From Knowledge to Wisdom

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Management Science in Knowledge Management

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Technological developments, globalization, and numerous information types have caused significant changes in every part of people's life. In this era, along with the occurrence of information society, organizations have also initiated this changing process. Nowadays, increasing competition in economy makes information the most valuable part of production. Management administration, which is of high importance for the firms and which provides advantage in sustainable competition, has become one of the most popular topics. From now on, information is an economical tool for organizations. The people, who have information, are evaluated as powerful. Moreover, if the organizations produce new information from available information, they move ahead of their opponents. Information is in the centre of financial and social change. Meanwhile, information has a key role in both societies' and foundations' superiority struggle over another. Knowledge management is a compile of strategies and processes for creating, finding, and exploiting information. Reaching, gathering, sharing, utilizing, evaluating, and storing information are some of the processes of knowledge management. One of the most important parts of obtaining advantage in competition firms is to evaluate information effectively. In this paper, information management, its importance, its conceptual development, its aim, its underlying perspective, and its processes are highlighted. In the results of the study, two questions have been studied: What can be done in addition to current situation of information management and what are the points need to be careful about. The main focus in this article is on the knowledge management and its importance in the management science.

Keywords: knowledge management, technological change, management information systems, information

Introduction

This article discusses the management of information and knowledge pioneer of global competition. Information has existed since the cradle of humankind, and it has constantly developed in every part of people's life so far. Information has become like a pile. From the past to the present, many people have defined information and uttered unforgettable words about it. Famous Sokrates said "There is only one good, knowledge, and one evil, ignorance". According to Farabi, the biggest virtue is science and wisdom. Knowledge is like an endless sea. True knowledge is the basic for living as a human (Kocadaş, 2002). As for philosopher Bacon, knowledge is the power.

In the past, economic activities were composed of agriculture, industry, and services; yet today this situation has changed and organizations have faced with information economy. In this kind of structure, knowledge is basically shaped with competition and professional lives are changing. This economy serves as an

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innovation and creation dominant structure, in which being fast is important in global senses (Öğüt, 2001).

Technological developments, with the numerous information and globalization, have led to important changes in every part of life. Particularly, with the unbelievable extension of computer technologies, accessing and sharing have been affected in information systems. Due to having easier connections among each other, this situation has made the easily combination of these systems necessary.

In the era, with the existence of information society, organizations have also been included in this changing process. Nowadays, the most valuable production factor is information. Knowledge management, which is of high importance for the firms and which provides advantage in sustainable competition, has become one of the most popular topics.

Via globalization, there are no longer national or international boundaries and there is more competition among firms. As a result of this competition, digital firms have occurred, which direct important relationships among its customers, suppliers, and employees. Digital firms have obviously more advantages than other firms in that they provide low cost with rapid access opportunities. Nowadays, all firms progress in order to be digital firms.

In the course of the changing process of management, four important changes in the world have affected. The first change is about actively involvement of global economy, the second change is about the transition from industrial economy and society to information society, and the third change is about the organization structure and administration, and the last change is about the occurrence of digital firms (K. C. Laudon & J. P. Laudon, 2002).

In order to raise competition force and develop its performance, as well as preparing them for the future, studies about directing information in a systematic way have increased. Recently, knowledge management has become one of the most popular topics (Wiig, 1999). The organization ability of firms depends on their abilities about collecting, processing, and combining information (Kim, 1998). Lastly, internet, intranet, and extranet, and the rapid growth of connected global webs except them, have led to fundamental changes in the ability of information management at the beginning of 21st century. Internet firms as well as global electronic and trade systems led to important changes in today's firms (K. C. Laudon & J. P. Laudon, 1999).

Knowledge Management

When the studies about knowledge management are taken into consideration, it can be seen that they are generally about three topics. These topics are the quality of the information, elements that make up the infrastructure of knowledge management, and knowledge management processes.

Knowledge management has been defined by different experts in different sources similarly. In these definitions, knowledge management has been written as knowledge management, producing, obtaining, sharing, using, and administering information. Knowledge management is the whole of activities which are used to make information use effective and administer information in order to create value and provide competition advantage (Zaim, 2005).

Parallel with the relatively increase among production factors, information is in the centre of global financial changing process (N. Kakabadse, A. Kakabadse, & Kouzmin, 2003) and it is evaluated as the most superior tool of the economies comparatively (Beijerse, 1999).

According to Manasco (1996), knowledge management is the compile of strategies and processes about creating, finding, obtaining, and exploiting information in order to increase competition.

Some experts have defined knowledge management as the direction of intellectual assets in an organization. As for this approach, knowledge management is every kind of activity about strategy and politics which are used to administer human assets (McAdam & Reid, 2001). In another definition, it is the administration of intellectual capital (Lee & Yang, 2000). Sveiby and Simons (2002) expressed it as the art of value creation from intangible parts of the organization.

As for Odabaş (2005), knowledge management is the process of a firm, in which the aim is to increase value, compensate for the deficient parts, or adapt to competition. For this aim, all external and internal resources are gathered, arranged, and shared among colleagues who contribute to personal and institutional productivity.

According to Carla, Jackson, and Grayson (1998), knowledge management is a conscious strategy which helps to transmit information to the right people at the right time and which can increase organizational performance by exploiting information and sharing.

From the management science perspective, knowledge management is a process which changes management understanding radically. During the process of decision, knowledge is of high importance and it makes the decision making process faster and easier.

Importance of Knowledge Management

In terms of organizations, the ambiguity and rapid changes have made the information the most important tool (Koçel, 1998). The most valuable production factor in knowledge economy is information (Drucker, 1994; Wu, 2008). Knowledge is in the centre of industrial and social change and it has a key role in the competition among societies.

In terms of organizations, the effective administration of information is evaluated as one of the ways that leads to a long term advantage in competition (Beijerse, 1999; Hicks, Dattero, & Galup, 2007; Tiago, Couto, Tiago, & Viera, 2007).

As for Özdemirci (2001), institutional management administration, which can be provided via the institution's use of information technologies, makes information accessible and applicable.

Knowledge management is an administrational and strategic tool in firms. Thanks to this tool, right decision making, guessing about future, having inter-institutional or intra-institutional relations, having standards in products and services, solving present problems, and finding solutions for the future problems can be done.

The findings of Göker (2001) clearly illustrate the importance of information in economical development and new economy. On one hand, industry welcomes radical changes in line with technological advances. However, in an economy, which is directed by information, knowledge is of high importance not only for industries with high technology but also for industries with lower technology. On the other hand, the thing which determines innovation is technologic innovation. Technology is an information category. The information source of the technology of this era is scientific information. Therefore, today's production economies are characterized as information based or information directed. In an information based economy, the crucial point is accessing information and producing new information as a result of that accessed information.

There have been many studies about the advantages of knowledge management. Gallivan, Eynon, and Rai (2003) emphasized that knowledge management has a strategic importance in order to stand in global competition environment. Furthermore, Goll, Johnson, and Rasheed (2007) and Park and Kim (2006) have conducted field studies that point out the relationship between knowledge management and firm performance.

As for firms of today, the vital points are the length and permanency of competition period, economical survival, and having strategic advantage against their competitors. To access this information, knowledge management should be attached importance. While firms are accessing to information, they have to obtain the information from their close and general surroundings in a systematic way, and they need to process this information in a reliable way in the due time. In that case, it can be said that there is an effective knowledge management that can make the goals reachable.

A successful knowledge management provides big opportunities and advantages in terms of firms. The shortening of product development time and presenting the new product in a rapid way, the enlargement of market, the increase in product variety, the decrease in cost, the quick adaptation to different economical conditions, the right and on time providing of the needs and requirements of the customer can be outlined as examples (Schulteis & Sumner, 1998, p. 62). In that sense, functions of information systems can be provided through implementing such functions.

The tendency to think strategically helps to answer the following questions in a firm (Thompson, 2001):

- What will be the progress of competition in the future?
- What are the needs of the customers?
- What kind of behaviours do the competitors have?
- How can the competition advantage be obtained and sustained?

In today's firms, knowledge management has become as important as accounting, finance, marketing, or human resources. Information systems are important parts in production of services and products which present strategic advantage for the firm in global market.

Sharing and communicating information are important things in knowledge management. Sharing and communicating information among individuals and groups leads to the occurrence of new ideas, and it is of crucial importance on this issue. Thus, the firm makes itself more advantageous with the new ideas and applications in economies.

In the era, the individuals, who access to and use information and who think critically and creatively will contribute to the development rather than the individuals who memorize. Tonta (2001) stated that in the future "ignorant people" will not be those who are "illiterate", but "they will be those who do not know how to access to information".

The increasing number of virtual organizations is only one example of digitalization which converts a virtual thing into reality. In this era, the increasingly growing role of virtual money, processes, communities, paths, and even sex makes the boundaries between the reality and dreamy world, in which people can implement what they dream (Wacker, Taylor, & Means, 2000).

Knowledge management is the most important strategic part for the sustainability and competition of firms in economy. Knowledge management is used among many fields like administration, management application, management philosophy, technologies, strategies, and human behaviour.

Due to the increasing importance of information in business world, knowledge management function in organizations includes the processes and techniques, which can create add value from information at a maximum level (Göker, 2001).

Development of the Knowledge Management Concept

Changing process of organizations in information society has firstly started with the efforts to increase quality and productivity. In 1950s, knowledge was a bureaucratic obligation for organizations. After 1980s, it became customer focused and its aim turned out to provide more value for customers. In this process, information has a strategic role for organizations. In the course of changing, they need to redefine information and they have determined its meaning in line with the requirements. In 1990s, information has become a strategic source to provide competition advantage.

The first publications, conferences, and counselling activities about information society appeared in 1990s. Thus, organizations have started to understand the importance of knowledge management. In 1997, more than 30 conferences were held in Europe and USA, a lot of books were published and 1.5 million dollars counselling income was obtained (Little, Quintas, & Ray, 2002).

Aims of Information Management Systems

The most basic aim of knowledge management is reaching goals for the firms. Another aim is to implement the information by the right person at the right time (Nemati & Barko, 2003). The basic aims of knowledge management can be outlined as follows (Özgener, 2002; Plunkett, 2001):

- accelerating curve of learning;
- providing faster enhancement;
- producing new information in organization;
- enabling the opportunity to transmit the right information to the right people at the right time;
- providing chance for accelerated transformation;
- making the organization obtain the valuable information from outer sources;
- easing the development of information via public culture and its incentives;
- presenting the information through documents, data bases, and software (via present organizational information sources);
- providing opportunity of available information for organizational decisions;
- making the information in organization transfer or the same parts in another organization transfer;
- converting organizational knowledge into intellectual capital and provide its measurement through knowledge management.

To Odabaş (2005), the most important aim of knowledge management is to reveal the recorded or potential information sources and include them into processes of organizations. Another aim of knowledge management is to provide the production of new information by making employees access to information from information sources.

The importance of knowledge management composed with these aims is stated by Nonaka (1998). The only reliable source of constant competition superiority is information in an economy in which the only true thing is ambiguity. As the markets changed, the technologies became widespread and the new products became old products in just one night, successful firms have become the firms, which have produced information steadily, spread the information widely, and used the new technologies in products rapidly.

Background of Knowledge Management

In order to have an effective application of knowledge management, a strong background is the primary requirement (Tiwana, 2000). There are five basic points which compose the background. These points are technology, leadership, intellectual capital, organizational culture, and organizational structure.

Technology

Knowledge management is beyond technology, but certainly technological background is the indispensable part of it (Thierauf, 1999; Davenport & Prusak, 1998). In that sense, technological changes, namely the catalyzors of knowledge management (Binney, 2001), make the most exciting point of this issue in the points which they make the application of knowledge management (Gottschalk & Khandelwal, 2003; Reyes & Raisinghani, 2002). Moreover, in knowledge management applications, information technologies are used in different and multi-directional ways (Lindvall, Rus, & Sinha, 2003).

Leadership

Leadership and upper administration support have a crucial role as regards the success of knowledge management (Goll et al., 2007). The will and attitudes of employees to produce and share information need to be reinforced, and the motivation of the administration needs to be enhanced (Cruz, Perez, & Cantero, 2009).

Organizational Culture

It is the compile of shared beliefs, norms, traditions, and value judgements among the employees in an organization. Organizational culture is of high importance in terms of successful implementation of knowledge management (Lopez, Peon, & Ordas, 2004). On this issue, an information friendly organizational culture, willing participation of participants, needs to be composed in order to exploit information at a maximum level (Koulopoulos & Frappaolo, 1999).

Intellectual (Human) Capital

In today's economy, global competition has accelerated. Situation of markets has become ambiguous, products and services have become similar. In this economy, what makes a firm different and what makes them obtain competition advantage are the most important parts in intellectual capital. The quality of intellectual capital and how this kind of capital is of significant importance are the success of knowledge management applications (Marr, 2004). Intellectual capital is classified in three groups as human capital, structural capital, and relational capital (Bozbura, 2004).

Organizational Structure

In the success of knowledge management, the structural background plays a key role. The formation of an organization in line with the knowledge management bares great importance (Beijerse, 2000; Narasimha, 2000).

Process of Knowledge Management

Knowledge management has the process of disclosing, collecting, arranging, and evaluating the knowledge. It has also the processes of sharing with the employees, being made fruitful, being collected in the data pool, and it has many processes like these.

The stages of the mentioned process are outlined as follows (Beijerse, 2000):

- identification of required information;
- identification of accessible information;
- identification of information deficiencies;

- developing information;
- acquiring information;
- building an information channel;
- providing information share;
- utilizing information;
- evaluating utilized information.

Perhaps, the most important processes are the producing of knowledge and developing knowledge.

Today, due to the increasing pressure in global competition, if an organization wants to obtain sustainable competition advantage, it has to develop new information (Beveren, 2002; Roth, 2003; Bergman, Jantunen, & Saksa, 2004).

Producing knowledge is the term used for an organization that has the new and useful ideas as well as the ability for finding solutions. Organizations produce information by restructuring their previous or present knowledge as a consequence of various interactions (Bhatt, 2001). On the other hand, developing knowledge is expressed as the further improvement of the knowledge, related to the available services and products by working on them or the new ideas' and inventions' being transferred from thought to action (Shani, Sena, & Olin, 2003).

For the information to express value only through its being used in line with its purpose of use and classification of the information in line with its type, target of use and through its preservation in the way, it can be offered to the access of the workers today and in the future (Offsey, 1997).

The classification and the preservation of knowledge are necessary both for the use of knowledge and its re-evaluation in the future. In this way, knowledge becomes part of the organization getting out of the possession of the individuals to a great extent (Nemati & Barko, 2002).

Another knowledge management process is the share and transfer of knowledge. The process of sharing the knowledge is the exchange of the knowledge between the person who offers the knowledge and the one who demands it (van den Hooff & de Ridder, 2004). In this process, information increases as it is shared, becomes valuable as it is transferred, and thus new types of information are produced. Even, in most cases, the transfer process mentioned creates a reaction and this is called the multiplication effect of the knowledge (Sveiby & Simons, 2002). In this respect, one of the basic aims of knowledge management is to make use of the available knowledge potential at the maximum level through the sharing of the knowledge effectively among the individuals, themes, and departments (Robertson, 2002; Wong & Aspinwall, 2004).

During knowledge management, use of information and implementing it, information affects organization in the long term effectively; it contributes to organization; and the knowledge management reaches its goal (Ordaz & Allez, 2004). According to Wilhelmij and Schmidt (2000), the success of knowledge management largely depends on how effective knowledge is used, and to what extent this knowledge is put into practice in terms of products, processes, behaviours, and policies etc..

Conclusions

Together with technology and globalization, there have been major changes in the role, definition, and use of knowledge from the past to the present time. With this change, the purposes, targets, needs of the firm, and the strategies of the firm as a whole have also undergone changes. With the transition from the industrial societies to information society, information has a key role in the success of the companies.

The studies about knowledge management are also important for the modern management strategies. For Snyman and Kruger (2004), for the firms that try to withstand the changing market conditions today, the increasing global competition and fascinating technological developments, the most valuable possession is valuable. For this reason, firms need to make maximum use of knowledge from the sources in an effective way.

The people who manage knowledge and the departments which plan the knowledge, should work on the knowledge system that the company needs what they think the firm should have in time. At the stage of knowledge management and use, words of knowledge, data and information, and their connotations should be distinguished. Decision making, planning, comparing, analysis, evaluation, guessing, determination, work applications, and procedures etc. should be made regarding the meanings of these expressions. At first, knowledge is personal. In order to make it usable by the society, it should be coded, clarified, conveyed, managed, and put into the use of groups.

With the concepts of the renewed economy and economy knowledge, new work models, professional areas, and job definitions have started to be used. In today's firms, management knowledge systems and decision support systems have started to be used. The inputs provided from these systems have started to take part in basic production factors. Thus, the composition and processing of knowledge management systems require information technologies as an indispensable thing.

A successful knowledge management occurs only if there is an organizational culture which supports continuous learning, attendance, sharing ideas, increasing knowledge, the strong attendance of information management, and the effective use of intellectual capital. Moreover, the organizations' mission, target, strategy, and politics also shape the right information politics as well as the right strategy. Under these circumstances, technology can be utilized in an intelligent way (Sütcü, 2014).

For the knowledge management to be applied successfully, the infra structure of knowledge management should be given importance. The knowledge management which includes leadership, technology, institutional culture, human capital, and organization should be used with the elements of infra structure. Without the elements of infra structure, knowledge management cannot achieve success.

