

INNOVATIONS IN ORGANIZATIONAL STRATEGIES

Edited by

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From the Editors

Innovations play important roles in organizational strategies, both in the public and private sector, and have enjoyed well-deserved popularity among academic researchers in recent years. The 4th issue of JEMI in 2016 documents insights into these diverse approaches to innovations, with its intended focus on novel theoretical perspectives and previously undocumented empirical endeavors. The articles included in this issue also offer extensive literature reviews, which are complemented respectively by quantitative or qualitative research methods.

The first article concerns the role of affiliations to corporate groups in the pursuit of organizational strategies. The authors ask a research question: whether firms that are members of corporate groups are more resilient during economic crises, using the empirical evidence of manufacturing companies in Poland. They have carried out an extensive opinion survey among representatives of over 700 companies, confirming the higher resilience of firms affiliated with local or international corporate groups than stand-alone players.

Another article relates to corporate strategies and, based on quantitative methodology, focuses on the perceptions of export barriers by European SMEs. Using a large, representative sample of 7515 companies from EU member states, the research investigates specific differences in the internationalization process, with a particular focus on the perception of external and internal export barriers. External barriers include conditions in home and host countries, encompassing factors typical for a given industry, as well as political, economic, socio-cultural and technological circumstances. Internal barriers to export activities are firm-specific and relate to resource constraints, strategic intents or managerial decision-making processes. The research helps differentiate between types of SMEs depending on their approaches to internationalization, and outlines gradual shifts in the importance of specific barriers depending on the length of experience in international markets.

The third article presents the characteristics of spin-offs in the process of collaboration with customers and suppliers. In-depth case studies of seven corporate spin-off companies in advanced technology markets shed new light

on the peculiarity of these practices, and inform us about the processes of involving external stakeholders in the development of products and services.

The following paper discusses the experiences of agricultural entrepreneurs in Taiwan, using semi-structured qualitative interviews with 10 expert agri-entrepreneurs. The article presents the views of industry participants on market development tendencies, the intensity of competition in the industry and the role of sustainable development.

The fifth article discusses innovations in public sector organizations, using the example of an unnamed authority in the Australian Capital Territory and applying the concept of New Public Management. The authors rely on the analytical framework supplied by Giddens' theory of structuration and argue for the rationale of government organizations adopting the New Public Management practices as a way of strengthening organizational performance and improving managerial practices.

The final article in this issue of JEMI explores the gender dimension in micro, small and medium-sized enterprises (MSMEs) in the South Indian state of Kerala. Companies founded by women entrepreneurs are found to display unique characteristics, based on economic data collected between the years of 2007 and 2014. The findings can encourage policy makers to further promote female entrepreneurship as a method of ensuring inclusive, sustainable economic development.

We hope the readers of JEMI will explore the diversity of views and theoretical approaches, supported by rigorous empirical studies, which are presented in this current issue of the Journal. These articles could contribute to the development of novel perspectives on Innovations in Organizational Strategies, both in private and public sector organizations.

We would like to thank the authors for their important scientific contributions included in this volume. We are indebted to the distinguished reviewers for their invaluable inputs, constructive feedback, and their suggestions for improvements and detailed comments. These encouraged the authors to further improve their papers and stimulated the research excellence of this joint endeavor. We are certain that the readers of this issue of JEMI will find inspiration for their own research and will appreciate the original insights presented by the authors.

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Are Firms in Corporate Groups More Resilient During an Economic Crisis? Evidence from the Manufacturing Sector in Poland

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Abstract

Corporate groups are specific types of business networks that generate particular advantages for firms. They allow corporates to reduce costs, develop the pool of resources and increase the flexibility of operations and responses to external shocks among others. The above mentioned benefits are of even greater importance during times of economic turbulence. Their involvement in a corporate group should theoretically allow firms to perform better. The aim of this study is to verify whether corporate group membership truly translated into a firm's higher input competitiveness and a firm's better performance during the recent economic crisis. First, we try to investigate if the input competitiveness is higher in the case of firms being members of corporate groups. Second, we test whether the involvement in a corporate group matters for the performance of the firms. Using critical in-depth literature studies and conducting the primary empirical research using the CATI (computer-assisted telephone interviewing) method we strive to verify the following hypothesis - the higher a company's input competitiveness during the economic crisis, the better a competitive position the company achieves. The empirical research encompasses more than 700 corporates from the manufacturing sector in Poland during the global economic crisis

