integration. The willingness to give up autonomy depends on the degree of revenues, which are referred from other network firms. Revenues from referred work can be used as a proxy for the unobservable stream of additional rents from referred work: The higher the network-specific revenues in relation to total revenues, the higher the willingness to give up autonomous decision rights. Unfortunately, no data is available about the percentage of referred work in relation to revenues.

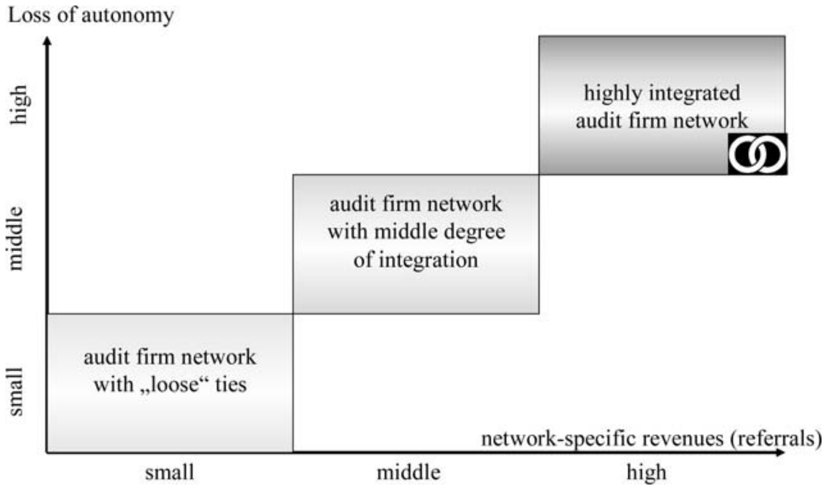

Fig. 3. Degree of integration in audit firm networks

Another factor that determines the degree of economic autonomy of the national member firms is the design of the network organization. In principle, audit firm networks are decentralized organizations.[28] National engagements and engagements referred from network firms are served autonomously by national member firms whereas the lead auditor or lead partner takes on a coordinating function; but this does not mean he is entitled to issue instructions for member firms abroad. The dependency between network members and the network at first refers to collective decisions like decisions about quality standards, which all member firms have to obey. These decisions are negotiated in coordination committees. The network organization itself does not provide services to clients. The organization

[28] See Lück and Holzer (1981, 2037), Havermann (1993a, 52), Nelissen (1995, 527), Sieben and Russ (1992, 1324).

takes care of the evolution of international strategies and their implication in the member firms. She takes on the role of a meta-coordinator or information broker within the network.[29]

However, it should be emphasized that the European Commission in connection with the merger between Price Waterhouse and Coopers & Lybrand, which was investigated by the Commission had noted that the member firms of Price Waterhouse "function collectively as a single economic unit."[30] For this firm a "significant degree of integration" was stated.

International audit firm networks coordinate their activities through committee structures. They are based on the delegation of delegates from national member firms into diverse committees. The following Figure 4 is based on a stylized description (framework) of a network structure and shows the committee structure in general. The framework can be used to organize descriptions of various existing networks.

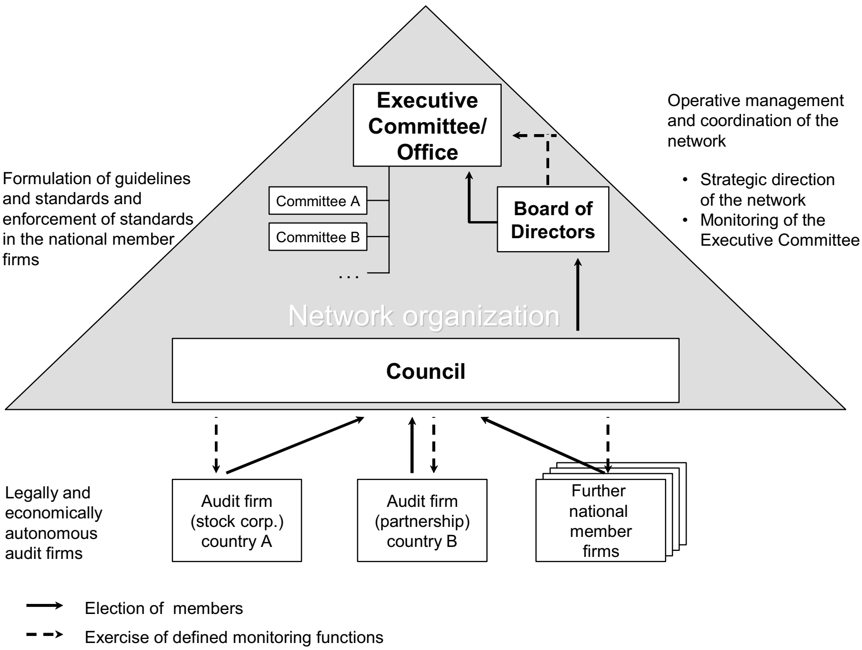

Fig. 4. Global audit firm network organization (Source: Lenz and Schmidt 1999, 129)

[29] See Sieber (1991, 307).