As a result, recently, knowledge and data have made an increase, and it keeps increasing as a snowball everyday. For the firms to compete with their rivals, they need to re-evaluate the available knowledge in the work procedures. Today, in order to be successful as a firm, they need to use more competitive and authentic knowledge compared to their rivals and adapt to available knowledge and technology infra structure to be able to keep pace with the changes in knowledge and technology.

It is not enough to disclose the institutional knowledge accumulation, it is also necessary to distribute knowledge among the employees. In the knowledge management, the basic elements of the firms should be in balance and coordination with each other such as employees, individuals who are given service, budget, technical infra structure, legal arrangements. Owing to the structure and purpose of knowledge management, good quality knowledge should be provided, used, and conveyed to the related departments in the firm, feedback should be taken, and new knowledge already produced should be accumulated in the information pool of the firm, and should be made ready to be used again for the productivity of the firm. It should be kept in mind that the knowledge cannot be reached and cannot be counted as firm information and capital.

In the company knowledge cycle, the knowledge should be evaluated as for its quality and accumulated in a pool having been purified from the unnecessary knowledge. The knowledge accumulated, arranged, shared, and taken to the knowledge pool should be classified according to their qualities and should undergo the processes such as data mining. The data obtained particularly through the internet form knowledge density and the knowledge obtained becomes the accumulation of knowledge which cannot be classified. In this respect, to be picky and to stand away from the knowledge without a source and the necessary knowledge should be exploited.

A successful knowledge management depends on to use of technology more than leadership, to invest on technology and to follow the improvements in technology, and apply these in the right time. Meanwhile, the investment should be made to those not only who use the technology, but also to those who have the technological information.

Nowadays, firms have their biggest investments on information technologies. Firms should purchase not only the best and the most recent technological system but also should adapt to that system quickly. For this reason, if it is required, there should be fundamental changes in organizational structures. Furthermore, new firm models need to be developed and previous organizational structures should be abandoned.

Nowadays, particularly via internet, there is not a problem about the deficiency of the knowledge; rather there is too much information pollution. Many firms form databases for knowledge management. In these databases, there is too much unnecessary information. The thing needed to be done in knowledge management by the firms is to use, interpret, make sense of, and administer the required information.

Knowledge management is not only a technical but also a social process. It integrates with organizational learning in social process. This provides individual benefits such as learning from colleagues, intrinsic motivation, firm culture, institutional soul, and advancement.

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Managerial Ownership and Intellectual Capital Efficiency: Evidence From Poland

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This article contributes to the corporate governance and intellectual capital literature and examines the relationship between managerial ownership and intellectual capital efficiency (ICE). The results were obtained by investigating a sample of 1,057 firm-year observations and 292 companies listed on the Warsaw stock exchange between 2008 and 2013. Since the data span covers six years, panel data analysis (fixed-effects model) is employed. The empirical analysis indicates that managerial ownership is negatively related to human capital efficiency (HCE), which is partly consistent with some previous studies. As such, it indicates the entrenchment effect of insider ownership. Moreover, the study concludes that these and previous results on the relationship between managerial ownership and IC efficiency are not robust due to ICE measures, which now are employed in research.

Keywords: corporate governance, managerial ownership, intellectual capital, Poland

Introduction

Interest in intellectual capital and intangible assets has been increasing in recent years, because its creation and efficiency are seen as an important source of competitive advantage (Hamel & Prahalad, 1990). Therefore, some authors underlined that companies oriented on intellectual capital will be winners in terms of future value (Lin & Edvinsson, 2008). In view of this, intellectual capital has also become a subject of some researches, which examined the relationship among its risk, value or efficiency and company performance (Firer & Williams, 2003; Riahi-Belkaoui, 2003), corporate value (Tseng & Goo, 2005), knowledge performance (Wiig, 1997), types of innovative capabilities (Subramaniam & Youndt, 2005), disclosure practices (Williams, 2001), business strategy (Joia, 2000), business start-up success (Peña, 2002), organizational culture (Sánchez-Cañizares, Muñoz, & López-Guzmán, 2007), board structure (Swartz & Firer, 2003), and some others (Bohdanowicz & Urbanek, 2013).

In a nutshell, many studies on intellectual capital showed that there is a need for further research, which will explain the conditions conducive to the creation and use of intellectual capital. This study refers also to this problem and is held in the Polish system of corporate governance. Since this system is two-tier one, i.e. corporate boards consist of supervisory boards and management boards, ownership is concentrated and one of the most influential owners is the insider; the main aim of this study is to examine how in these circumstances

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managerial ownership affects the ICE. As such, this study tries to fill the gap in the literature. To put it briefly, there have been little studies on the relationship between ownership structures and intellectual capital (Celenza & Rossi, 2013). This study refers to the association between managerial ownership and ICE measured by the value added intellectual coefficient (VAIC) and explain the relationship between them on the basis of agency theory.

The reminder of the paper is organized as follows. In Section 1 the related literature is reviewed and the hypothesis is developed. Section 2 describes the sample selection and the variables. Section 3 provides descriptive statistics and empirical results on the relation between managerial ownership and ICE. Finally, conclusions, including research limitations, are presented.

Literature Review

Agency Theory and Managerial Ownership

Agency theory is based on the separation of ownership and control (the agency problem) and it describes the situation, in which the interests of shareholders (principals) and managers (agents) are divergent (Jensen & Meckling, 1976). Both parties, i.e. the principals and agents, seek to maximize their utility. The owners' objective is to increase the value of their shares. The managers tend to increase their remuneration including perks, and are not always acting in accordance with the expectations of their principals, unless they have shares and thus their interests are aligned with shareholders' interests. In some modern companies, especially in Anglo-Saxon countries, ownership is dispersed and single shareholders do not have enough incentives to control agents, who in reality control the companies' assets. Some studies indicated that concentrated ownership in the hands of individual shareholders increases their tendency to monitor managers and motivate them to achieve the owners' objectives more conscientiously (Jensen & Warner, 1988). Therefore, ownership concentration and managerial ownership are considered as the most effective mechanisms of corporate governance (La Porta, Lopez-de-Silanes, & Shleifer, 1998).

But in contrast, in some countries, ownership is concentrated (Becht & Röell, 1999). This creates the principal-principal problem (conflict between majority shareholders and minority shareholders), as the largest controlling shareholders enjoy private benefits of control (Faccio & Lang, 2002; Renders & Gaeremynck, 2012). However, the presence of majority shareholders can diminish the conflicts of interest between the owners and managers, because shareholders are exposed to greater risk by investing in company shares. Their investments are usually long-term, and, in contrast to the minority shareholders, they cannot "vote with their feet" and have a stronger incentive to actively monitor the managers (La Porta et al., 1998; Renders & Gaeremynck, 2012).

The agency problem changes its nature when ownership is concentrated and in addition the key owners are top managers. Morck, Shleifer, and Vishny (1988) mentioned that manager who controls a substantial fraction of the firm's equity may have enough voting power or influence more generally to guarantee his employment with the firm at an attractive salary. Moreover, owner-managers can dominate corporate boards, entrench themselves, and reduce the role of the external directors or the supervisory board members in two-tier board model (Bohdanowicz, 2014; Short & Keasey, 1999; Mace, 1972).

Managerial Ownership and Firm Performance

Previous studies on the relationship between managerial ownership and company performance gave mixed results. On one hand, there are studies, which underlined that the relationship between them is non-monotonic

(Demsetz & Villalonga, 2001). On the other hand, there are researches, which emphasized that there exist the significant and positive connections between them (Jelinek & Stuerke, 2009). In addition, other studies found the piecewise-linear relationship between managerial ownership and firm performance (Morck et al., 1988).

Among the studies, which highlighted the non-monotonic nature of the relationship between managerial ownership and company performance, there is a lack of compliance at intervals, changing the nature of this relationship, for example, Morck et al. (1988) noted an increasing relation between 1% and 5%, a decreasing one between 5% and 25%, and an increasing one beyond 25%. But Vintila and Gherghina (2012) noticed a positive relationship until a threshold of 35.58% and a negative relationship beyond the threshold. Moreover, Cheng, Su, and Zhu (2012) examined a sample of Hong Kong listed companies and found that managerial ownership has an "entrenchment-alignment-entrenchment" effect on company performance. Due to this, managerial ownership positively affects the companies' performance at a wide medium ownership range from 22.18% to 78.02%. But in opposition, at very low and very high levels of managerial ownership, examined impact is negative.

Moreover, previous studies tried to find the association between the fraction of executives' equities and both accounting, e.g. ROA (Jelinek & Stuerke, 2009) and market measures of companies' performance, e.g. Tobin's Q (Chen, Guo, & Mande, 2003). Also the results of research on the association between managerial ownership and both types of measures were mixed, for example, Warrad, Almahamid, Slihat, and Alnimer (2013) investigated the relationship between managerial ownership and company performance measured by accounting and market measures in Jordanian non-financial listed companies and they found that managerial ownership do not have a significant effect on ROA and ROE, but substantial fraction of equities in hands of managers has a significant effect on Tobin's Q.

These results show that the relationship between managerial ownership and company performance can be highly dependent on measures and generally on the system of corporate governance, in which the study was conducted. But for now, most of researches have supported the view that this relationship is non-monotonic.

Ownership and Intellectual Capital

There were some researches on the relationship among managerial ownership or ownership concentration, company performance and ICE (Celenza & Rossi, 2013; Tsai, Yu, & Wen, 2013). Some of these researches concerned the relationship between ICE and managerial ownership (Bohdanowicz & Urbanek, 2013; Saleh, Rahman, & Hassan, 2009), but as Celenza and Rossi (2013) stated, especially the association between intellectual capital and ownership structure was little examined.

However, Saleh et al. (2009) investigated 264 companies listed on the MESDAQ market of Bursa Malaysia and found only the weak and negative relationship between managerial ownership and the VAIC, but in opposition to their expectation, managerial ownership was not related to its components. They concluded that these results lead them to question the competency of the Malaysian managers in creating value given the existing resources, but it should be the subject of future research.

Different variables on intellectual capital are used studies of Tsai et al. (2013). They investigated companies listed on the Taiwan stock exchange between 2004 and 2008. To measure intellectual capital, they employed the ratio of spending on human resources divided by sales, R&D intensity, and advertising intensity. But they were concentrated rather on the association between company performance and intellectual capital, than on the association between ownership structure and intellectual capital. They did not find any relationship between company performance and measures of intellectual capital in their whole sample.

Bohdanowicz and Urbanek (2013) utilized the sample of the Polish companies listed on the Warsaw stock exchange between 2006 and 2011. Amongst others, they found a negative relationship between VAIC and ownership by management board members. Moreover, ownership by management board members was negatively related to structural capital efficiency (SCE).

Finally, Celenza and Rossi (2013) investigated the association between ownership concentration and ICE in 43 Italian companies. They mentioned that the relationship between ICE and ownership concentration is frequently positive, but not significant.

Overall, based on agency theory, the above discussion and despite the ambiguous previous results, the hypothesis can be posed that managerial ownership has a positive influence on ICE.

Research Method

Sample

The sample consists of Polish companies listed on the Warsaw stock exchange between 2008 and 2013. Data was hand-collected and derived from annual reports or supervisory boards annual statements. The sample concentrates only on non-financial companies. Financial institutions are excluded due to their unique financial structure and special accounting rules for financial sectors. Following Firer and Williams (2003) in this study, companies with negative book value of equity or negative structural capital and at the same time negative value added (VA) are eliminated. Moreover, observations with missing data are also excluded. This gives an unbalanced panel initial sample of 292 companies and 1,057 firm-year observations.

Variables

The following model is used for testing the hypothesis:

$$Y_{it} = \alpha_i + \beta X_{it} + \gamma Z_{it} + \varepsilon_{it}$$

where, the Y_{it} vector contains the dependent variables, i.e., ICE measured by the value-added intellectual coefficient (model 1), the HCE (model 2), the SCE (model 3), the capital employed efficiency (CEE) (model 4), or the ICE (model 5); the X_{it} vector includes independent variable, i.e., managerial ownership; the Z_{it} vector consists of the control variables, specifically supervisory board diversity, supervisory board size, frequency of supervisory board meetings, management board diversity, management board size, company size, and leverage; the ε_{it} describes random disturbance.

Since the data span covers six years, panel data analysis (fixed-effects model) is employed.

In this study, ICE, which is a dependent variable, is measured by value-added intellectual coefficient ($VAIC^{TM}$). This proxy variable was used by Pulic (2000), Firer and Williams (2003), and Nazari and Herremans (2007). VAIC is a financial valuation method and uses accounting data. It contains not only the efficiency of intellectual capital, but also the efficiency of employed capital. For this reason, the ICE is examined as a separate coefficient. However, capital employed comprises physical and financial capital. To calculate VAIC, it is necessary to count initially its three components i.e. HCE, SCE, and CEE. All of them are calculated as efficiency rates using VA measurement. The general VAIC formula takes the form:

$$VAIC^{TM} = HCE + SCE + CEE$$

The different efficiency rates and the VA rate are calculated using the following formulas:

$$HCE = VA/HC$$

$$SCE = SC/VA$$

$$CEE = VA/CE$$
$$ICE = HCE + SCE$$
$$VA = OP + HC + D + A$$

where, HC stands for labour costs (salaries and employee benefits), SC stands for amount of structural capital, (SC = VA – HC), CE stands for book value of net assets, OP stands for operational profit, and D + A stands for depreciation and appreciation.

Managerial ownership is the percentage of shares owned by all the management board members (Bohdanowicz, 2014). This variable is calculated as direct and indirect voting rights at the general meeting and counted as a decimal number.

Then, there are employed five board variables. The Polish board model is two-tier one and corporate boards in Poland consist of two separate bodies, that is supervisor boards and management boards. Supervisory boards are composed of only external directors and fulfill control and eventually advisory function. Management boards are composed of only internal directors and are responsible for management of companies' operations and their strategies. Anyway, since the Polish board model is two-tier, in this study, there are employed three supervisory board variables and two management board variables, which control their roles in companies. Supervisory board variables are supervisory board size, supervisory board diversity, and frequency of supervisory board meetings. Management board variables are management board size and management board diversity. As a proxy for diversity, gender diversity is used, which is measured as the percentage of women on the supervisory board and separately on the management board (Campbell & Minguez-Vera, 2008). This variable is counted as a decimal number. Board size is calculated as the total number of directors (Yermack, 1996). As a proxy for supervisory board activity, the number of meetings held by the supervisory board is used (Brick & Chidambaran, 2010; Vafeas, 1999).

Moreover, as a proxy for the scale of the company (company size), total assets at the end of the company's prior fiscal year are used (lnTA). As it is commonly done, this is transformed with a natural logarithm (Kang, Cheng, & Gray, 2003). Furthermore, debt ratio is used to control company leverage (LEVER). This is calculated as the ratio of total liabilities to total assets (Crespí-Cladera & Gispert, 2003).

Results

Descriptive Statistics

Table 1 shows the descriptive statistics and correlation matrix for the variables considered. The mean VAIC across the entire sample is 2.8925, which is similar to this received by Bohdanowicz and Urbanek (2013), but higher than the VAIC in the study of Saleh et al. (2009), where it was 2.063. The mean of HCE is lower and amounts to 2.1127, as compared to 2.221 in the study by Saleh et al. (2009). Furthermore, the mean of SCE is higher than in the compared study, where it was 0.202, and in this study it counts 0.3338. CEE is also higher and here it counts 0.5342 against 0.043 in the quoted study. Moreover, the mean of ICE is 2.2539 in this study, which is slightly higher than in the study by Saleh et al. (2009), where it was 2.019. These differences may result from a different structure of the sample as well as from the time of observation.

Managerial ownership in the sample is relatively high. The mean is 0.2163 and standard deviation is 0.2745. This mean is higher than reported, for example by Ozkan (2007) for British companies, but lower than reported by Greco (2010) for Italian companies. Generally, these results indicate that large fraction of listed companies' shares belongs to the management boards' members.

Table 1

Descriptive Statistics and Correlation Matrix

	Mean	S.D.	1.	2.	3.	4.	5.	6.
VAIC	2.8925	1.9332	1.00					
HCE	2.1127	2.1554	0.93	1.00				
SCE	0.3338	0.5535	0.62	0.39	1.00			
CEE	1.1301	0,5089	0.13	-0.15	-0.02	1.00		
ICE	2.2539	1.5395	0.95	0.95	0.71	-0.12	1.00	
MANOWN	0.2163	0.2745	-0.11	-0.13	-0.04	0.03	-0.10	1.00
SBSIZE	5.7386	1.3013	0.14	0.14	0.12	-0.04	0.18	-0.28
SBDIV	0.1339	0.1686	-0.05	-0.05	0.00	-0.03	-0.06	0.25
SBFREQ	6.3491	3.3052	-0.03	-0.04	0.03	-0.02	-0.03	-0.22
MBSIZE	3.0618	1.4483	0.07	0.04	0.09	0.01	0.09	-0.03
MBDIV	0.1126	0.2168	0.07	0.09	-0.03	0.00	-0.06	0.06
LNTA	19.4681	1.6704	0.22	0.23	0.23	-0.13	0.31	-0.25
LEVER	0.4748	0.2573	-0.05	-0.11	-0.05	0.25	-0.05	0.05

	7.	8.	9.	10	11.	12.	13.
7. SBDIV	1.00						
8. SBDIV	-0.05	1.00					
9. SBFREQ	0.18	0.11	1.00				
10. MBSIZE	0.33	-0.06	0.11	1.00			
11. MBDIV	-0.13	-0.07	-0.01	-0.09	1.00		
12. LNTA	0.55	-0.06	0.30	0.53	-0.10	1.00	
13. LEVER	0.01	0.07	0.02	0.09	0.00	0.08	1.00

Notes. MANOWN: managerial ownership; SBSIZE: supervisory board size; SBDIV: supervisory board diversity; SBFREQ: frequency of supervisory board meetings; MBSIZE: management board variables; MBDIV: management board diversity.