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and shortly afterwards. To investigate the issue we use the following methods of statistical analysis – cluster analysis, non-parametric tests and correlation coefficients. The results of the study show that firms involved in both Polish and international corporate groups were more resilient during the economic crisis than those which were not.

Keywords: corporate groups, economic crisis, performance, networking.

INTRODUCTION

An economic crisis in the simplest terms is a sharp drop in the economic activity that manifests itself through decreasing GDP, increasing unemployment, decreasing investment activity, turbulent financial markets and increasing factor costs. Gourinchas and Kose (2011) pointed to the fact that the financial crisis that started in 2008 led to the deepest and most synchronized global recession over the past 70 years. According to World Development Forum, the GDP growth in Poland achieved a level of 2.63% in 2009 compared to -4.39% for the European Union (World Development Indicators, 2015). This ability to cope with the economic crisis gave Poland the name “Green Island”. In the next few years the GDP growth in Poland was even higher reaching the level of 5.01% in 2011 and 1.3% in 2013, respectively. The comparatively strong results of the Polish economy reflect the relatively high immunity of Polish firms to economic crisis turbulence. Still, the manufacturing companies that accounted for around 10% of the registered entities in Poland in 2009 and 2011 dropped to little more than 9% in 2013. They employed about 27% of the workforce in the period 2009-2013. The industry value added amounted to PLN 240 billion in 2009 and almost PLN 270 billion in 2011 and 2013. Many of the companies present in the industry were the firms affiliated within corporate groups.

A corporate group “(...) is composed of corporates that are independent in legal terms, but rely on each other economically due to the control and/or ownership links between them. Within a group, some links between a dominant entity (parent) and its subsidiaries are distinguished” (CSOP, 2015, p. 18). The Central Statistical Office in Poland (CSOP) uses the term *enterprise group* instead of *corporate group* but in literature they are used interchangeably. According to the survey conducted annually by CSOP, there are more than 2000 corporate groups registered in Poland. Most of them operate in manufacturing industries and trade and repair of motor vehicles. Throughout 2009-2013 these two areas of economic activities accounted for about 46% of people employed in corporate groups. To be more specific corporate groups can be further divided into: “(1) *all-resident corporate group* composed only of corporates (both group head and subsidiaries) that are all

resident in the same country; (2) *multinational corporate group* composed of at least two corporates located in different countries; (3) *truncated corporate group* as a part of a multinational group, located in the same country” (CSOP, 2015).

All-resident groups constituted about 50% of all registered groups in 2009, in 2010 the share of all-resident groups in the number of all registered groups dropped to 41%, in 2011 to 36%, in 2012 and 2013 to 31%. Overall, the statistics on the corporate groups have not changed much through the analyzed period 2009-2013. They account for 0.6% of all the non-financial firms registered in Poland but employ about 28% of all employees and generate more than 50% of the sales income. The corporate groups that operate internationally (foreign controlled truncated corporate groups) mostly had their headquarters located in EU Member States. Throughout 2009-2013 Germany was the number one location, followed by the Netherlands (2009-2011) and most recently Cyprus (2014). Outside the EU zone the United States was the main global group headquarters (CSOP, 2010, 2011, 2012, 2013, 2014, 2015). Most of the corporate groups (in the manufacturing sector) employ between 50 and 249 people (153 groups) or more than 1000 people (122 groups). In total that accounts for almost 500,000 employees. Their total assets come to PLN 202.85 billion with 58% in fixed assets and the remaining 42% in current assets.