[30] See European Commission (1999, 29).

Common legal forms of a network organization are a Swiss cooperative (e.g. KPMG), a Swiss association (Verein, e.g. Deloitte Touche Tohmatsu) or a British (Private) Company Limited by Guarantee (e.g. PricewaterhouseCoopers).[31]

Generally speaking, all full member firms are represented in the *Council*. The Council elects the members of the Board of Directors, the leading organ of the network. The Board determines the strategic aims, decides over the admission and exclusion of member firms and formulates professional standards for the global services. Furthermore, the Board elects the members of the Executive Committee and monitors the activities of the Executive Board.

For example, at KPMG[32] the International Council consists of the International Chairman, together with the Senior Partners of the largest 25 member firms and 12 additional Council members being nominated by the International Board and the International Council on the recommendation of the International Chairman. According to KPMG (2005, 3) the role of the Council "is to approve common goals and direction, and significant policies to appropriately develop, govern and manage the international organization. The International Council also approves certain membership matters, the annual international budget and other significant financial decisions as well as recommending the annual financial statements of KPMG International for approval by the General Meeting." Also, the Council nominates additional members for the Board.

The Executive Board leads the Executive Office, which organizes the operative day-to-day activities. It coordinates the cooperation between member firms and enforces the decisions of the Board of Directors and is responsible for the whole management of the network.[33] The Executive Board makes available the resources for all international activities, assists, und steers the committees and project groups, which develop the network standards and methodologies, and assists and controls the national member firms who implement the network standards and policies.[34] The Executive Board analyzes the member firms and gives recommendations concerning potential new members. In most audit networks the Executive Board and the Executive Office have a strong position inside the network.[35]

Example KPMG:[36] The International Board at KPMG comprises of up to twenty members, made up of representatives from the seven largest member firms (by revenue), including the KPMG International Chairman. The remaining members are made up of the CEO and representatives of up to twelve other member firms, nominated by the International Board and the International Council on the recommendation of the KPMG International Chairman. Members of the Board, with the exception of the Chairman and the CEO, are appointed for renewable

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31 See for a detailed description of these legal forms Hachmeister (2001, 229-236).

32 See for he following KPMG (2005, 3).

33 See Ziegler (1994, 394).

34 See Linden (1989, 345).

35 See Mandler (1994, 181); Niehus (1992, 1066).

36 See KPMG (2004, 2-4).

terms of two years. The Board has an overall mandate to review and endorse the policies regulations at KPMG and monitor their implementation.

Example Deloitte Touche Tohmatsu (DTT):[37] The Board of Directors at DTT is comprised of 33 members and it is the highest global governing body. Members of the Board are appointed by individual member firms that are themselves selected based on size, revenues, and number of multinational clients. The Board also includes five regional seats, ensuring that smaller member firms are represented. Once elected, a member can serve up to a four-year term. The Board is served by the Governance Body, which has oversight responsibility for the organization's management. The Governance Committee has equal representation of DTT's 13 largest member firms. Each Committee member has one vote on matters considered by the Committee. The Board has also a number of subcommittees that coordinate and recommend actions on a wide scope of financial and administrative issues within the context of the global organization.

To sum up, despite economically autonomous entities there are a lot of interdependent ties between national audit firms. The network organisation is a meta-coordinator who shall organize an effective cooperation between national audit firms. Usually, a committee structure is established which restricts the autonomy of the national firms in specific well-defined areas. In more integrated Big 4 networks like KPMG or Deloitte the largest member firms clearly take on a dominant position in the governance structure.

Strategic Leadership

A strategic network is led strategically by one or more central firms.[38] In audit firm networks the leading firms are the firms who operate in the significant audit markets, e.g. the U.S. or the British audit market. These firms have the highest turnover and dominate other firms via their economic importance. As shown above, strategic leaders have more seats on the Board of Directors or on the committees. Certain positions, e.g. the chair of the Executive Board, may be reserved for the strategic leader, as it was the case by the former C&L-network.[39] Strategic leaders can gain an advantage over other firms because their predominant resources used to fulfil joint projects. Regularly, the audit manuals and audit software is developed by the leading firm in the network.[40] Strategic leaders gain a powerful position within the network through the setting of network guidelines, which transfers the pressure to adapt to the other network members.