Moreover, the mean of supervisory board size in the sample is 5.7386, which shows that some supervisory boards count only the minimum number of members, which in Poland for listed companies is five members. The average of management board size is 3.0618 with standard deviation 1.4483. According to the Polish company law, the minimum for management boards is one member.

Supervisory board diversity is 0.1339 with standard deviation 0.1686. It means that approximately 14% of board members are female directors. To compare, management board diversity is even lower and amounts 0.1126 with standard deviation 0.2168. These results indicate the dominance of both Polish boards by male directors and low gender diversity in the Polish boardrooms.

The average supervisory board meeting frequency across the entire sample is 6.3491 with standard deviation 3.3052. It is similar to the average obtained by Bohdanowicz (2014) in the Polish listed companies, but slightly lower than observed by Vafeas (1999), where there were 7.45 meetings, and Greco (2010), where there were 9.27 meetings in one-tier board model. Generally, the number of boards of directors in one-tier board model seems to be higher than the number of supervisory board meetings in two-tier board model.

The average debt ratio is 0.4748 with standard deviation 0.2573 and the mean natural logarithm of total assets (company size) is 19.4681 with standard deviation 1.6704.

Regression Analysis

Table 2 illustrates the results of the panel data estimation for the sample. It shows that managerial ownership, which is independent variable, has a negative and significant impact on HCE (β = -1.1585, $p < 0.01$). This result stands in opposition to the prediction. Moreover, there is no significant association between managerial ownership and other dependent variables, i.e. value-added intellectual coefficient, SCE, and CEE. Overall, these results do not support hypothesis.

Table 2

Panel Data Estimation of the Ownership Structures and Intellectual Capital Efficiency

Independent and control variables	Dependent variables				
	Model 1 VAIC^{TM}	Model 2 HCE	Model 3 SCE	Model 4 CEE	Model 5 ICE
MANOWN	-0.0801	-1.1585**	-0.0541	0.0684	-0.1923
	(0.4002)	(0.4446)	(0.1711)	0.1165	(0.3445)
SBDIV	-0.1484	0.3407	0.1266	-0.2425†	0.0423
	(0.4767)	(0.5363)	(0.2066)	0.1404	(0.4100)
SBSIZE	-0.2021*	-0.2217*	-0.0416	-0.0530*	-0.1362
	(0.078934)	(0.0887)	(0.0342)	0.0233	(0.0681)
SBFREQ	-0.0029	-0.0262	-0.0017	-0.0058	-0.0047
	(0.0217)	(0.0243)	(0.0094)	0.0063	(0.0187)
MBDIV	-0.0031	-0.2006	0.0306	0.0300	-0.0541
	(0.3485)	(0.38812)	(0.1496)	0.1017	(0.2997)
MBSIZE	-0.1036	-0.0193	-0.0440	0.0063	-0.1403*
	(0.0674)	(0.0759)	(0.0292)	0.0199	(0.0582)
Ln TA	0.5147**	0.5524**	0.3505***	-0.1403*	0.6920***
	(0.1848)	(0.2076)	(0.0800)	0.0544	(0.1591)
Leverage	-0.9007**	-1.1323*	-0.5646**	0.5389	-1.3775***
	(0.4043)	(0.4532)	(0.1752)	0.1187	(0.3482)
Constant	-5.1966	-6.4177	-5.8695***	3.9556***	-9.3194**
	(3.5540)	(3.9945)	(1.5385)	1.0470	(3.0591)
N	1,051	1,056	1,056	1,057	1,045
Adjusted *R*-squared	0.6800	0.7649	0.2664	0.9997	0.6265

Note: † $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; standard error is given in brackets; MANOWN: managerial ownership; SBSIZE: supervisory board size; SBDIV: supervisory board diversity; SBFREQ: frequency of supervisory board meetings; MBSIZE: management board variables; MBDIV: management board diversity.

There is also some relationship between the control variables and dependent variables. Supervisory board diversity is negatively related to CEE (β = -0.2425, $p < 0.1$), but is not related to other dependent variables. Moreover, supervisor board size is also negatively related to CEE (β = -0.0530, $p < 0.05$), but in addition negatively related to value-added intellectual coefficient (β = -0.2021, $p < 0.05$) and HCE (β = -0.2017, p < 0.05). These results support the view that supervisory boards are passive in Poland and have little influence on company performance (Bohdanowicz, 2014; Jeżak, 2010). Furthermore, management board size is negatively related to ICE (β = -0.1403, $p < 0.05$).

Moreover, there is a positive relationship between company size (natural logarithm of total assets) and four of dependent variables, i.e. value-added intellectual coefficient (β = 0.5147, $p < 0.01$), HCE (β = 0.5524, $p < 0.01$), SCE (β = 0.3505, $p < 0.001$), and ICE (β = 0.6920, $p < 0.001$), but negative relationship between company size CEE (β = -0.1403, $p < 0.05$). However, it indicates that larger companies better utilize intellectual capital.

Furthermore, leverage is negatively associated with value-added intellectual coefficient (β = -0.9007, $p <$ 0.01), HCE (β = -1.1323, $p < 0.05$), SCE (β = -0.5646, $p < 0.05$), and ICE (β = -1.3775, $p < 0.001$). It reveals that debt negatively affects ICE.

Conclusions

The main aim of this study is to examine how managerial ownership affects the ICE, which has been measured by the VAIC and its components, specifically HCE, SCE, CEE, and in addition ICE. The conducted analysis has given only support to the negative relationship between managerial ownership and HCE. Moreover, this relationship seems to be monotonic, since attempts to find non-monotonic relationship have failed (not included). However, this research gives further evidence that insider ownership is negatively related to VAIC or its components (Saleh et al., 2009; Bohdanowicz & Urbanek, 2013). As such, this study has found that managerial ownership is rather characterized by entrenchment effect, but not by alignment effect, which is also consistent with some previous studies on the relationship between insider ownership and firm performance, so that it identified at substantial fraction of the firm's equity owned by top managers (Morck et al., 1988).

Furthermore, this research has been conducted in two-tier board and it has been possible to identify the relationship between supervisory board or management board characteristics and ICE. This research has revealed that supervisory board size and management board size are negatively related to VAIC or its components, specifically supervisory board size to value-added intellectual coefficient, HCE, and CEE, but management board size to ICE. This relationship is consistent with corporate governance literature on board size and findings that large corporate boards are ineffective in monitoring (Eisenberg, Sundgren, & Wells, 1998; Yermack, 1996). Moreover, there has been found the weak negative relationship between supervisory board diversity and CEE. It stands opposition to some researches on significant of gender diversity (Campbell & Minguez-Vera, 2008), but supports other studies, which give contradictory conclusions (Ahern & Dittmar, 2012).

The results of this study are also subject to limitations associated with the measurement of variables, which can affect the results and make them unclear. It concerns the dependent variable. Although the value-added intellectual coefficient is easy to calculate and is based on audited financial data which allows its use for intercompany comparisons (Firer & Williams, 2003), it has a number of drawbacks that limit its use as a fully objective measure (Andriessen, 2004; P. Stahle, S. Stahle, & Aho, 2011). However, its simplicity and the fact that calculations are based on readily available and comparable data make the value-added intellectual coefficient a proxy variable frequently used in studies on ICE (Chen, Cheng, & Hwang, 2005; Firer & Williams, 2003). But more in-depth conclusions can be drawn in the future, when new methods will be found that were removed through the VAIC's weaknesses.

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Understanding Business Relationship Management in China: A Power and Leverage Perspective

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This paper examines whether a power and leverage perspective, successfully applied to analyse extended buyer-supplier relationships in a western context, can be used to analyse business relationships in China. A single embedded case study is presented in this paper and a power and leverage approach is used to analyse business relationships. The power and leverage perspective is applicable for investigating buyer-supplier relationships in a Chinese cultural context. However, in this context using power as coercion is an extremely counterproductive relationship management strategy, which can draw both buyers and suppliers in to a "no-win" or negative sum situation. The findings are based upon a single case, which makes drawing generalisable conclusions more difficult. In addition, although every effort was made to limit the subjectivity of the power and relationship analysis, researcher interpretation of the data was required. In the Chinese business context, it may not be advisable to manage any relationships in an arms-length manner. Chinese business networks are centred on less explicit or formal power relationships and therefore companies that have learnt the rules of the game of exchange in the west need to modify their approach in China. This work extends the understanding of buyer-supplier relationships and provides additional empirical evidence validating a power and leverage perspective. In addition, the paper provides the first assessment of whether this approach can be used in a non-western context without significant modification.

Keywords: buyer-supplier relationships, power, culture, China

Introduction

Business-to-business relationship management is a key area of interest for managers and academics, like Ulaga and Eggert (2006), Su, Song, Li, and Dang (2008), and Meehan and Wright (2011). It has long been argued that the effective management of buyer-supplier relationships can lead to competitive advantage (Spekman, 1988; Dyer & Singh, 1998; Dyer, 1996; Zaheer, McEvily, & Perrone, 1998; Jap, 1999; Kim, S. H.

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Park, Ryoo, & S. K. Park, 2010; Emberson & Storey, 2006). In today's global market, network and relationship building are seen to be critical for success and the survival of businesses (Park & Luo, 2001). In the context of today's global economy, understanding how cultural differences can impact business relationships has become an increasingly important focus (Ribbink & Grim, 2010; Hofstede, 1980; House, Javidan, & Dorfman, 2001).

Prior research into buyer-supplier relationships has used a number of theoretical perspectives to help understand the phenomenon, for example, agency theory (Eisenhardt, 1989; Himmelweit, Simonetti, & Trigg, 2001) and transaction cost economics (TCE) (Williamson, 1975, 1985, 1995) have been the theoretical engines for numerous empirical studies. Resource dependence theory (RDT), as made popular by Pfeffer and Salancik (1978), has been employed in multi-disciplinary research focusing on explaining how organization can reduce environmental interdependence and uncertainty (Hillman, Withers, & Collins, 2009, p. 1404). Building on RDT, Cox, Sanderson, and Watson (2000) developed a power and leverage perspective for exploring the commercial outcomes of buyer-supplier relationships. However, their research has only been conducted in a western context.

To address this, the authors conduct an empirical study in a Chinese business context and analyse buyer-supplier relationships using a power and leverage perspective (Cox et al., 2000). This leads to the key research question: Does the power and leverage perspective need modifying in non-western contexts?

To explore this research question, this paper will firstly discuss the concept of power in buyer-supplier relationships. Secondly, a power and leverage perspective (Cox et al., 2000) will be discussed. Thirdly, authors will explore the impact that the Chinese cultural context can have on business relationships. Finally, authors will operationalize a power and leverage perspective (Cox et al., 2000) and use it to analyse the relationships between a number of buyers and suppliers in a Chinese multiple food market context.

This paper makes a number of important contributions to the understanding of buyer-supplier relationships. Firstly, through the presentation of an in-depth case, the paper delivers important empirical guidance for those who intent on measuring buyer-supplier power relationships. The methodology presented aims to shed light on how, in practice, one can determine who has power in a relationship. Secondly, empirical evidence is provided which explores the boundary conditions of a power and leverage perspective (Cox et al., 2000). Finally, potential refinements will be suggested to this perspective for analysing business relationships in a Chinese cultural context.

Understanding Power

Power is multi-dimensional (Ireland, Webb, & Coombs, 2005) and "an essentially contested concept" (Gallie, 1955), in that many disagree as to how exactly the concept should be understood and what its scope should be. Some scholars argue that there are much more subtle expressions of power and that power is not always displayed in overt and observable acts (Bachrach & Baratz, 1962). Indeed, some have exploited this contestation to actually deny the importance of the concept (Williamson, 1995). There is however, a considerable body of literature that focuses on power. A number of authors consider the role of power within organizations, for example, Contu and Willmott (2003) talked about the embeddedness of learning practice in power relations. They argued that learning practices are shaped, enabled, and embedded within relations of power, whereby power is determined by "the social organization of and control of resources" (Lave & Wenger, 1991). Fleming and Spicer (2006), also focusing on power within organizations, stressed that there are four distinct "faces" to power where each face has distinct answers to what power is, how it operates, and how it is maintained in organizations. These results in the study of power are multi-faceted and complex. In addition, French and Raven (1959), working in the field of sociology, identified five sources of power: reward, coercive, legitimate, expert, and referent. They emphasized that although actors may have potential power, they often chose not to exert it fully. The difficulty in understanding and defining power is a possible reason why many scholars have chosen to use alternative theories to help explain phenomenon such as buyer-supplier relationships. Authors would argue, as Pfeffer and Salancik (1978) do, that although it may be difficult to define power, the consequences of power can be observed all around. Those who have power achieve their desired outcome, whilst those who do not rarely achieve them. This paper explores the power dynamics among organizations rather than individual actor's within an organization. The working definition of power employed in this paper, in the context of understanding buyer-supplier relationships, as developed by Lukes (1974), is the ability of one actor to affect the behavior of another actor in a manner contrary to the second actor's interest. This definition is similar to those of Dahl (1957), Emerson (1962), and Bowles and Gintis (1993), amongst others. In this paper, the actors are buying and selling organizations and therefore power relationships rather than power in itself will be considered (Foucault, 1982).

Power and Leverage Perspective

Cox et al.'s power and leverage perspective (2000) builds upon the work of Emerson (1962) and other author's work (Blau, 1964; Thompson, 1967; Jacobs, 1974; Cook, 1977; Cook & Emerson, 1978; Campbell & Cunningham, 1983; Porter 1979, 1980). Cox (2007) argued that the dominant approach to understanding power relationships is seen as a function of resource dependency (or asymmetrical interdependence) (see also Caniëls & Gelderman, 2005; Meehan & Wright, 2011). From this perspective, it is therefore possible, by considering the degree of resource dependency, to determine the relative power of a buyer over a supplier. However, to do so, it is necessary to fully appreciate the buyer-supplier relationship context. This requires building up an understanding of the relationship from both the buying and supplying organizations standpoints. In this way, the power and leverage perspective fully acknowledges that power is, as Fleming and Spicer argued (2006), causal, episodic, and situational. This recognition is an important departure from earlier studies which have tended to focus on the effects of dependence upon only the buyer (e.g. El-Ansary & Stern, 1972; Kim et al., 2010).

The power and leverage perspective, grounded in RDT, uses the constructs of resource utility, resource scarcity, and information scarcity. This paper will introduce how the perspective has been constructed, as this will enable any potential limitations of their models to be explored when applied to the Chinese business context.

With the focus of study being the dyad, the starting point is to analyze the key attributes of power for both the buyer and the supplier. In line with Pfeffer's viewpoint (1981), this approach defines power as being relative. Therefore, from the analysis it is possible to situate a dyadic relationship in the "Power Matrix", as shown Figure 1. Power relationships will be located in one of four power positions: buyer dominance (>), interdependence (=), independence (0), and supplier dominance (<) (Cox et al., 2000; Cox, Ireland, Lonsdale, Sanderson, & Watson, 2002).

In the context of vertical business exchanges, there are structural power resources that enable a buyer or supplier to achieve their desired outcome. For buyers, these are the occurrence of "monopsony and oligopsony, low sunk and switching costs, regular market contestation, buying consortia and appropriate governance structure to eradicate ex ante and ex post opportunism in situations of incomplete contracting and bilateral dependency" (Cox, 2007). For suppliers, "superior endowments of capital, tangible and intangible assets, distinctive capabilities, intellectual property and know-how" (Cox, 2007) can provide them with significant power resources. According to Rumelt (1987), these are isolating mechanisms that help create imperfect markets. In addition, suppliers gain power from information asymmetry, as well as sunk and switching costs.

Attributes to Buyer Power Relative to Supplier	Attributes to Supplier Power Relative to Buyer: LOW	Attributes to Supplier Power Relative to Buyer: HIGH
HIGH	**BUYER DOMINANCE (>)** Few buyers/many suppliers Buyer has high % share of total market for supplier Supplier is highly dependent on buyer for revenue with few alternatives Supplier's switching costs are high Buyer's switching costs are low Buyer's account is attractive to supplier Supplier's offering is a standardized commodity Buyer's search costs are low Supplier has no information asymmetry advantages over buyer	**INDEPENDENCE (0)** Many buyers/many suppliers Buyer has relatively low % share of total market for supplier Supplier is little dependence on buyer for revenue and has many alternatives Supplier's switching costs are low Buyer's switching costs are low Buyer's account is not particularly attractive to supplier Supplier's offering is a standardized commodity Buyer's search costs are relatively low Supplier has very limited information asymmetry advantages over buyer
LOW	**INTERDEPENDENCE (=)** Few buyers/few suppliers Buyer has relatively high % share of total market for supplier Supplier is highly dependent on buyer for revenue with few alternatives Supplier's switching costs are high Buyer's switching costs are high Buyer's account is attractive to supplier Supplier's offering is relatively unique Buyer's search costs are relatively high Supplier has moderate information asymmetry advantages over buyer	**SUPPLIER DOMINANCE (<)** Many buyers/few suppliers Buyer has low % share of total market for supplier Supplier has no dependence on buyer for revenue and has many alternatives Supplier's switching costs are low Buyer's switching costs are high Buyer's account is not particularly attractive to supplier Supplier's offering is relatively unique Buyer's search costs are very high Supplier has substantial information asymmetry advantages over buyer

Figure 1. The power matrix. Source: Cox, Ireland, Lonsdale, and Sanderson (2003, p. 54).