Bearing in mind the significant position of corporate groups in Poland during the economic crisis and shortly afterwards, our aim is to verify whether members of corporate groups in Poland performed better than companies outside such groups. Using the CATI method, we conducted a survey of 695 manufacturing companies to gather information on their performance during the period 2009-2013. Afterwards, the information was supplemented by relevant financial data extracted from the Amadeus database. Detailed information on the indicators used is provided in later sections.

We start our paper by outlining the conceptual background behind corporate groups, how they are perceived as a specific type of business network, and how they use their resources and capabilities as sources of competitive advantage. We then use existing literature to formulate hypotheses related to the interdependencies between corporate group affiliation and sources of competitive advantage and separately between corporate group affiliation and their performance. Subsequently, we present the methodology and the findings of the analysis with the use of descriptive statistics, non-parametric analysis of variance and correlation coefficients. In the final part of the paper, we discuss the findings and highlight the implications and limitations of our research.

CONCEPTUAL BACKGROUND AND HYPOTHESES DEVELOPMENT

Corporate group affiliated firms' sources of advantages

The emergence of corporate groups has played a significant role in the globalization process, and currently these groups play a vital role in the transformation of both Eastern European and Asian countries. A corporate group, known also as an enterprise group (CSOP, 2015) or a business group (Carney, 2011), consists of independent economic entities that are bound together through capital, transactional and personal ties (Romanowska, 2011). The concept of corporate groups differs across nations. In Poland, as mentioned before, the definition was formulated by the CSOP (2015). Though a significant growth in the number of corporate groups can be mainly observed in the developing countries, they are also of great significance in the developed ones. A quick look at the trade flows reveals that 75% of US trade is directly linked to corporate groups and similarly 65% of French international trade is carried out by domestic or foreign-owned corporate groups (Altomonte & Rungi, 2013). Thus, the importance of such groups should not be underestimated.

Corporate groups come into existence through mergers and acquisitions, capital outsourcing, direct investments and consolidation (Trocki, 2004). They can be viewed as a neo-institution that emerges from the network of firms – filling the institutional voids (e.g., Li & Kozikode, 2008).

Corporate groups are said to be set between markets and hierarchies (Williamson, 1975, 1985). These co-dependent entities create structures that vary both in terms of organization and management. Corporate groups created through capital outsourcing (that is extracted from an already existing firm that belongs to the group) tend to be homogenous throughout. Control does not have to be exerted in excess as strong ties exist between the old and new firms in the group. Much more control is needed in the case of groups that come into existence by mergers and acquisitions (Trocki, 2004). As firms vary in cultural, organizational, social and sometimes even ethical ways, a common ground (i.e. common rules of conduct) needs to be established to create a networking platform for the companies within the group.

The degree to which control and management centralization are exerted depends upon the goals of the corporate group in question. Most of them seem intent on displaying excessive coordination of both managerial and operational activities (Romanowska, 2011). This seems to be due to the processes affecting the groups worldwide – the pursuit of internationalization and diversification.

Although it is hard to find agreement on a universal definition of a corporate group, the one that emphasizes the aspect of legally independent firms with common management prevails (e.g., Colpan & Hikino, 2010). In other words, a corporate group is a group of inter-related jointly controlled firms, consisting of a parent firm and a number of subsidiaries that can be linked to sub-subsidiaries and other equity associate firms. They are independent entities but they are characterized by coordinated activities through different ties. These ties arise from interactions that are a feature of business networks which, according to Todeva, (2006) encompass not only actors and activities but different resources as well. Thus, a firm fully embedded in the network of corporate group, may hold an advantage over a stand-alone company functioning in the market. This advantage may result from capital availability, know-how and experience sharing, synergy effects, etc. At the same time, it can be argued that control costs, shareholders' individual goals and structural complexity may diminish this predominance.