In the Big 5 (now Big 4) networks the influence of the strategic leaders, mainly U.S. or U.K. firms, is based upon their economic importance in conjunction with technology and know-how advantages.[41]

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[37] Deloitte Touche Tohmatsu (2004, 27).

[38] See Sydow (1993, 81); Jarillo (1988, 32); Gilroy (1993, 33).

[39] See Speechly (1994, 10).

[40] See Niehus (1992, 1065).

[41] See for details Lenz (1999, 131).

Specialization and Pressure from Competition

Specialisation and market pressure that assures efficiency are important success factors for networks. In audit firm networks specialisation is comprised of country-specific know-how about language, culture, and legal systems (corporate, tax and accounting laws), which is crucial for audit and related advisory services. Some member firms are specialized in branches, e.g. financial services, or specific services, e.g. legal services. These specializations can be used in the whole network. Specialization benefits are supplemented by market pressure created through the comparison with national competitors because each member firm acts as an independent and autonomous entity on its relevant national market. Whereas the member firms in larger networks possess the exclusive right to represent a network on the national markets this does not necessarily mean that competition is restricted because henceforth competition takes place between networks.[42] The individual audit firms compete on national markets with members of rival networks. This permanent evaluation of network relations can assure the efficiency of the network, because the individual member firm can calculate, whether the membership is still rewarding or whether a change to another network would be more worthwhile. Otherwise, the network organization can evaluate if existing relationships must be improved or whether individual firms must be replaced by more effective firms. So, within networks competition supports efficiency and innovation.

The permanent evaluation of network relationships und the opportunity to arrange more advantageous network arrangements enables an efficient cooperation in the network, because each network is forced to optimise its relations to hinder the potential loss of members. However, the change of network membership requires often a merger between the previous and the new member firms in the respective country. If there are differences in organization and partner profitability this is not always possible without frictions.

Mechanism to Manage Coordination and Cooperation Problems in Audit Firm Networks

Which institutional arrangements and reciprocal obligations help audit firm networks to organize efficient cross-border coordination and cooperation and to protect the network against opportunistic actions of individual firms (free rider problem)? Coordination means the coordination, which is necessary if there is a high degree of division of labour. Thereby we assume no conflicts of interest between the parties are present. In contrast, motivation and incentive problems are caused mainly by conflicts of interest between principal and agent (agency problems), e.g. between a lead auditor and a foreign member firm. Table 2 gives an overview about possible coordination instruments in international audit firm networks.

[42] See Thorelli (1986, 46); Semmlinger (1993, 340).

Table 2. Coordination instruments in audit firm networks (Source: Hachmeister 2001, 247)

Personnel coordination instruments	Mutual exchange of employees, personnel communication networks which enable an informal exchange of information, e.g. regular partner meetings
Organizational coordination instruments	Network vision and joint network culture, cooperative formulation of common strategies, committee structure, design of the central office, installation of a reporting system, clear assignment of tasks and competencies via a lead partner system
Technical coordination instruments	Harmonized IT- and management systems, audit guidelines and tools

Hachmeister (2001, 249) describes three basic incentive and motivation problems:

1. If a new member firm is admitted to the network, both sides have to check if each side has the adequate resources and competences at their disposal (signalling and screening).
2. After the admission of a member firm the network has to be assured that each network member adheres to the agreed quality standards, otherwise the reputation of the whole network is at stake (moral hazard risk).
3. Value and cost of the network membership has to be traded off. The usually ex ante incomplete contracts must not be interpreted ex post in a way which favours one side unfairly (hold-up risk).

The following Table 3 shows hypothesized incentives for some contractual arrangements used in audit firm networks, which shall attenuate moral hazard and hold-up risks.

Exclusive rights and referrals: Exclusive rights hinder mutual competition within the network. If an audit firm waives the right to carry on business in a foreign country a typical bilateral situation of mutual dependency is created. This arrangement avoids conflicts of interests and restricts opportunistic behaviour. For example: The German auditor of a group in Germany needs for the audit of the U.S. subsidiary of this group the services of an U.S. network member. Similarly, the U.S. auditor who audits a U.S. group with a subsidiary in Germany must have trust in the services of the German network member. Both parties know that they have to rely on each other's quality at the next audit and will avoid falling below the agreed-upon quality standards.