Relationship Management Choices

Once the power relationship is analyzed, it is then possible to consider the full range of relationship management choices available for buyers and suppliers. There is little contestation, at least in a western focused academic context, that there is a range of inter-organizational relationship types. Authors can see the range of relationship types as a continuum from transactional to vertical integration (Spekman, Forbes III, Isabella, & MacAvoy, 1998; Fontenot & Wilson, 1997). Between these two extremes lie various hybrid governance forms (Figure 2).

There is, however, less agreement about the conditions under which different governance forms are more or less appropriate. Appropriateness of relationship choice is best understood by considering the reasons and the conditions under which organizations establish linkages or exchange with each other (Oliver, 1990). This could be the specific production process being employed (assembly line or batch) (Leenders & Blenkhorn, 1988; Ramsay, 1996); the size of purchase (volume of business) (Spekman, 1988; Gadde & Snehota, 2000) and the characteristics of the purchase (the level of complexity and criticality of the purchase) (Gadde & Snehota, 2000). It can be argued, as many other authors do, that there cannot be one best way of working (Cannon & Perrault, 1999). Therefore, there is arms-length or collaborative relationship management choices, both of which may be appropriate under particular operational conditions. Similarly, whenever commercial value is appropriated in a relationship, one party may achieve more than the other. In an unequal exchange, the subservient party has to accept the unequal terms of trade, although in some circumstances both may share the value relatively equally. Relationships can be described as being commercially adversarial or non-adversarial. Considering power and relationship management types together, six broad choices can be seen (Figure 3).

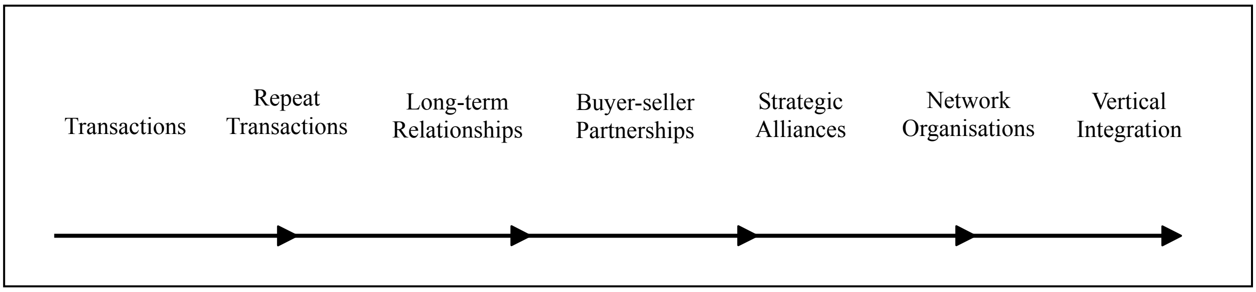

Figure 2. The range of marketing relationships. Source: Fontenot and Wilson (1997).

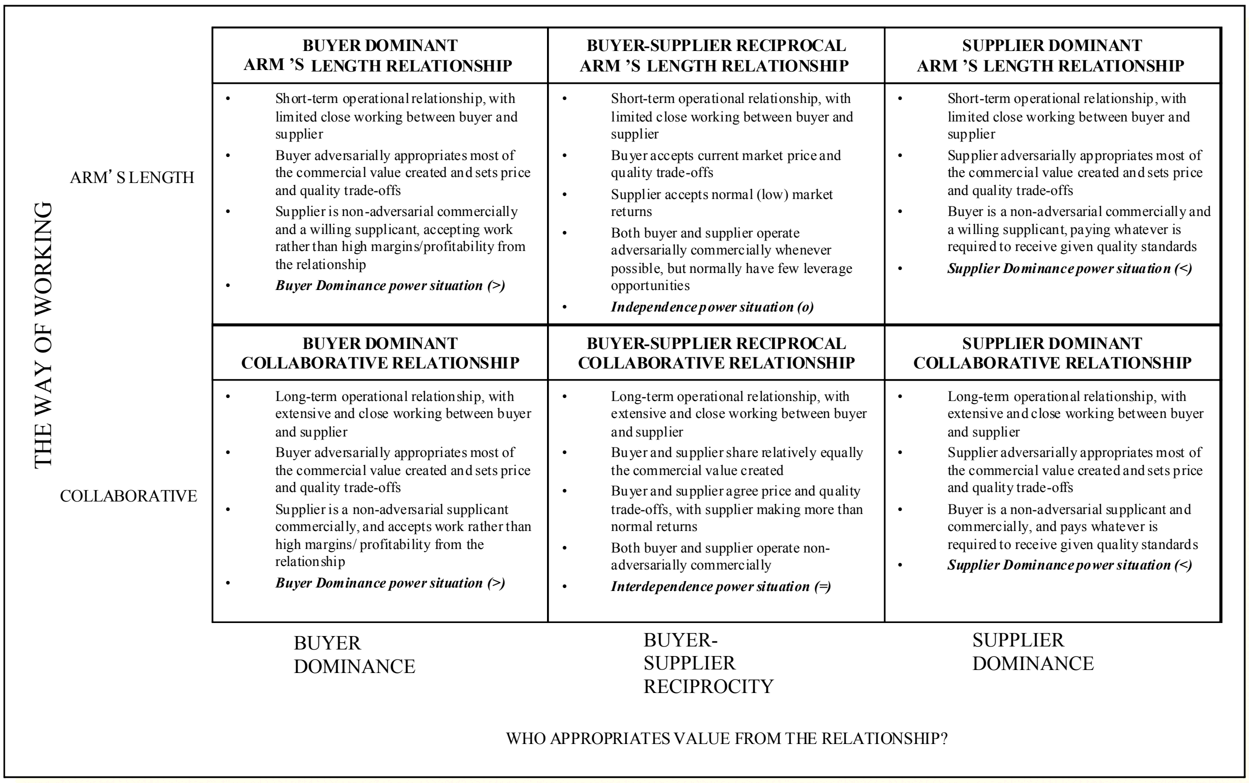

Figure 3. Relationship management choice matrix. Source: Cox, Lonsdale, Sanderson, and Watson (2004, p. 97).

From this perspective, therefore, there is "a causal relationship among the buyer-supplier power relationship, the type of interaction that is pursued and the commercial outcome of the relationship" (Lonsdale, 2004, p. 384). Although the unit of analysis is the dyad, from this perspective, it is possible to map extended power relationships through a chain. This is particularly important as often that effective relationship management choices are about understanding the dynamics at play in whole supply chains rather than at a dyadic level. Choi and Wu (2009, p. 7) argued that although the dyad may be the building block for analyzing networks they do not adequately "capture the essence of a network". It is better to consider extended buyer-supplier-supplier relationships what they term a triad.

Having discussed power in buyer-supplier relationships and the power and leverage perspective, the next section of this paper will focus on buyer-supplier relationships in a Chinese cultural context.

Relationships in a Chinese Cultural Context

Many authors note that there are unique political, institutional, social, and cultural characteristics in China (Hofstede, 1980; G. Hofstede & G. J. Hofstede, 2005; Humphreys, Shiu, & Chan, 2001; Leung, Kock, & Lu, 2002; Lee & Oh, 2007; Cai, Yang, & Hu, 2011). This gives rise to distinctive economic organization (Whitley, 1994; Boisot, 1986; Boisot & Child, 1996), exchange structures (Keister, 2001), and present major supply-chain related problems or risks (Humphreys et al., 2001; Jiang, 2002; Cambra-Fierro & Ruiz-Benitez, 2011). Furthermore, it is argued that the Chinese market is volatile, social culture is subtle, and the business environment and behavior are unique and sometimes incomprehensible (Li, Lam, & Qian, 2001; Graham & Lam, 2003; K. Lieberthal & G. Lieberthal, 2003; Vanhonacker, 2004; Chen & Vishwanath, 2005).

It has been argued that success in the Chinese market stems from taking advantage of the opportunities presented by globalization, whilst being flexible enough to derive local solutions (Cambra-Fierro & Ruiz-Benitez, 2011). As recent research has highlighted that, amongst other factors, strategic alliances with local partners provide opportunities for western organizations to adapt their practices to suit local culture (Cambra-Fierro & Ruiz-Benitez, 2011; Salmi, 2006). Furthermore, when dealing with suppliers, retailers should be aware that "Guanxi relationships" drive business practice in the Chinese food retail market (Luo, 1997).

In China, all types of interpersonal connections are called Guanxi and can therefore be applied to dyadic business relationships (Yang, 1994; Xin & Pearce, 1996). Guanxi literally means "a relationship" and stems from Confucianism.

The broad cultural aspects of collectivism are at the heart of Confucianism and influence all aspects of Chinese culture. This is particularly important for understanding how business relationships are formed and develop in the Chinese business context. Relationships in Chinese society are implicitly built upon "mutual interest and benefit" (Yang, 1994, pp. 1-2). According to Park and Luo (2001, p. 455), Guanxi has never been more relevant as this thinking is "entrenched in the present Chinese business environment".

It has been argued that for supply relationships in this market to flourish, they must be based upon trust and benefit both partners. In addition, it is paramount that in all dealings between retailers and their suppliers, face is maintained (Humphreys et al., 2001). Maintaining a certain level of "face" is very important in Chinese society and is a key dynamic within Guanxi. To establish and develop a Guanxi network, it is necessary to ensure that no loss of face occurs (Park & Luo, 2001). Thereby, open request for cost information, for example, the overt use of power differentials (coercive power), prevalent in many buyer-supplier relationships in the west, would be interpreted in the Chinese context as a breakdown of trust in the relationship. This would result in individuals within an organization losing face (Humphreys et al., 2001).

Therefore the following proposition can be put forward:

P1: In a Chinese business context due to the influence of Guanxi and Mianzi (face), it is unlikely that power differentials in a relationship will be exploited.

Research Methodology

A power and leverage perspective is used to analyze extended buyer supplier relationships in a Chinese business context. As power is a complex and context-dependent phenomenon, determining power relationships requires research methods that can take into account situational and context specific factors (Mintzberg, 1983; Pettigrew, 1977; Pfeffer, 1981). Therefore, case-based research is appropriate as it provides a greater understanding of complex phenomenon (Voss, Tsikriktsis, & Frohlich, 2002). Authors adopted a single embedded case research method of data collection (Yin, 1994), as it enables the researcher to gather rich information from the subjects through a variety of methods, including interviews, and document analysis (Yin, 2003). The case was introduced so as to illustrate and test the usability of the power and leverage perspective within a Chinese cultural context. By conducting the research in the context of a specific buyer-supplier interaction, the validity and reliability of the information were improved (Yin, 2003).

Case Selection

To address the research questions, authors sought a supply chain in China with a focal organization which was employing western management thinking/practices. A number of potential focal organizations were identified. It was crucial that the focal organisation would be able to facilitate access to their supply chain partners. Authors chose a single supply chain with four companies. The focus on an embedded case of single supply chain limits generalizability, but allows for greater depth and richness of study (Voss et al., 2002). The case studied was Westco and its roasted and raw seed and nuts supply chain described below.

Westco, the focal organisation, is a leading western multiple food retailer which has been highly successful in its native market. Their customer focus is to deliver low priced products and excellent service. Over the last 10 years, Westco expanded aggressively into a number of major developing markets in Asia and South America. With over 100,000 employees globally and more than 1000 stores, Westco commands significant purchase power.

Nutco, a small (less than 20 employees) local roasted nut business, was established in 1988. The business started as a nut shop and a number of investments were made to improve the processing methods, along with the development of a unique new recipe. This made Nutco's products distinctive in the marketplace. In 2000, Nutco commenced trading with a number of local food retailers and in 2004 signed an exclusive supply deal with Westco.

In addition to buying roasted seeds and nuts from Nutco, Westco also buys raw seeds and nuts from Rawco. Rawco is a small (less than 20 employees) local seeds and nuts supplier which purchases products from national wholesalers and sells in both local and regional markets. Finally, Nutco buys its raw seeds and nuts (to be further processed in their facility) from Seedco. Seedco is also a small (less than 20 employees) local seed and nut supplier.

Data Collection

Authors conducted in-depth face-to-face interviews with selected participants (senior management, marketing, operations, and procurement) in the buying and selling organizations. This paper used two semi-structured questionnaires designed to operationalize the power and leverage perspective. Face-to-face interviews were chosen rather than conducting a postal survey, as this allowed the researchers to gather richer data and to clarify, when necessary, complex questions.

Two semi-structured questionnaires were employed. The first was a "power and competition analysis questionnaire" (Tables 1, 2, and 3). The second was a "relationship management type questionnaire" (Table 4). The questions were drawn from a power and leverage perspective literature. They were then refined during a number of research meetings with colleagues knowledgeable in the field. Finally, the questionnaires were piloted with a number of buying and supplying organizations at a one-day workshop.

Table 1

Marketing Approach Questions

1. What end product and/or service is the item under investigation being bought for?
2. For this end product, who are your key channel partners (%) and what % of total turnover (for the business) is attributed to each of these?
3. For a key customer, what do you supply?
4. What performance criteria are important to your key end customers?
5. What is your customer/competitive strategy as a supplier?
6. As a supplier, how do you manage your buyer? Do you see them as a development account, key account, low value account, or exploitation account?

Table 2

Buyer Power Resource Endowment Questions

Interview Questions	**Answers to provide maximum level of power resource endowment for the buyer**
1. How operationally important is the item to be sourced? (U)	Low
2. Is the item sourced of commercial importance? (U)	Low (support good)
3. What % of the total buyers spend is devoted to this item? (U)	Low
4. Is reciprocity a factor in the relationship between the buyer and supplier? (U)	No
5. How many potential suppliers are there for this item of spend? (S)	Many
6. How contested is the current supply market? (S)	High
7. How commoditised is the supply offering (level of complexity)? (S)	Highly
8. Are credible substitute items easily available? (S)	Yes
9. How high are the barriers to entry for new suppliers? (S)	Low
10. How many isolating mechanisms does the supplier have against their competitors? (S)	None or Few
11. Does the buyer pose a realistic threat of backward integration? (S)	High
12. Is it possible to take the first-tier supplier out of the chain? (S)	High
13. What is the current evidence of cartelisation in this supply market? (S)	Low
14. What is the current level of lock-in by the supplier of the buyer's business? (S)	Low
15. How high are the buyer's switching costs? (S)	Low
16. Are the buyers search costs high or low? (I)	Low
17. Does the buyer have low or high levels of information asymmetry? (I)	Low
18. What type of product/service is being purchased (experience, search or credence)? (I)	Search Good

Table 3

Supplier Power Resource Endowments Questions

Interview Questions	**Answers to provide maximum level of power resource endowment for the supplier**
1. How significant is the buyer's spend to the operational sustainability of the supplier's business (i.e. ratio, regular and predictable)? (U)	Low
2. How commercially important is the buyer to the supplier? (U)	Low
3. Does the buyer provide supplier with clear and consistent demand forecasting and capacity planning information? (U)	Yes
4. Is the buyer's business attractive for the supplier? (U)	Low
5. How many customers in total does the supplier have for this item? (S)	Many
6. How many potential customers are there for this supplier? (S)	Many
7. How high are the suppliers sunk costs? (S)	Low
8. Does the supplier have the ability to forward integrate? (S)	Yes
9. Does the supplier have access to private buyer information (i.e. budgets, reservation price, what is valued, who specifies etc.)? (I)	Yes

Table 4

Relationship Management Type Questionnaire

Section A: Defining way of working
Q1: For the relationship in question, is there only a basic exchange of information and products or services, such as a basic specification, volume and timings information from the buyer and limited specification, timing and pricing information from the supplier? Q2: Can evidence be provided demonstrating that the relationship has moved beyond an arm's length relationship? What specific product/process information exchange, operational linkages, legal bonds, cooperative norms and relationship specific adaptations are present in the relationship?
Section B: Determining the sharing of surplus value in the relationship
Q1: What are the commercial goals for the buyer and supplier (i.e. strategic ends, such as security of supply) of entering into this relationship? Q2: Were these commercial goals fully or partially realised? Q3: Is there an equal distribution of relationship specific investments? Q4: If not, who has invested more in relationship specific adaptations (what evidence is there to support this)? Q5: What profit margins does the supplier make? Q6: What evidence is there in the contract (or agreement) to indicate an equal or unequal sharing of the surplus value (payment terms, length of contract, detrimental clauses, allocation of risks etc.)?

The power and leverage questionnaire was split into two sections (A and B), for logical data collection and subsequent analysis. Section A has six questions and focuses on determining the subject's marketing approach with customers (Figure 4 and Table 1). Section B was split into two sub-sections. B1 had 18 buyer-focused questions, aimed at determining buyer and supplier power (Figure 4 and Table 2). B2 had nine supplier focused questions, aimed at determining buyer and supplier power (Figure 4 and Table 3).