The concept of a business network is based on the concept of a network in general terms – it is a structure that is formed by nodes tied to each other by particular threads. The nodes in a network are e.g. firms or other organizations and the threads are particular relationships between the actors. Ford, Gadde, Hakansson and Snehota (2011, p.182) stated that the nodes and threads are equipped with tangible and intangible resources. According to Todeva (2006, p. 15) a business network (an industrial network) is a set “of repetitive transactions based on structural and relational formations with dynamic boundaries comprising interconnected elements (actors, resources and activities). Networks accommodate the contradictory and complementary aims pursued by each member, and facilitate joint activities and repetitive exchanges that have specific directionality and flow of information, commodities, heterogeneous resources, individual affection, commitment and trust between the network members”. Networks developed by a group of firms often help to promote the operations of each group member and these members can stay financially independent, while at the same time enjoying access to the resources of other members thanks to the inter-firm relationships (Gulati, 1995).

The definition of a network presented by Ford (et al., 2011, p. 182) and in particular the fact that the nodes and threads are equipped with tangible and intangible resources is useful when explaining the possible interdependencies between being a group affiliated firm and being relatively better equipped with resources and capabilities. According to the resource based view (RBV), corporate groups as specific business networks are a type of business organizations that are bundles of idiosyncratic resources and resource conversion activities (Rumelt, 1984). Wernerfelt (1984, p. 172)

described the resources of a company as anything that can be perceived as a strong or weak side of the organization, and classified them as material resources and assets, which include among others the brand, technological know-how, capabilities, commercial contracts, machines, processes, capital, etc. Corporate group affiliated companies join their strengths and weaknesses within their resources and capabilities. It has been argued by many researchers that interfirm ties contribute to the development and exploitation of competitive resources (e.g., Almeida & Kogut, 1999; Dyer & Singh, 1998; Eisenhardt & Schoonhoven, 1996; Foss & Eriksen, 1995; Gulati, 1999; Gulati, Nohria & Zaheer, 2000; Lavie, 2006; McEvily & Marcus, 2005; Shan & Kogut, 1994; Sorensen & Reve, 1998; Uzzi, 1997).

The tangible and intangible resources embedded in the nodes and threads of a network, to some extent, arise from the resources and capabilities of networked firms and simultaneously can increase the sources of competitive advantage of single firms. The interfirm ties provide the corporate group affiliated firms with access to the information, knowledge, resources and markets, and lead to a faster diffusion of knowledge. The pooling of top managerial resources within a corporate group promotes innovation and positively influences the entrepreneurial capacity required per unit of innovative decision-making (Leff, 1978; Belenzon & Berkovitz, 2010). The set of group-specific assets that can increase the resources and capabilities of group affiliated firms is the corporate group reputation among others (Duysters, Jacob, Lemmens & Jintianal, 2009). Balcet and Bruschi (2008) point to the intra-group technology transfer and information flow and the group financial strength that contributes to the group affiliated firm's competitive advantage. Hence, we argue, that:

H1: A corporate group affiliated firm has better resources and capabilities than a non-group affiliated firm.

Corporate group affiliated firms' performance

New institutional economics constitutes the basic conceptual framework on which research on corporate group performance is based. Particular theories include agency theory and transaction cost approach as well as RBV and institutional theory. However, the different theoretical approaches do not always correspond with one another in regards to corporate group affiliation and firm performance. Based mostly on transaction cost approach and institutional theory researchers found that corporate group affiliation enhances the financial performance since it allows for internalization and hence, transaction costs minimization. It is claimed that, especially in

the context of developing economies, corporate groups fill in the void of poor-quality legal and regulatory institutions, limited property rights and corruption (Granovetter, 2005) in order to substitute the inefficient market with an efficient internal structure (Estrin, Poukliakova & Shapiro, 2009). On the other hand, agency theory highlights the multi-layered coordination issues that corporate groups undeniably suffer (Morck, Wolfenzon & Yeung, 2005) and that in the end may significantly impair the groups' as well as affiliates' effectiveness.