Network-specific investments: Opportunistic behaviour can be restricted through network-specific investments which are lost if an opportunistic member firm must leave the network. Network-specific investments like the costs for central training facilities, branding costs, formulation of audit guidelines or the development of audit tools are sunk costs. High investments into the international quality assurance

Table 3. Institutional arrangements of audit firm networks and incentive effects (Source: Hachmeister 2001, 259f.)

Contractual arrangements	Incentives for network- compliant behaviour (moral hazard)	Dependence with reference to an individual firm (hold-up)	Dependence with reference to the whole network (hold-up)
Exclusive rights	Eases the control of the contract parties (scale effects of monitoring)	Strengthens the position of the exclusive member firm in a specific country	Dependence of an exclusive single member firm
Referrals	Incentives for monitoring	Leads to mutual dependence between network members	
National branding name (reputation)	Emphasizes the autonomy of the members, weak incentives for monitoring and for investments into the network	Strengthens the position of the member firm	Weakens the position of the network
International branding name (reputation)	Self-binding with respect to clients, incentives for monitoring and network-specific investments	Weakens the position of the member firm	Strengthens the position of the network
Network-specific investments in audit tools and education/training	Self-binding with respect to clients and monitoring incentives	Mutual dependency between network members	
Profit-pooling	Strengthens network-compliant behaviour, profit-pooling leads to common interests	Mutual dependency between network members	
Lead partner for specific clients	Eases the control of member firms	Weakens the position of an individual member firm	Strengthens the position of the network

are investments into long-term relations, which protect against quality deceit. Clients and network members know that these investments are lost if an auditor opportunistically tries to break agreed-upon quality standards.[43] According to Thorelli (1986, 39) information integration is one aim of a network. Information integration, e.g. common audit technology and IT-systems, makes joint knowledge available.[44] Long-term relations ease the exchange of knowledge because the value of information can be evaluated. Furthermore, information integration causes additional ties in the network which reinforce the long-term relations.

Brand name, reputation: A high reputation enables the realization of price premiums and additional engagements. It takes a long time to build up a reputation but reputation of a firm or a network may easily be destroyed by misconducts of only a few employees.[45] The collapse of the worldwide Andersen audit network after the Enron accounting scandal is an instructive example. The efficiency of the reputation mechanism indeed assumes a high market transparency, i.e. the detection probability must be high enough.[46] Without many costs reputation may be transferred via branding on network member firms. It must be kept in mind that this goodwill spill-over may be effective in the opposite direction, too. If a network member firm acts inappropriately the reputation of the whole network may be damaged. In the face of these risks the network will consider a symmetric allocation of the investments to hinder a one-sided expropriation of benefits. For example, only firms with a comparable reputation in their home country may be accepted as new members because this puts a comparable reputation at stake in case of deficient audits.[47]

4.3 Risks of Global Audit Firm Networks

A network organization carries substantial risks, which can threaten the existence and evolution of networks. We identify the following risks:

If networks are characterized by very loose ties the system can only partially be controlled (*partial systems controllability*).[48] In this case the network firms primarily intend to strengthen their own position at the cost of the whole network. A further problem is the *loss of identity,* which may follow if a member firm adapts a strong network culture.[49] Important national features, which are advantageous in the local

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[43] See Jarillo (1988, 37); Meyer (1995, 153); Gilroy (1993, 140); Gemünden and Heydebreck (1994, 266f.).

[44] See Semmlinger (1993, 338); Gilroy (1993, 31f.).

[45] See Gilroy (1993, 155); Mandler (1995, 37); Marten (1994, 153).

[46] See for an overview about empirical studies Moizer (1997).

[47] See Mandler (1995, 36); Havermann (1989, 110).

[48] See Sydow (1993, 275).