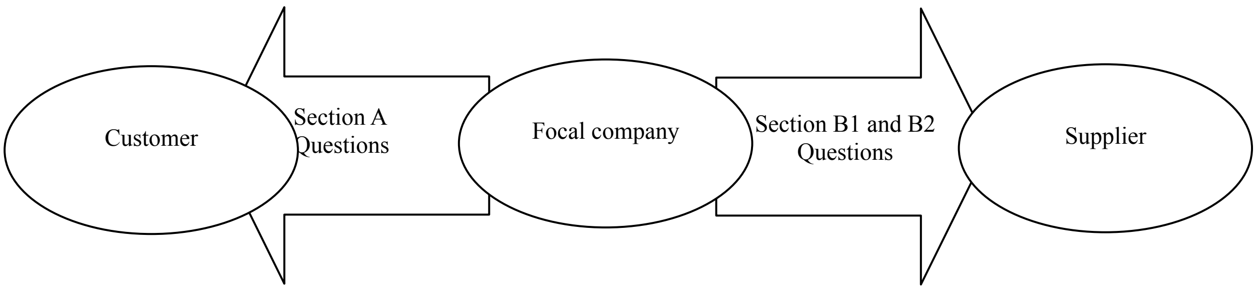

Figure 4. Power and competition questionnaire.

The questions shown in Tables 2 and 3[1] were devised to determine:

(1) Relative utility (U) of the exchange: How important or valuable is this customer or supplier to the business?

(2) Scarcity (S): How many equivalent alternatives do people have beyond this customer or supplier?

(3) Information (I): How much do people know, or how easy/expensive would it be to find out the customer's reservation price or the supplier's cost of production?

The relationship management type questionnaire was also split into two sections. Section A had two questions which were aimed at determining the way of working between the two organizations (Table 4). Section B had a further six questions which were aimed at establishing the share of surplus value in the relationship.

[1] The second columns shown in Table 2 and 3 help data analysis. The process of data analysis is described in full in the next section of the paper.

The data collection process is shown in Figure 5. Interviews were conducted in English and in Cantonese over an initial period of three months. The interviews took during two and three hours. The answers to the questions were transcribed and at a later date checked for accuracy with the interviewee. Safeguards were established to ensure that the data was robust. The process of data collection for the questionnaires ensured that the answers to the questions were validated by internal stakeholders and between the buying and selling organizations. Where possible, answers were also validated by external sources (industry reports etc.) and/or independent experts. The data came from a variety of sources ensuring adequate triangulation (Yin, 2003).

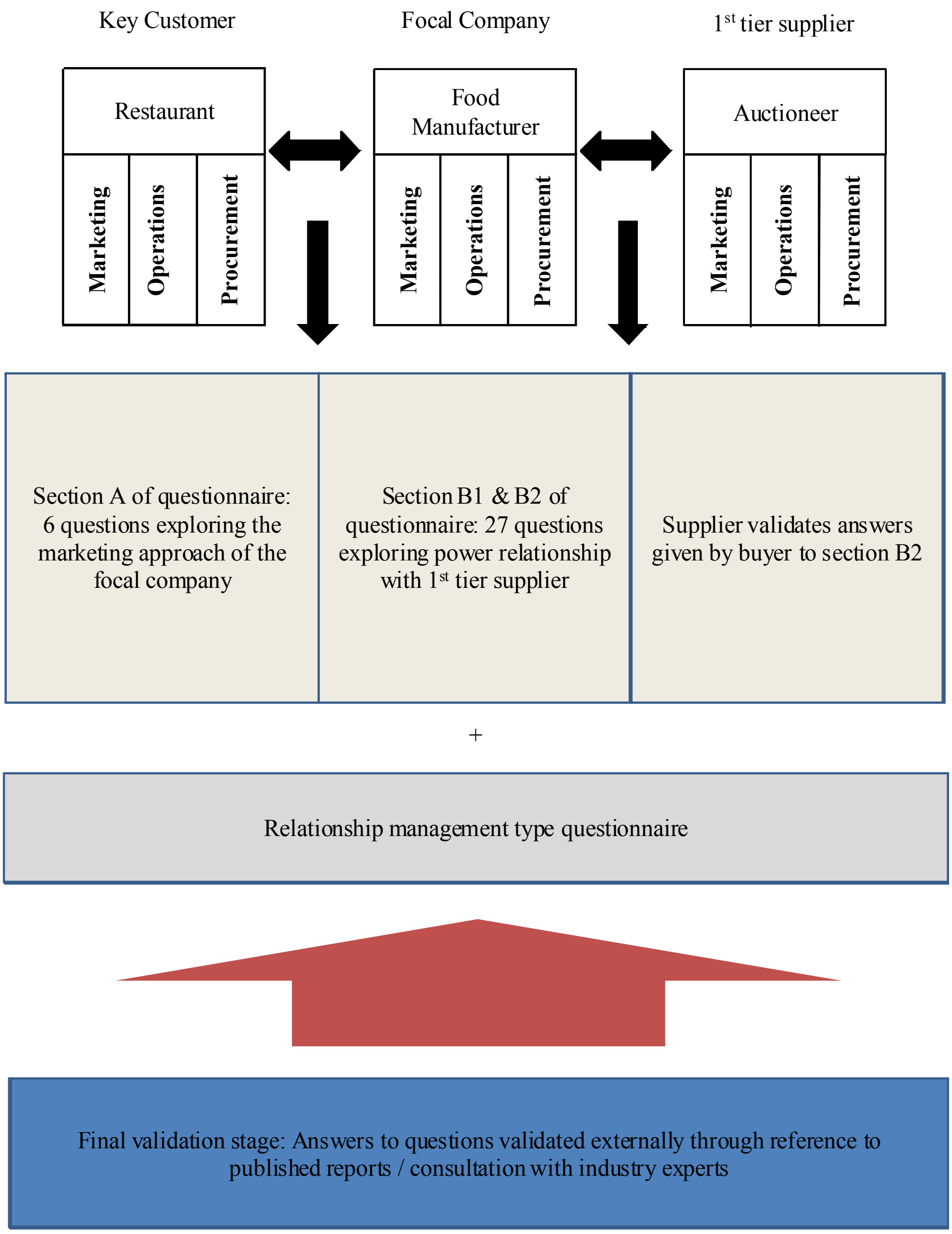

Figure 5. Data collection strategy and process.

Table 5

Characteristics of Equal and Unequal Sharing of Surplus Value

Buyer-skewed adversarial	**Non-adversarial**	**Supplier-skewed adversarial**
Buyer's commercial goals fully achieved	Each Party's commercial goals partially realized	Supplier's commercial goals fully achieved
Supplier invested more in relationship-specific adaptations	Equal distribution of relationship specific adaptations	Buyer invested more in relationship-specific adaptations
The buyer is paying a price which is substantially lower than their utility function (reservation price)	The buyer is paying a price which is mid-way between their utility function (reservation price) and the supplier's mean cost of production	The buyer is paying a price very close to their utility function (reservation price)
The supplier is receiving only normal profit (or slightly above)	The supplier is able to earn average profits for the industry sector (comparable companies operating at the same supply chain stage)	The supplier is able to earn sustained above average profits for industry sector (comparable companies operating at the same supply chain stage)
The terms of the contract or agreement favor the buyer (i.e. pricing, payment terms, exit clauses, etc.)	The terms of the contract or agreement favor neither the buyer nor supplier (i.e. pricing, payment terms, etc.)	The terms of the contract or agreement favor the supplier (i.e. pricing, payment terms, exit clauses etc.)

Data Analysis

The first analysis step was to use the data to categorize each of the four relationships. Each relationship was categorized in one of the four power relationships shown in Figure 6. The process of analysis was as follows: A full power relationship analysis was conducted using the data collected from the survey (Table 1, 2, and 3); the second columns in Table 2 and 3 aid data analysis, for example, the first four questions shown in Table 2 determine the utility (U) of the purchase for the buyer. If the answer to question one is "low", then this will provide the buyer with high power resource endowments. Therefore, specific answers to each of the 18 questions shown in Table 2 demonstrate high power resource endowments for the buyer. The same logic is applied to the nine questions shown in Table 3 for determining supplier power resource endowments.

Bringing together the analysis of buyer and supplier, power resources enable to categorize the relationship in the box "power matrix". When the buyer has high attributes of power relative to the supplier and the supplier has low attributes of power relative to the buyer (high/low), then the relationship is buyer dominance (>). Conversely, when the buyer has low power attributes relative to the supplier and the supplier has high power attributes relative to the buyer (low/high), then the relationship is supplier dominance (<). When both the buyer and the supplier have high power attributes relative to each other (high/high), then the relationship is characterized by independence (0). Finally, when both the buyer and the supplier have low power attributes relative to each other (low/low), then the relationship is characterized by interdependence (=). This is summarized in Figure 6.

These results are shown in Figure 7, with the questionnaire responses presented in Table 6 and 7 in the findings section of this paper. Authors go beyond the dyad to build up a picture of the power relationships and relationship management types within the supply chain.

The second step of data analysis was to position the relationships in one of the six possible relationship types shown in Figure 3. This was achieved by first determining the way of working. If the answer to question one in section A of the relationship management questionnaire is "yes", then the relationship is arms-length. All other relationships will be positioned in the matrix as close. However, to validate the "yes" answer and to provide further information about the degree of connectivity in the relationship, a further question is asked (question two in Section A of the "relationship management questionnaire"—Table 4).

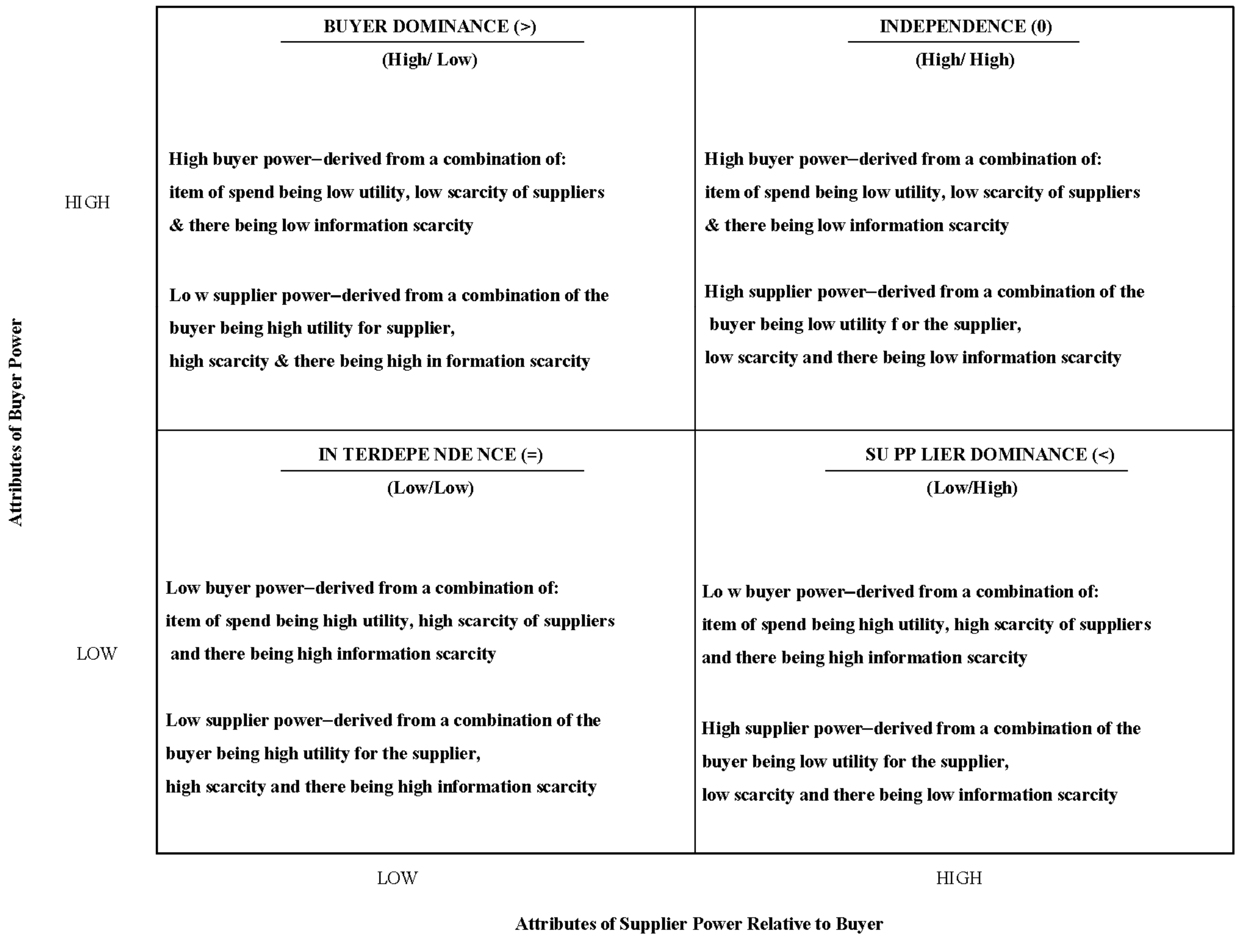

Figure 6. The power matrix: Bringing buyer and supplier power.

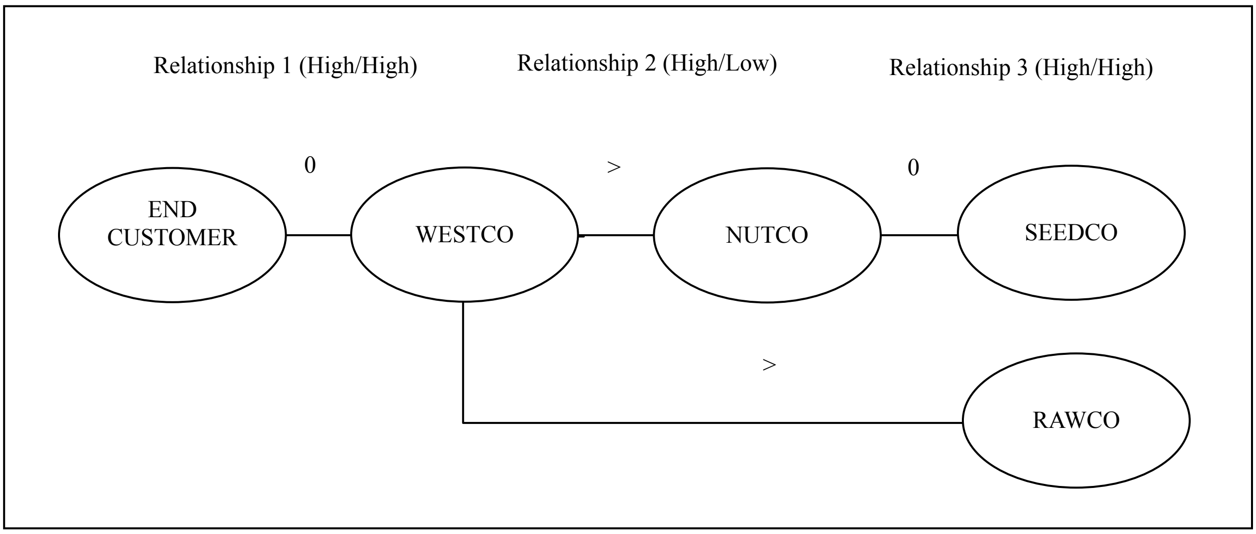

Figure 7. The power analysis for roasted seeds and nuts (Key to symbols: > = Buyer dominance, 0 = Independence - for the full analysis see Table 6 and 7).

Secondly, six questions were asked in section B of the "relationship management questionnaire" to determine the sharing of surplus value in the relationship. Table 5 shows the characteristics of equal and unequal sharing of surplus value. The characteristics depicted in Table 5 aid the researcher when analyzing whether the surplus value created in the relationship is shared equally or favors either the buyer or supplier. Here, a judgment needs to be made as to who, on balance, gains more of the surplus value from the relationship. If it favors the supplier, for example, then the relationship will be deemed to be supplier-skewed adversarial. If it is very difficult to determine any obvious beneficiary, then the relationship will be classified as non-adversarial. These relationships will be discussed in more detail below.

Findings

Authors now examine the power relationships in the extended supply chain and the relationship management approach between Westco and Nutco. The dyadic power relationships in this chain are depicted in Figure 7, with the analysis provided in Table 6 and 7.

End Customer—Westco Power Relationship (Relationship 1)

The Shanghai store of Westco is typical of other large format multiple retail markets in the region. It has been successful in establishing itself in a new market and enjoyed an 18% market share in the region. The store services a large number of individual consumers, all of whom are able to switch relatively easily to alternative suppliers if they wished. "Although we have been successful, we are under no illusions that our customers can quite easily move to another similar competitor. We try and compete on price, but the quality of our produce is of great importance", said a marketing manager of Westco.

The power relationship between the end customer and Westco (Figure 7) has been analyzed as independence (0) (Table 6 and 7).

Westco—Nutco Power Relationship (Relationship 2)

Authors next examine the key relationship with Nutco. Westco purchased 60% of its goods from local suppliers, with non-branded roasted seeds and nuts single sourced over the previous two years from Nutco. The orders from Westco accounted for 80% of Nutco's revenue. There were a number of larger non-branded roasted seeds and nuts producers operating in Shanghai, but the shelf life of their products was reported to be at least 20% shorter than those of Nutco. The distinctive taste and aroma of Nutco's roasted products helped them to increase their market share and contributed 4% to Westco's overall turnover. This provided important operational and commercial benefits. "Nutco's products are undoubtedly market leaders and nut products are an important category for us", said a category buyer of Westco.