Findings of empirical research are inconclusive with regard to affiliate's performance. Khanna and Rivkin (1999) sampled 13 developing economies to see whether group affiliation has an effect on a firm's financial performance. The results found both evidence for and against the effect. Khanna and Rivkin (1999) applied econometric analysis for financial data of: Argentina, Brazil, Chile, India, Indonesia, Israel, Mexico, Peru, the Philippines, South Korea, Taiwan, Thailand and Turkey. The hypothesis proved to be right for the developed countries and for most of the developing ones (except for Mexico and Peru). Keister (1998) posed a similar question when looking at the transformation process in China. The research focused on the 1980s and proved that corporate group affiliation boosted the member's financial performance. Some scholars (e.g. Bertrand, Mehta & Mullainathan, 2002; Khanna & Yafeh, 2005) claim that the positive effect exists although it can happen at the expense of others. In case any affiliated firms face troubles in terms of their performance, other affiliated firms operate under strong pressure to bail them out. The nature of corporate groups manifests itself through sizeable flows of goods among affiliated firms and it can happen that the firms are made to purchase them from other group affiliated firms, irrespective of the quality of the goods. Performance of group affiliated firms may also be affected by different institutional context and overall economic conditions.

In Poland, manufacturing corporate groups generate around PLN 234.3 billion revenue and reach net revenue of around PLN 8.68 billion (CSOP, 2015). Their return on assets is 4.3% which is 6th place in terms of sectoral breakdown after: mining and quarrying, education, arts, entertainment and recreation, other service and electricity, gas, steam and air conditioning supply. In 2013, the return on investment was around 7.7% and return on sales 12.3%. Although the overall number of affiliated firms is relatively small, they generate 44% of the manufacturing gross profit and almost 70% of the operations revenue. Comparing the gross profit rate for entities affiliated in the corporate groups with the overall manufacturing sector, we can notice that in 2009 and 2010 they achieved about 0.2% higher rate. Similarly, they performed better in the period 2011-2013 and on average achieved about

0.1% higher rate. Thus, bearing in mind the data of the Central Statistical Office in Poland on the financial performance of manufacturing corporate groups, we will attempt to verify the second hypothesis:

H2: A corporate group affiliated firm has better performance throughout a period of economic crisis and shortly after than the non-group affiliated firm.

A similar hypothesis has been posed in the pre-crisis research of George and Kabir (2012). However, the researchers do not focus on the perception of the resources and capabilities but on the portfolio diversification. They assume that portfolio diversification has a positive effect on a company's resources and capabilities and afterwards prove that group-affiliated firms performed better. Our aim is to verify such dependency in a different geographical and institutional context and to see how the overall economic situation affects the results. By doing so, we seek to observe links among resource and capabilities' perception, group affiliation and performance in Poland.

RESEARCH DESIGN

Sample and timeframe

Our empirical research aims to address the question of performance of group affiliated firms against non-group affiliated firms taking into account two restrictions. Firstly, we limit the analysis to one country only, in order to eliminate the distortion caused by institutional differences in each country. Secondly, we restrict the study to manufacturing industries only. We address the question of which firms are more immune to the economic crisis – group affiliates or the non-group affiliates. In doing so, we raise the question of whether the performance-affiliation effect exists and if it depends on the economic situation.

The study is partially based on data from the AMADEUS database and primary data from interviews with top managers of 695 manufacturing firms located in Poland and operating in 7 industries defined according to NACE Rev. 2 at the level of divisions (see Table 1). The sample was determined by a prior analysis with the use of linear ordering of objects and the results of this analysis are broadly presented in another paper (e.g., Dzikowska, Gorynia & Jankowska, 2015). It is useful to underline that the aim of the delimitation was to identify industries in which firms did relatively well during the economic crisis (division 10, 17, 25, 32) in Poland and those that

had difficulties with returning to pre-crisis performance (division 14, 15, 24). Subsequently, a ranking of industries was developed. The industries included in our study encompass 44% of firms registered in Poland and operating in the manufacturing sector.