[49] See Meyer (1995, 160).

market, may disappear. In the former audit network KMG (Klynveld Main Goerdeler) the national identities were so strong that sometimes the appearance under a common name was problematic for some firms.[50] The openness of networks enables firms to leave the network if better relations are available (*instability through exits*). This may weaken the network if an important member firm in a country leaves. BDO Binder experienced a strong set-back on the important British audit market as the foundation member Binder Hamlyn changed in 1994 to Arthur Andersen. Prior to this, BDO had lost its foundation member in the Netherlands Dijker & Doornbos to another network.[51] Since clients change the networks with the departing audit firm, member firms in other countries loose clients because clients, i.e. subsidiaries of the parent company who was audited by the leaving firm, prefer to work worldwide with a single network of audit firms. A further threat is the *loss of competence* of the national member firms if there are strong strategic leaders in a network. If the hub-firms occupy the central positions in the network they determine the further development of the profession and the design of network guidelines and audit tools. The new audit approach of the KPMG audit network is clearly stamped by the U.S. member firm.[52] The increasing significance of international accounting and auditing standards leads to a relative debasement of country-specific knowledge and is favourable for Anglo-Saxon member firms. Previously, we already have mentioned negative reputation effects, which are a risk for the whole network (*reputation risks*). The more different the cultures and techniques, the larger the number of member firms, the higher the *coordination costs* for the network.[53]

Audit firm networks describe themselves as global professional service firms, which deliver a broad range of services to their clients. However, incentive-incompatible regulations in the audit business create a problem for audit firm networks. In some jurisdictions, consultants who bring in a substantial portion of revenues are not allowed to take over a management position in an audit firm.[54] Independence requirements have severely restricted the delivery of non-audit services in many countries. This makes the joint delivery of professional services from a single supplier less attractive than before.

5 Summary

The evolution of large international audit firms was driven by client needs and legal regulations specific for the audit industry. The organizational structure of these professional service firms can be characterized as a specific form of a strategic

[50] See Stevens (1985, 54f.).

[51] See Post et al. (1998, 701f.); Otte (2002 , 128-134, 154-158).

[52] See Bell et al. (1997).

[53] See Havermann (1993b, 58).

[54] See for example § 28 WPO (German Public Accountant Act); see also Havermann (1998, 418).

network. The national member firms have to adapt to their different legal, cultural and economic national environment. In particular, the legal rules in the audit sector establish barriers of entry for foreign competitors and prevent more common forms of market entry, e.g. the acquisition of another audit firm or the establishment of a subsidiary in a foreign country.

Networks of audit firms are a prime example of hybrid governance structures between markets and hierarchies and are organized by contractual relations between legal and economically autonomous partnership entities from different countries. The networks are controlled by a committee structure. Strategic decisions are made by one or more lead firms.

This paper describes the governance structure of international audit firm networks. Furthermore, we analyze how coordination and incentive problems, e.g. hold-up and moral hazard situations are dealt with in these network structures. Exclusive rights, referral work, brand names, network-specific investments and profit pooling are means to ensure that network members cooperate.

The future will bring a greater transparency with respect to audit firm networks. The proposal for an 8th Directive requires as a special provision for the statutory audit of public interest entities a publicly available transparency report. The annual transparency report should include amongst other things the following (Article 38): a description of the legal structure and ownership; where the audit firm belongs to a network, a description of the network and the legal and structural arrangements in the network, a statement on the governance structure of the audit firm, financial information and information about the basis for partner remuneration.

This additional information will give researchers an opportunity to gain further insights into the structure of audit firm networks and into the degree of network integration and enables them to formulate and to test hypotheses, e.g. about the correlation between network-specific revenues and the degree of integration (see Fig. 3) or between the degree of integration and cooperation-ensuring instruments (see Table 3). Furthermore, future research should explore in more detail the mix of safeguards in place ensuring cooperation within networks of differing degrees of member autonomy. Our research provides a basis for empirical research into these issues by organizational and auditing theorists.

Regulators likely will be interested in this research because independence rules cover not only auditors and audit firms but also the *network* to which a statutory auditor or an audit firm belongs (Art. 23 8th Directive of the European Union). Article 2, Point 5, of the new 8th Directive defines network as follows:[55]

"Network" means the larger structure:

[55] European Parliament legislative resolution on the proposal for a directive of the European Parliament and of the Council on statutory audit of annual accounts and consolidated accounts and amending Council Directives 78/660/EEC and 83/349/EEC (COM(2004)0177 – C6-0005/2004 – 2004/0065(COD)), 28 September 2005.

- which is aimed at cooperation to which a statutory auditor or an audit firm belongs, and
- which is clearly aimed at profit or cost sharing or shares common ownership, control or management, common quality control policies and procedures, a common business strategy, the use of a common brand-name, or a significant part of professional resources.

This definition is broad and uses some vague terms, which must be interpreted by audit firms and regulators in the member states of the European Union. Further economic research is needed to operationalize these terms and to develop a measurable taxonomy of network integration. Thereafter, it would be possible to discuss what degree of integration of the common interests between network members would make it necessary to also apply independence rules to network members.

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