Westco achieved 25% gross profit from sales and a 5% lower price than it purchased from other suppliers. Despite this, the buyer demonstrated little understanding of the supplier's own cost and profit drivers in the relationship. Nutco was heavily dependent upon Westco for the majority of its business revenue. "For us, Westco is our most important customer by far; without them, it is unlikely that we could sustain the business", said an owner of Nutco.

Not only was 80% of its revenue generated from this relationship, but it also made such a low return that it had insufficient funds to purchase vehicles to distribute its products to other customers. Furthermore, this stopped it from providing a timely or reliable service for Westco. These factors enabled Westco to establish buyer dominance (>) over Nutco. This is because Nutco provided high quality products, for normal returns (2% net profit) and transparently passed all cost improvements to the buyer in return for regular work and low, but guaranteed margins (Table 6 and 7).

Table 6

Analysis of Buyer Power Resources

Interview Questions:	High power for the buyer	R 1: EC - Westco	R 2: Westco - Nutco	R 3: Nutco - Seedco	R 4: Westco - Rawco
1. How operationally important is the item to be sourced? (U)	Low	Low	Medium	High	Low
2. Is the item sourced of commercial importance? (U)	Low (support good)	Low	Medium	High	Low
3. What % of the total buyers spend is devoted to this item? (U)	Low	Low	Low	High	Low
4. Is reciprocity a factor in the relationship between the buyer and supplier? (U)	No	No	No	No	No
5. How many potential suppliers are there for this item of spend? (S)	Many	Many	Restricted	Many	Many
6. How contested is the current supply market? (S)	High	High	High	High	High
7. How commoditised is the supply offering (level of complexity)? (S)	Highly	Highly	Medium	Highly	Highly
8. Are credible substitute items easily available? (S)	Yes	No	No	No	No
9. How high are the barriers to entry for new suppliers? (S)	Low	Low	Low	Low	Low
10. How many isolating mechanisms does the supplier have against their competitors? (S)	None or Few	Few	Few	None	None
11. Does the buyer pose a realistic threat of backward integration? (S)	High	Low	Low	Low	Low
12. Is it possible to take the first-tier supplier out of the chain? (S)	High	Low	Low	Low	Low
13. What is the current evidence of cartelisation in this supply market? (S)	Low	Low	Low	Low	Low
14. What is the current level of lock-in by the supplier of the buyer's business? (S)	Low	Low	Low	Low	Low
15. How high are the buyer's switching costs? (S)	Low	Low	Low	Low	Low
16. Are the buyers search costs high or low? (I)	Low	Low	Low	Low	Low
17. Does the buyer have low or high levels of information asymmetry? (I)	Low	Low	Low	Low	Low
18. What type of product/service is being purchased (experience, search or credence)? (I)	Search Good	Search Good	Search Good	Search Good	Search Good
From the answers to these questions what is the overall assessment of the buyers power resource endowments?		**High Buyer Power**	**High Buyer Power**	**High Buyer Power**	**High Buyer Power**

Nutco—Seedo Power Relationship (Relationship 3)

Nutco was also supplied by a local Shanghai based raw seeds and nuts supplier—Seedco. The relationship between Nutco and Seedco was characterized as independence (0). This is because Seedco was one of several raw seeds and nut suppliers in the area. "There are many suppliers who can provide us with raw seeds and nuts. As these products are a commodity item we feel that it would be straightforward to move to an alternative supplier. There is little risk in doing so", said a buyer of Nutco.

It was relatively easy for Nutco to re-source this commodity from an alternative supplier. Equally Nutco was a relatively small client for Seedco, accounting for less than 1% of their turnover. In addition, there were many alternative buyers from different sectors, such as food manufacturers, requiring nuts as a raw material (Table 6 and 7). "We have over 100 clients for our product and although Nutco does buy regularly, it would be relatively easy to replace this customer", said a marketing manager of Seedco.

Westco—Rawco Power Relationship (Relationship 4)

Westco was also able to establish buyer dominance (>) over Rawco, another supplier of non-roasted raw seeds and nuts (Figure 7). This was because Westco is a key client for Rawco, accounting for a significant proportion of their turnover, with the company not having a diverse client base. Whereas, these products only contributed 2% towards Westco's total sales and this commodity could be relatively easily resourced from alternative suppliers (Table 6 and 7).

Table 7

Analysis of Supplier Power Resources

Interview Questions:	High power for the supplier	R 1: EC - Westco	R 2: Westco - Nutco	R 3: Nutco - Seedco	R 4: Wesco - Rawco
1. How significant is the buyer's spend to the operational sustainability of the supplier's business (i.e. ratio, regular and predictable)? (U)	Low	Low	High	Low	High
2. How commercially important is the buyer to the supplier? (U)	Low	Low	High	Low	High
3. Does the buyer provide supplier with clear and consistent demand forecasting and capacity planning information? (U)	Yes	No	Yes	Yes	Yes
4. Is the buyer's business attractive for the supplier? (U)	Low	Low	High	Low	High
5. How many customers in total does the supplier have for this for this item? (S)	Many	Many	Few	Many	Few
6. How many potential customers are there for this supplier? (S)	Many	Many	Few	Many	Few
7. How high are the suppliers sunk costs? (S)	Low	Low	High	Low	High
8. Does the supplier have the ability to forward integrate? (S)	Yes	No	No	Yes	No
9. Does the supplier have access to private buyer information (i.e. budgets, reservation price, what is valued, who specifies etc.)? (I)	Yes	No	No	No	No
From the answers to these questions what is the overall assessment of the suppliers power resource endowments?		**High Supplier Power**	**Low Supplier Power**	**High Supplier Power**	**Low Supplier Power**

Relationship Management Approach Between Westco and Nutco

Westco was fully aware of the strong position they had in the market place. In this context, Westco chose to leverage their buyer dominant position to manage the relationship with Nutco in an arms-length and commercially adversarial manner (Figure 3). The buyer was able to appropriate the greater share of the value in the relationship. Westco chose to manage the relationship in an arms-length manner. It can be argued that this is an appropriate relationship management approach under the specific exchange circumstances. Although the purchase was not a one-off purchase, the products being offered by Nutco were commodity items requiring only a basic exchange of information (order quantities etc.) and products. Furthermore, although Nutco's products contributed towards overall revenue for Westco, they were by no means critical products in terms of their contribution to revenue and return. In addition, Westco was more used to managing similar suppliers outside of China in an arms-length way. "Our suppliers know that we are in a strong position and expect tough negotiations. We don't want to waste time and money getting too close to our suppliers; this would make our negotiations less affective", said a category manager of Westco.

Management felt that getting too close to their supplier was detrimental to achieve the most advantageous commercial outcome as relationships get in the way of sound commercial judgment. It can be argued, therefore, that the buyer achieves a win outcome from the exchange, but the supplier receives only a partial win. Westco achieves above normal returns and captures the major part of the commercial value created. Despite this, Nutco received regular high volumes and revenue but with only a very small return. This is initially, therefore, a nonzero-sum (win-partial win) outcome, because both parties benefited from the exchange (Figure 8: Cell B).

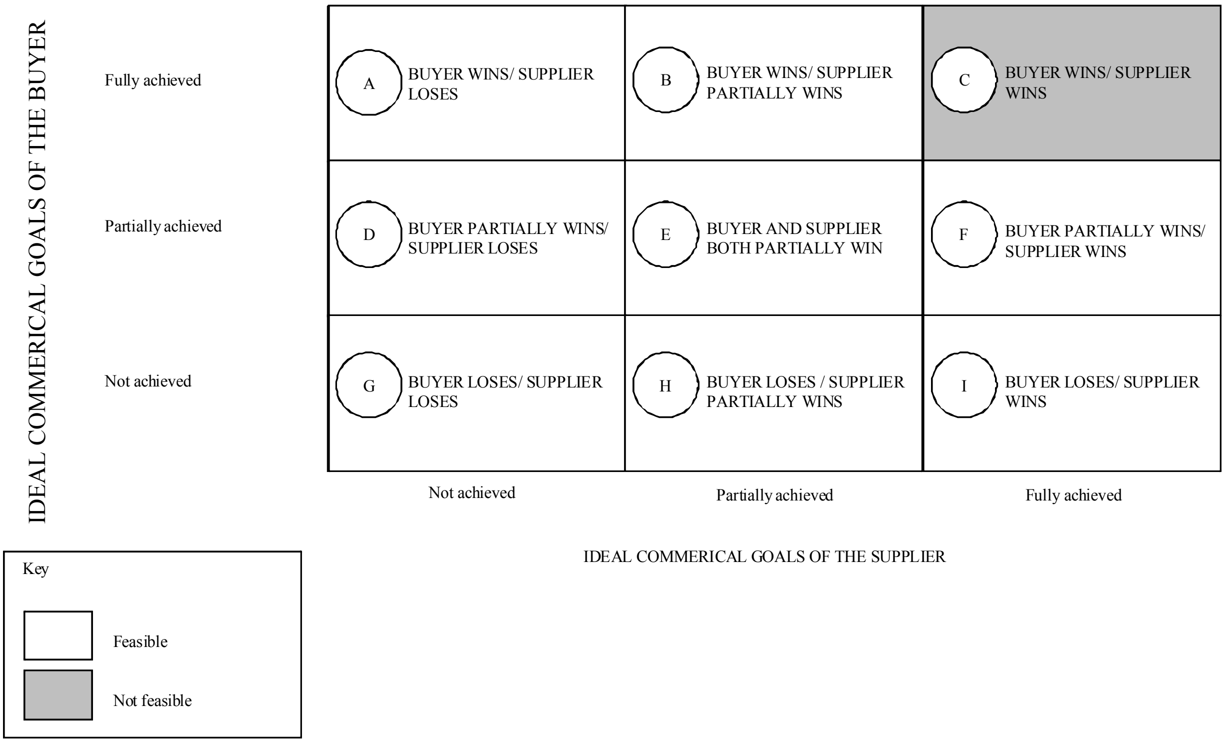

Figure 8. Commercial outcomes from buyer and supplier exchange. Source: Cox (2004, p. 25).

Relationship Breakdown

Over time Westco suffered poor cash flow because of its rapid market expansion program and its market share declined due to the arrival in Shanghai of another major international multiple food retailer. “We enjoyed a period of growth, whilst we were one of the only international multiple food retailers in Shanghai. However, with greater competition, market share is lost. All aurhors can do is to try and cut costs and become more competitive. However, this is not easy to achieve in China, as our local suppliers seem unwilling to cut costs themselves”, said a general manager of Westco.

To improve its short-term financial performance and to reduce purchasing costs, Westco, following the adversarial logic it had learnt in the west, unilaterally demanded that Nutco accepts longer payment terms and provides further price discounts. Given the prevailing objective power position, Nutco initially has no option but to accept the revised terms and conditions imposed upon them. This is principally because, in the short-term, Nutco could not afford to purchase vehicles to market and deliver its products to other potential retail customers, and there was an inadequate legal framework to protect its original contractual terms (Allen, Qian, & Qian, 2005).

The result of this more adversarial arms-length positioning by Westco was that the relationship moved from nonzero-sum favoring the buyer (Cell B in Figure 8) to a zero-sum (win-lose) outcome favoring the buyer (Cell A). Under the new terms and conditions imposed by Westco, it was impossible for Nutco to make any profit, and it soon suffered financial difficulties. In order to stay in business, Nutco acted opportunistically and, without informing the buyer, reduced the quality of its products by using inferior raw materials, as well as the safety and hygienic control budget. To reduce transaction costs, Westco does not have sufficiently robust internal quality control processes and it does not check the quality of Nutco's products. "We rely upon our suppliers to ensure that our high quality standards are maintained. This is common practice in our other non-Chinese stores. The fear of losing our business ensures that our suppliers delivered what we want and always on time", said a general manager of Westco.

Inadvertently Westco sold inferior quality roasted seeds and nuts to consumers. In this way, Nutco attempted, unilaterally, to move the relationship back to the non-zero-sum (buyer win-supplier partial win) outcome depicted in Cell B in Figure 8.

The result was that, two months later, 13 people were reported to have suffered health issues from eating Westco's inferior roasted seeds and nuts products. Nutco was fined and soon afterwards went bankrupt and Westco suffered a serious reputational embarrassment and heavy financial losses due to a rapid decline in sales and market share. The consequence of this exchange is that both parties end up in a negative-sum (or lose–lose) outcome, as depicted in Cell G in Figure 8.

Discussion and Analysis

As highlighted in the case, from a power and leverage perspective, Westco could have managed their relationship with Nutco in a number of ways (Figure 3). The first choice for Westco was whether to have an arms-length or collaborative relationship with Nutco. In this case, the decision to manage the relationship in an arms-length manner was influenced by the nature of the product being purchased and the cultural predisposition of the buying organization. It would seem that more proactive collaboration was never on the agenda. A Westco category buyer stated that, "These products (nuts) were commodity items; we just didn't feel that the relationship warranted taking the time to understand the supplier better. I still think that we managed the relationship in the right way".

The second choice for Westco was how to share the surplus value in the relationship. As the power and leverage perspective emphasizes, regardless of whether the relationship is managed in an arms-length or collaborative manner, the benefits can broadly speaking be shared equally (balanced or non-adversarial) or unequally (unbalanced or adversarial). The case indicated that the highly adversarial commercial practices that Westco has historically developed in the west; leveraging their buyer dominant position aggressively to suit their own strategic short-term goals, without thought for the consequences for their suppliers, elicited a very different response to that which they were used to. Normally, dominant buyers in the west can assume that their suppliers will either accept the newly imposed terms of the deal or they will walk away from it. According to a general manager of Westco, "We were in, what we believed to be such a strong position that we never envisaged our nut supplier doing anything other than complying with our demands".

Those accepting the aggressive adversarial stance of the buyer are normally suppliers who have few other options, who will accept the short-term leverage of the buyer in the hope of maintaining the relationship and negotiating an improved deal later. Previous research indicates that UK-based multiple retailers effectively use their dominant power position to continuously re-negotiate better terms over their suppliers in many categories (Cox & Chicksand, 2008). Those walking away are likely to be companies that have alternative options, or who have decided that working for nothing is not an acceptable commercial position to be in and who would rather exit and try their luck elsewhere.

What Westco did not bargain for, and this presumably explains why they did not create a robust quality control system to check incoming products, was that their own short-term opportunism would be repaid back to them in full by one of their suppliers. Possible reasons for this include that Westco did not fully understand the immaturity of the business environment or the Chinese cultural norms, when a supposed "partner" behaves opportunistically against the other "partner", and even when the relationship is one of master-servant (or buyer dominance).

There are a number of important management and theoretical lessons which can be drawn from this analysis. This paper will address the theoretical implications first.

Theoretical Implications

It has been argued that, in the western context, from a power and leverage perspective, it is appropriate to manage relationships in either an arms-length or collaborative way. Western organizations adopting a portfolio approach to relationship management are, some would say, demonstrating best practice (Olsen & Ellram, 1997). However, in the Chinese business context where equity and trust are highly regarded principals, a relational approach for investigating the phenomenon of buyer-supplier exchanges seems to be a more natural fit than the power and leverage perspective. The analysis suggests that the arms-length categorizations shown in Figure 3 are unlikely to be applicable in the Chinese context. Arms-length relationships in this context could produce sub-optimal outcomes for both buyers and suppliers. This suggests that "relationship management choice matrix" requires adaptation in the Chinese context.

Authors argue that a relational approach is inadequate for fully explaining the dynamics of buyer-supplier exchanges in the Chinese cultural context. This is because to understand business relationships, a distinction must be made between the way of working and the sharing of value and risks. Relational theory helps to recognize the appropriate way of working for business relationship in the Chinese context. However, this approach is inadequate for explaining how value and risk are shared in business relationships. The explanation for this is that the relational approach does not acknowledge that power can shape the outcome of a buyer-supplier exchange. Writers from the power and leverage perspective as well as the broader RDT perspective, have long argued that the power between buyers and suppliers largely dictates how value and risk, even in highly collaborative relationships, are ultimately shared. The relational approach literature assumes that collaboration will lead to a balanced sharing of risk and rewards. In the western business context, this assertion is difficult to justify. One only has to consider the collaborative "partnership" relationships between the dominant UK multiple food retailers and many of their suppliers to see this (Cox & Chicksand, 2005, 2008; Tallontire & Vorley, 2005; Competition Commission, 2000, 2008). Furthermore, in the Chinese context, the underlying power relationships also help shape the sharing of surplus value in buyer-supplier relationships. That is to say that the central principals of the power and leverage perspective are still applicable for understanding business relationships in the Chinese context. However, the expression of this power position is much more subtle than in the western context. It is suggested that the dominant party in buyer-supplier relationships in China will still gain an unequal proportion of the benefits from the relationship. However, the distribution of the gains and risks will be negotiated more collegially.

If this paper returns to earlier discussion of power, it can be seen that there is indeed a need for further research on both the boundary conditions for the power and leverage perspective and for more cross-national studies using this perspective beyond the western context. The research suggests that it may not be appropriate to make any unilateral resolution in negotiations before communicating with business partners collaboratively. If the powerful party in an exchange appears to take too much commercial advantage of the other party, its business partner will then also become adversarial in return and "fights back with viciousness" (a popular Chinese proverb). "Win-lose" or zero-sum outcomes, based on aggressive buyer or supplier behavior are, therefore, highly unsustainable in the Chinese business context. In this way, it can be argued that the face of power most relevant to the Chinese context may be either power as manipulation or domination (Fleming & Spicer, 2006).

It can be argued that in the Chinese context using power as coercion is an extremely counterproductive relationship management strategy—which will draw both parties into a "no-win" or negative sum situation. This is a dangerous proposition within the current Chinese business environment, where property rights and contract law are virtually nonexistent (Graham & Lam, 2003; Allen et al., 2005).

What this suggests, therefore, is that the continuum of who appropriates value from the relationship still exists (as shown in Figure 3), but it is less likely even if there are significant power differentials between the buyer and supplier that will be fully commercially exploited. The dominant party will more likely be willing to forgo some of their power (and the ability to retain more surplus value) in favor of creating an atmosphere of long-term harmony. This supports the notion identified by French and Raven (1959) that an actor within a relationship with potential power may at times choose not to exert it. This paper would also suggest that in the Chinese context, out of the nine theoretical commercial outcomes identified by Cox (2004), and shown in Figure 8, the most likely outcomes are B, E, and F. Cox (2004) argued that position C is not feasible, as it is never possible for both buyers and suppliers to fully achieve their commercial goals. It is possible, however, that in the Chinese context this may not be accurate. The analysis therefore supports P1: In a Chinese business context due to the influence of Guanxi and Mianzi, it is unlikely that power differentials in a relationship will be exploited.

Developing on from proposition 1, it proposes a second proposition: P2: In the Chinese cultural context, both adversarial and arms-length relationship management approaches will result in sub-optimal commercial outcomes.

Management Implications

What this case indicates is that Westco did not understand that having significant structural power resources over their supplier may not be a guarantee in China that they would be able to aggressively leverage lower prices, whilst maintain quality and delivery standards. In this context, having a contract was meaningless. Regardless of the strong power position of the buyer, without a harmonious relationship with the supplier there is, in practice, no guarantee that the terms and conditions specified in the contract will be delivered. This phenomenon is the result of traditional business customs in China, and also because the law at present inadequately protects the terms of a contract (Allen et al., 2005).

There are two interrelated management learning points to be derived from the case. Firstly, in the Chinese business context it may not be advisable to manage any relationship in an arms-length manner. Keister (2001) argued that the selection of exchange partners in China is driven by their reputation. Knowing a supplier in advance is crucial for relationships success as this reduces uncertainty. To overcome the complexity and risk associated with trading in China, it is wise to avoid arms-length transactions and secure trustworthy partners who have secure access to scarce resources, even if it is possible to find cheaper alternatives. This contradicts "market theorist who believe actors prefer to trade across a market" (Keister, 2001). Chinese business culture tends to revere long-term collaborative relationships with partners. Furthermore, arms-length relationships are impolite and unpopular in buyer and supplier exchanges. This is because of the existence of inseparable interpersonal relationships between buyers and suppliers—commonly called "Guanxi"—which is based on social and family networks (Li et al., 2001; Graham & Lam, 2003; Vanhonacker, 2004). As a result, mutually beneficial non-zero-sum forms of collaboration are the key to establishing harmonious relationships in Chinese business activities.

Secondly, organizations operating in China, even in long-term collaborative relationships should be wary of explicitly exploiting their position of power. That is not to say that power dynamics are not at play in business relationships in China. On the contrary, power relationships are at the heart of doing business there. Business leaders in China develop power by creating dependency (Keister, 2001) and according to Hofstede (2007) power is one of the five most important perceived goals ascribed to business leaders in China. In addition, to successfully conduct business in China, it is important to have prior connections, market position, and bureaucratic power to develop alliances (Keister, 2001).

In the western context, it can be argued that coercive power is the predominant face of power when talking about buyer-supplier relationships. However, in the Chinese business culture, power seems to be exercised in a different way. Chinese business networks are centred on less explicit or formal power relationships. Instead, they are based upon dominant or lead organizations with paternalistic connection with other organizations. In this way, it can be argued that the face of power most relevant to the Chinese context may be either power as manipulation or domination (Fleming & Spicer, 2006).

In conclusion, the case illustrates that relationship management choices are influenced by the specific cultural context of the buyer-supplier relationship. Companies that have learnt the rules of the game of exchange in the west will have to modify their approach, when they enter a market in which the rule of law is less formalized than it is in their traditional markets and supply chains (Graham & Lam, 2003). It would appear that the structural power resources of buyers may be severely affected by opportunism if the legal framework does not protect the rights of buyers or suppliers contractually (Allen et al., 2005). This may imply that in such an environment buyers may have to eschew short-term commercially aggressive adversarial leverage in favor of non-adversarial approaches. Furthermore, a collaborative rather than an arms-length way of working is likely to be more appropriate, even if it comes at a cost.

Conclusions

The key research question introduced at the beginning of this paper was:

> RQ: Does the power and leverage perspective need modifying in non-western contexts?

The research presented in this paper suggests that the power and leverage perspective is applicable for investigating buyer-supplier relationships in a Chinese cultural context. However, this paper has also highlighted some potential boundary conditions of a power and leverage perspective by exploring buyer-supplier relationships in the Chinese business context.

This paper developed one theory-based proposition and a further empirically based proposition. These were:

> P1: In a Chinese business context due to the influence of Guanxi and Mianzi it is unlikely that power differentials in a relationship will be exploited.
>
> P2: In the Chinese cultural context both adversarial and arm's-length relationship management approaches will result in sub-optimal commercial outcomes.

The findings presented within this paper support both of these propositions. However, a limitation of this study is that the findings were based upon a single case. This makes it difficult to draw general sable conclusions. Therefore, additional research in the Chinese business context is required to validate the two propositions presented in this paper. There is further limitation of this study. Analyzing buyer-supplier power relationships and relationship management types is complicated. The researcher must gather detailed, often commercially sensitive information, from both buying and supplying organizations. Every attempt was made to limit the subjectivity of the subsequent analysis through the adoption of a clearly structured data collection and analysis process. However, positioning relationships in the power matrix and the relationship management type matrix require a degree of interpretation of data by the researcher.

There is considerable scope for additional future research. It would be interesting to apply a perspective to studying buyer-supplier relationships in other cultural context, for example, the Middle East or Africa (see Wouters, van Jarwaarde, & Groen, 2007). Furthermore, there is still much work yet to be done in applying and when necessary adapting the power and leverage perspective for helping researchers understand phenomenon such as buyer-supplier relationships within and outside the western business context.

This paper has attempted to make a number of theoretical contributions. In addition, the research has suggested a number of potentially important managerial implications. The Chinese market offers many exciting opportunities for western companies. However, companies like price-mart have discovered that business success in China is not guaranteed[2] (China Operational Management, 2004). The case study presented in this paper suggests that given the current state of economic and social development in China a collaborative approach may well be superior to traditional western arms-length approaches. In addition, in increasingly difficult economic times, it can be argued that for organizations in the west it may be more prudent to cease short-term profit maximizing actions, in favor of taking a long-term, more collaborative approach to relationship management.

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[2] When the Chinese business of this US-based multiple food retailer failed after an eight-year struggle, a manager was reported as saying: "It is painful, especially when you don't understand their ways of doing business".

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Large Family Card as an Instrument of Supporting Families With Many Children*

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The aim of the article is to assess the efficacy of the large family card and its relevance to the real needs of families with many children, using the example of Poland. The large family card is a general term standing for locally implemented programmes that are aimed at families with many children. The idea behind the programme is to create a positive image of a large family. The very name of the programme serves the purpose of combating negative stereotypes and presenting large families as active and resourceful. The paper presents the results of empirical research conducted with cardholders and implementers of programs in selected Polish cities (questionnaire survey and focus group interviews with participants and interviews with program coordinators from 15 programs). Empirical research was conducted in the period from December 2013 to April 2014, and was funded by the National Science Centre. The study included all programs started by the end of 2011. The conclusions enable a number of anomalies and weaknesses of the programs to be seen and indicate directions for further development of this promising initiative. The program is perceived very positively by large families, although it has little influence on family situation. Apart from its positive impact on the diversification of sports and recreation activities, it does not basically play any role in supporting the condition of the family. Neither healthcare nor the educational aspect is attractive enough to interest the family. The basic reason for the low quality of programs is primarily the lack of proper communication and knowledge about the real problems affecting large families.

keywords: family policy, large family card, large families, aging societies

Introduction

The article presents the large family card as a way of supporting families with at least three children. The idea behind the card is to create a positive image of a family with many children and to improve family living conditions, among others, by increasing access to monuments or sports/recreational facilities for large families. The program is addressed to all families with many children, regardless of their income. It foresees the issuing of cards entitling families to significant reductions or free admission to cultural sites, entertainment, or sports events as well as sometimes discounts or free travel by rail and public transport. The card's program also foresees discounts at selected stores.

The work includes empirical research. The study covered local large family cards in Poland and consisted

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of a questionnaire survey among cardholders, interviews with program implementers, and focus group interviews (FGIs) conducted with program participants in selected cities. The questionnaire survey was conducted among families participating in programs. Due to the small number of participants in most programs it was possible to assume full study. Finally, more than 1,300 respondents from different cities took part in the survey. The survey was conducted by telephone as well as an online survey. The questionnaire consisted of 24 questions concerned assessment of the impact of various areas of life to its quality and questions concerning the card itself (e.g. card evaluation, the extent to which particular needs are satisfied, influence on family and social bonds). There were closed-ended and semi-open-ended questions. Some of the questions required that the respondents list answers in order of importance. The survey also included questions in the form of scales, e.g. a rating scale (which entails assigning ranks based on specified criteria) and the Likert scale (with a bipolar five-point intensity scale with categories described verbally) (Ostasiewicz, 2002). Questions concerning personal data pertained to, e.g., the number of children, income and the education of parents. The analysis and description of questionnaire results consisted mainly of the coding of the answers and statistical data analysis (e.g. determining statistical parameters such as the average, mode, and median).

An extension of the questionnaire survey was the FGIs which were conducted in selected cities with large family card holders. This study helped to develop a number of topics that appear in the questionnaire survey and to thoroughly analyze the specific situation of families with many children. Interviews with the implementers of the programmes, in turn, provided detailed information about the programmes themselves (which are not available in the programme documents and on the programmes' websites), e.g. about the premises and initiators of the programmes, their aims, methods of implementation and evaluations of the programmes, the number and structure of their beneficiaries as well as information concerning costs and directions of development of the programmes. A total of six focus groups and interviews with 15 coordinators of individual programs were conducted.

The role, situation, and support for families with many children will be presented, followed by a description of cards functioning in selected European countries. The results of studies of the Polish card will be provided—in terms of its adaptation to the needs of large families and the impact on the improvement of the situation, the family, and its relationship, both interfamilial and with local society. Finally, a model program—most fully meeting the needs of large families—will be proposed.

Role, Situation, and Support for Large Families

Although there is no single universal definition of a large family, the most common characteristic is that this is a family with at least three, or more rarely, four children. In this paper, the definition used by large family card implementers has been adopted as a family with at least three children.

The significance of large families in society is enormous. The family is the basic environment for the growth and development of a new generation. In families with many children (especially with large numbers of children), socialization runs differently than one or two children. The family is a natural environment in which children learn social skills such as: cooperation, responsibility, compassion, and concern for other human beings and making choices (Downey & Condron, 2004).

However, the most important task of large families is the mitigating demographic crisis, especially in highly developed countries. Almost all European countries are struggling with a dramatically low rate of fertility, which in most of them remains below the replacement level (Organisation for Economic Co-operation and Development, 2011). What is more, those who have few siblings also tend to have few children themselves (Kravdal, 2010, p. 668), thus an increase in fertility within a generation that does not have many siblings is unlikely. Families with many children are therefore a unique group that decides to have another child, even at the cost of worsening their situation.

Having a large family in fact means resignation from a high standard of living and the need to reduce needs to a minimum. Despite these efforts, a significant part of such families falls into a group at risk of poverty, as "the more children, the lower the standard of living" (Bradshaw, Finch, Mayhew, Ritakallio, & Skinner, 2006, p. 15). Large families are at very high risk of poverty in most European countries. In some, the risk is even higher than that in single parent families. Moreover, this risk is not associated with the unemployment of parents, as most often at least one of them works (Cantillon & Van den Bosch, 2002). This problem has been indicated by many researchers dealing with issues of poverty, such as Redmond (2000) and Cantillon and Van den Bosch (2002). When adding to this the fact that on average, every third child is brought up in a large family, it seems necessary to support and ensure equal opportunities for their development.

Europe has one of the highest rates of expenditure on family benefits across the Organisation for Economic Co-operation and Development (OECD) countries (Lippman, Wilcox, & Ryberg, 2014, p. 12). Most countries have a whole range of cash benefits, tax incentives, exemptions or deductions of charges, subsidies, and services in kind to support parents in raising children. Few of them, however, take into account the specific situation of families with many children (Wall, Pappamikaail, Leitao, & Marinho, 2009). France, for example, promotes large families, whereas the United Kingdom promotes rather small ones. Finland gives the same support to all types of family (Bradshaw & Finch, 2002).

Due to the relatively high family support in most European countries, the large family card is in fact a bonus rather than real support (except for less expensive utilities and public transport—lowering the cost of living). In Poland, however, where there is a lack of family policy, including families with many children, the Card is one of the key instruments for supporting large families. But even though this kind of support is mostly funded with public funds, it should be ensured that these funds are spent rationally and effectively. Support to families with many children should primarily support these families and therefore offer them products suited to their actual needs.

Large Family Card in Europe

The first large family card was created in France in 1921, where every year about 850,000 cards are issued. Similar solutions function in many other European countries, including Spain, Italy, Austria, Belgium, Luxembourg, Hungary, and Poland. Most large family cards are national programs, although regional (e.g., Austria) and urban (e.g., Italy) cards also exist. Polish large family cards operate as municipal programs (urban and rural) as well as in several counties; the government is also preparing a nationwide card. In most countries, the card is a government or local government program (e.g., France), although it may also be implemented by other entities, e.g., Non-Governmental Organizations (NGOs), as in Hungary.

In Spain, functioning of the card is governed at the national, regional, and local level. There is also a card issued by non-profit organizations. Discounts offered by the card consist of discounts on public transport, reduction in taxes (income, car, housing, local taxes), lower payments for water and energy, sport and leisure facilities, less expensive or free university, and discounts in more than 150 private companies (cards issued by NGO).

In the Province of Rome, Italy, the card is only addressed to lower income families that also have two children, and elders (over 65 years). The card entitles them to discount on a range of food-type products, services, and entertainment, and the program involves more than 350 companies. In Hungary, in turn, an NGO called *Nagycsaládosok Országos Egyesület* (NOE) (National Association of Large Families) is responsible for card issuing and operating. The organization issues membership cards, i.e., *tagsági kártya*, entitling holders to discounts in various places as well as private companies taking part in the program all over the country (including zoos, theaters, etc.).

In France, the card is issued by SNCF (France's national state-owned railway company), and entitles families to a range of discounts and benefits, e.g., on public transport and rail fares, admission fees to museums, cinemas, sports facilities as well as discounts at more than 90 private companies (shops, restaurants, and services). Companies such as Auchan, C&A, Intermarche, Novotel, and Yves Rocher have special offers for cardholders.

Research on the effectiveness of the card as a tool to support large families has not been widely carried out. In 2009, such a study was conducted in France and showed that families knew about the cards, although a much smaller number of them possessed or used such a card. What is more, the vast majority of cardholders mainly use the cards for discounts on rail travel, thus not knowing or barely using the program's other offers. Studies also indicate sources of information about the program, the effectiveness of information campaigns, and beneficiaries' opinions about the card. Studies have shown that, despite its long period of operation, general use of the card is still quite low.

Research conducted by the author aimed to show the influence of the large family card on quality of life in large Polish families. Due to the fact that most programs have only been launched in the last two years, a decision was made to choose to study only programs started from the end of 2011 (15 programs). The first section of questions concerned assessment of the impact of various areas of life to its quality, while the other—card usage and opinions is about the program. Areas of life, included in the questionnaire, have been limited to those whose support is possible through the large family card, and being participation in culture and leisure, educating children, the use of health protection system services, the threat of social exclusion, social attitudes and behavior, including social capital, social support, and to a certain extent the material situation of families. Figure 1 shows the assessment of respondents about the importance of different areas of life.

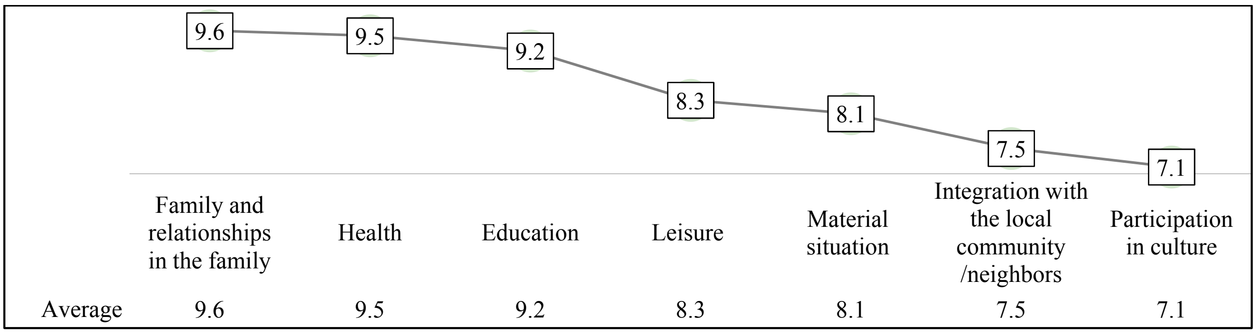


Figure 1. The importance of areas of life.[1]

Respondents who were asked about the most important aspects of their lives mainly pointed three of them—family, health, and education, with leisure and financial situation in the background. Integration with the

[1] Q: How important is a given sphere for the quality of life of your family (on a scale of 1 to 10)?

community and participation in culture was evaluated at relatively low level.

Most programs focus their offer on varied leisure and cultural activities of the family. It should, however, be born in mind that educational and healthcare offers could be even more attractive for large families. In many cities, educational offers are provided by private companies, especially language schools

Respondents, who were asked about satisfaction with participation in the program and its impact on the family, expressed their satisfaction. Figure 2 and 3 show responses to questions about the level of satisfaction with participation in the program and its impact on the family. Nearly three in four respondents are satisfied or very satisfied with participation in the large family card program. A similar percentage believes that participation in the program had a rather favorable or strongly favorable influence on their family. The remaining respondents are mainly people who are partly satisfied, which, in fact, believe that the program has had no impact on their family. The number of people dissatisfied and those who believe that the program affected them negatively is marginal.

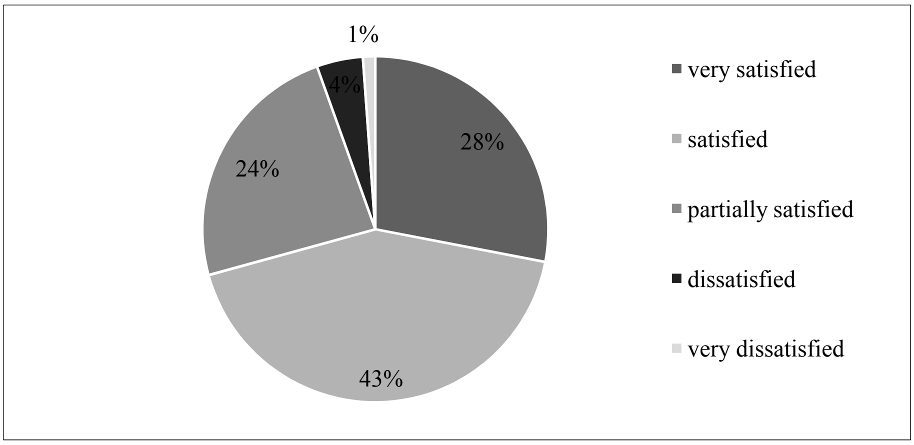


Figure 2. Satisfaction with participation in the program.

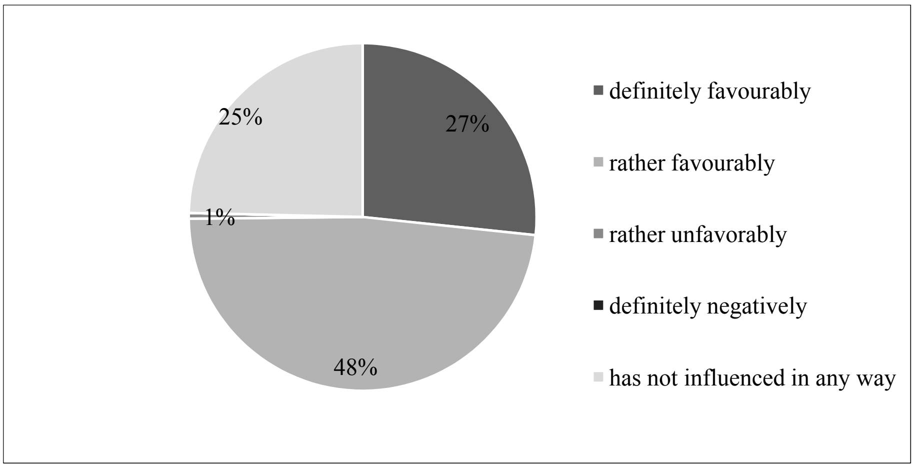


Figure 3. How participation in the program affects your family.

The situation is slightly different when asking about the actual use of the program offer. Respondents who were asked to specify the frequency of using the card (Figure 4), rarely pointed out the offer from which they would benefit at least once a week (mostly the swimming pool and public transport). What is more, in many cities, there are no healthcare services, cinemas, public transport, or even theater and museums within the offer.

Other facilities are, in fact, not very attractive or varied, or still too expensive to use more often than a few times a year. The poor offer of the program is also confirmed by further questions. Figure 5 presents an assessment of the impact of the program on different areas of life.

There is a visible rather small effect of the card on health, education, economic situation of the family, and even change of attitude towards large families. Therefore, most of the purposes established by program implementers have not been so far achieved. Significant influence can be observed only in the field of leisure opportunities (this is the opinion of eight out of 10 respondents). Despite mixed feelings about the majority of the surveyed areas of life, nearly every respondent declared an interest in further participation in the program.

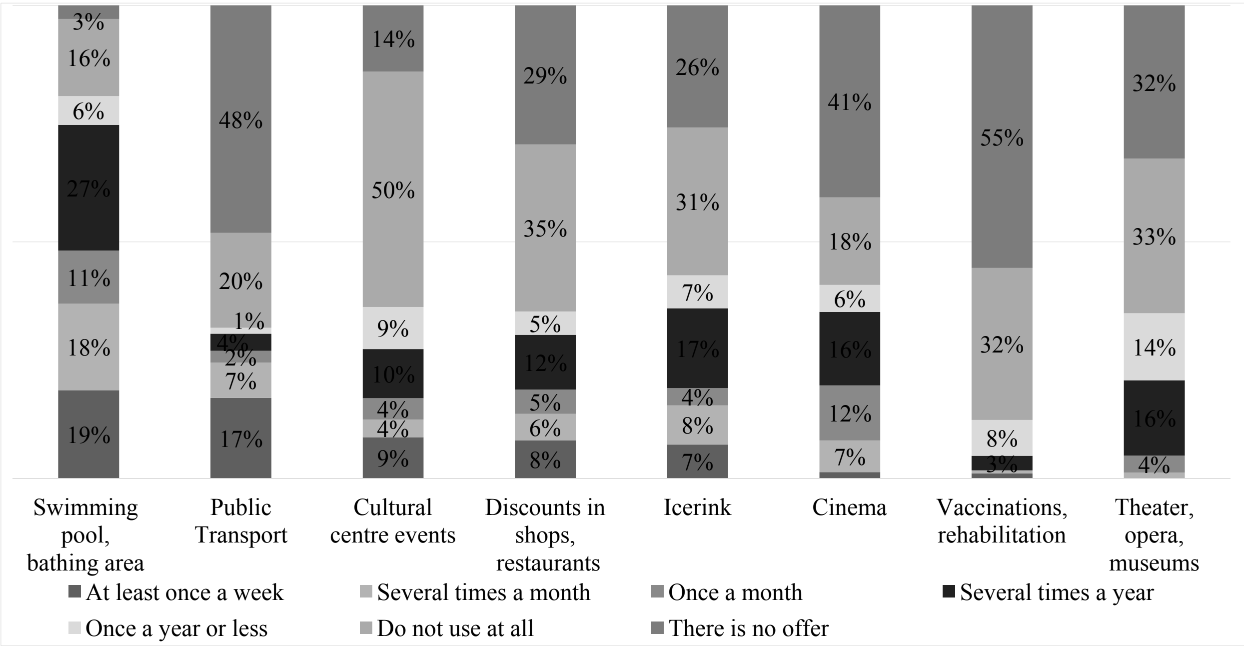


Figure 4. The frequency of using the offer.[2]

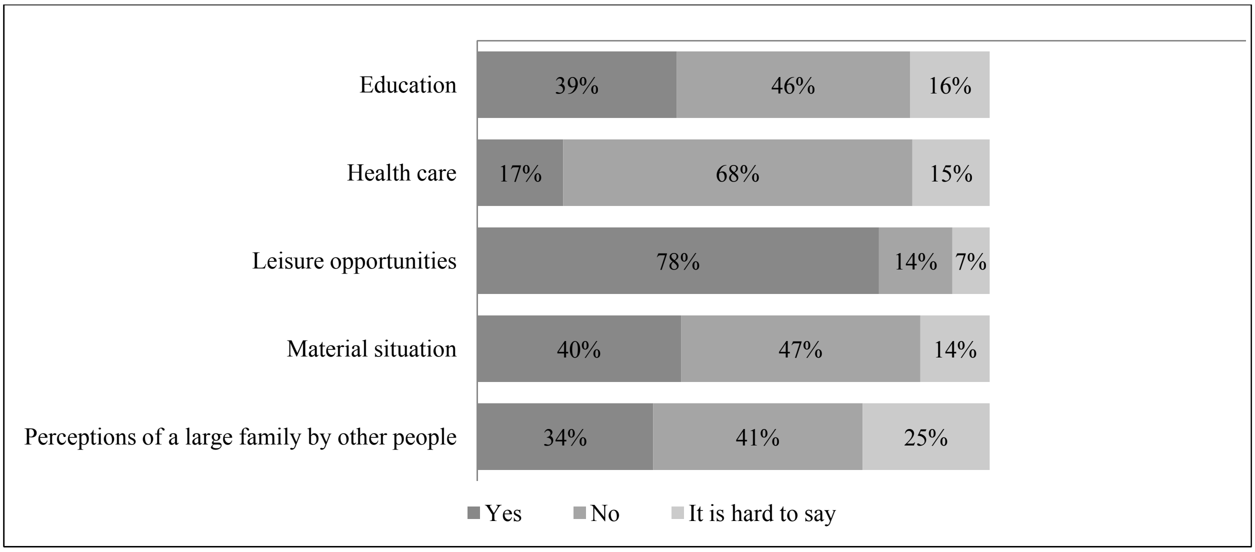
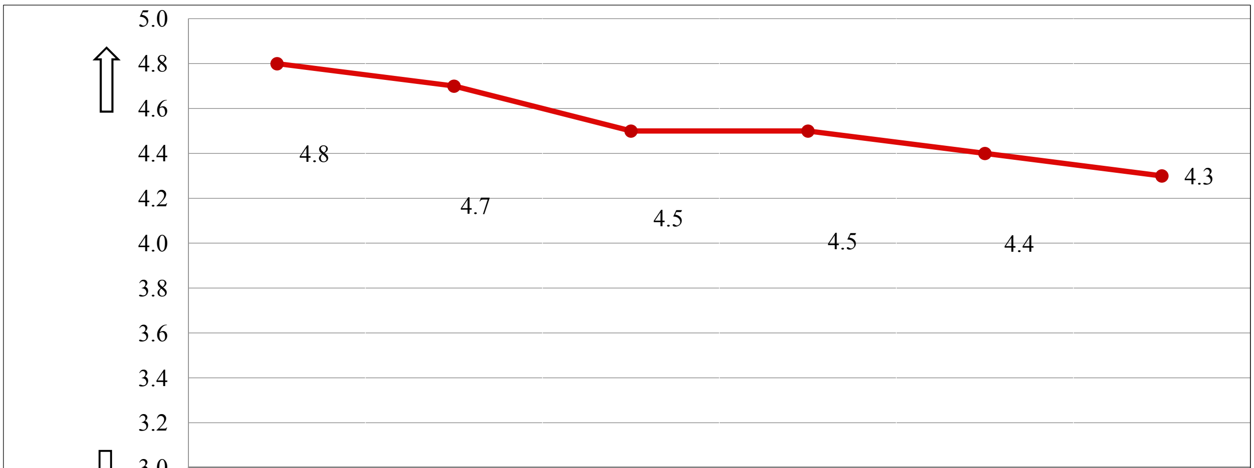


Figure 5. Chances and possibilities of the areas families have improved.

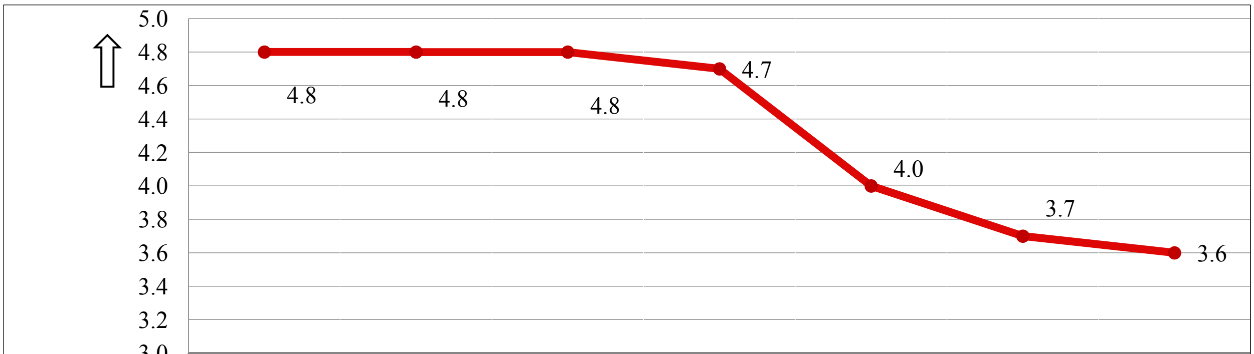
[2] Q: Which and how often do you and your family use offers within the program (if the offer is available)?

The respondents are interested in almost every new offer of the program. All possible directions of its development have been rated very highly (Figure 6, 7), although it can also be seen that there are some areas of less interest to large families.



	Sport and recreation	Discount in stores	Discount for public transport	Culture	Free/reduced tuition for children	Vaccinations, preventive examinations
Average	4.8	4.7	4.5	4.5	4.4	4.3

Figure 6. Willingness to use new offers (1).



	Discounts on school supplies and books	Lower fee for rent, utilities, etc.	Subsidies for camps, colonies for children	Discount/free access to extra curricular activities for children	Childcare services preference in admission and discounts in fees for nursery and kindergarten	Discount at beauty supply stores, caring services	Family support: counseling, training in family issues
Average	4.8	4.8	4.8	4.7	4.0	3.7	3.6

Figure 7. Willingness to use new offers (2).[3]

Respondents declared their willingness to use most of the potential offers and services that might be found in the new program offer. The most desirable ones are those that provide a better quality of life for their children and help with everyday expenses, such as payment for rent and utilities. Equally popular, and also the most popular so far, are cultural and sports offers.

[3] Q: How willingly would your family benefit from these offers/services if they were available in the program (on a scale of 1 to 5)?

Large families are not especially interested in helping themselves through the greater availability of childcare facilities, family counseling, and discounts on luxury items, such as beauty salons, jewelers, etc.. In families with many children in Poland, very often one of the parents (the mother) stops working to take care of the offspring and home. Such families are also quite often assisted by grandparents. Thus, the offer in the form of institutional care for children is not of interest to parents. In turn, psychological and family counseling, available for free for large families, are associated with the solution to dysfunctional families and focus on solving selected problems (e.g., alcoholism). Well-functioning families do not want to be associated with this type of families, and therefore do not benefit from such assistance and are not interested in it. The lack of interest in luxury goods is undoubtedly related to the lack of financial means of large families and the rational use of their resources.

Conclusions

Although the large family card is (or should be) only an addition to the whole package of support for families with many children, it is perceived very positively by these families. This assessment seems somewhat exaggerated after examination of the offer and its actual use by families. Apart from its positive impact on the diversification of sports and recreation activities, it does not basically play any role in supporting the condition of the family. Neither healthcare nor the educational aspect is attractive enough to interest the family. The basic reason for the low quality of programs is primarily the lack of proper communication and knowledge about the real problems affecting large families. In fact, statements (there is a lack of communication between program coordinators and recipients. Our expectations and needs are examined in a poor way, or no one asks us whether we are satisfied or not. There is virtually no contact between us and the office. We do not know to whom and how to convey our needs and comments) have been heard many times in FGIs.

The solution to the problem identified above, which is used in certain cities, is inclusion into the program of non-profit organizations, representing the interests of families. Thus, there is a chance to properly understand the needs and adapt the offer to the recipients. Among the 15 programs examined, just five declared any cooperation with NGOs, and only two of them were this cooperation stable and successful (these programs received the highest ratings of respondents).

Among the features that should be implemented in a good program and which should, in particular, be indicated are: good information flow between implementers and families, competent staff to operate the program to build a positive image of large families, an offer matched to children of all ages, a healthcare extension, an educational and public transport (in big cities) offer, an offer by private companies intentionally selected and negotiated, appropriate promotion of the program.

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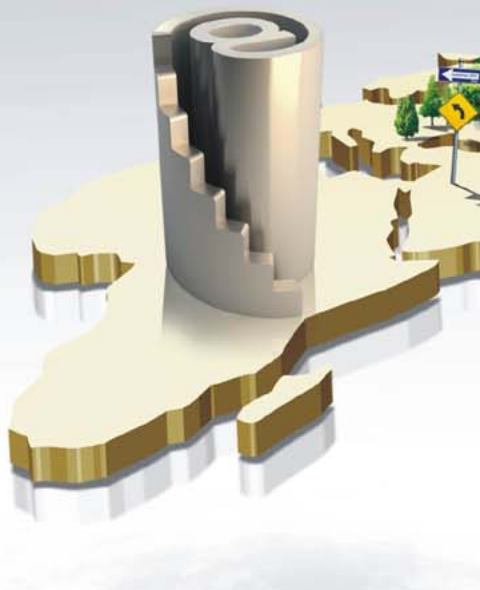

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