First, the authors used the data presented in the Amadeus database. Only firms with complete contact and financial records were taken into consideration. It turned out that in this proprietary electronic database there are 2533 firms with complete records representing the 7 selected industries⁵. Then, thereof, 750 firms were randomly contacted in July and August 2015 resulting in an effective response rate of 93%. In the study we wanted to investigate the implications of corporate group affiliation, during the crisis period and shortly after, for the sources of competitive advantage and performance of group affiliated firms. Thus we took into consideration only those entities that, within the whole period of time, were members of the same type of corporate group. In our study we distinguished between a Polish and an international corporate group. We contrasted the data for these entities with the data for firms that, within the whole period of time, stayed out of any corporate group. Since few companies migrated between the two distinguished types of corporate groups, we eventually had 695 entities included in the research sample.

Among those 695 companies, there are 43 micro, 220 small, 284 medium entities and 148 large entities. To characterize the size of the firms we used the number of employees in the crisis year 2009. The majority of corporate group affiliated firms represent division 10 (319 entities) and division 25 (226 entities) which are industries that coped relatively well with the crisis. 317 firms were not affiliated within any corporate group, 202 firms had affiliation within a Polish corporate group and 176 operated within an international corporate group.

The timeframe for the study embraces the period 2009-2013. The timeframe of five years was intentionally assumed. The first symptoms of the global economic crisis in Poland were visible in the second half of 2008; hence the year 2009 was defined as the period of the crisis. The growth of GDP in 2009 was 2.3%, down from 5.13% in 2008. In 2010, GDP growth recovered to the level of 3.88% (World Development Indicators, 2015). We assume that after 2009 we have the so called post-crisis period when the positive and negative consequences of the economic crisis emerged.

⁵ That is the number of entities in the database without records related to firms that participated in the pilot study that was conducted by the authors in 2014.

Table 1. Sectoral structure of the sample – number of firms from particular divisions and their involvement in corporate groups [N=695]

| Division | Description of activity | FNG | FPG | FIG | Total number |
|-------------|--|-----|-----|-----|--------------|
| Division 10 | manufacture of food products | 159 | 92 | 68 | 319 |
| Division 25 | manufacture of fabricated metal products, except machinery and equipment | 90 | 72 | 64 | 226 |
| Division 17 | manufacture of paper and paper products | 25 | 9 | 23 | 57 |
| Division 24 | manufacture of basic metals | 15 | 13 | 5 | 33 |
| Division 32 | manufacture of other manufacturing | 12 | 7 | 7 | 26 |
| Division 14 | manufacture of wearing apparel | 12 | 5 | 8 | 25 |
| Division 15 | manufacture of leather and related products | 4 | 4 | 1 | 9 |

FNG – non-group affiliated firm, FPG – a Polish group-affiliated firm, FIG – an international group-affiliated firm.

Methods, variables and operationalization

Firstly, we divided the whole sample into three groups of distinctive entities: (1) not operating in any corporate group (FNG), (2) firms participating in Polish corporate groups (FPG) and (3) entities performing within international corporate groups (FIG). The division was necessary to verify the interdependencies between group affiliation and sources of competitive advantage and to identify the potential implications for the firm's performance at the time of the economic crisis and in the post crisis period. For the purpose of our study we defined the Polish corporate group as a group where the parent company was located in Poland and an international group as a group where the parent company is of foreign origin.

The variables used in the study are described in Table 2. We looked for possible differences in the firm's perception of sources of competitive advantage. To characterize the construct – the sources of competitive advantage within the three defined groups of entities - we used variables explained in Table 2. Using Cronbach's alfa we checked if the broad set of variables measures the construct of the source of competitive advantage in a reliable way. Last, but not least, we conducted the Kruskal-Wallis non-parametric analysis of variance for the variables of resources and capabilities. To evaluate the firm's performance we used two types of variables – objective and subjective ones. To check if the set of variables was internally consistent, reliable and all variables measure the same construct, we calculated Cronbach's alfa (see Table 2). Then, we tried to verify if there are any statistically significant differences among the firms operating outside

corporate groups (FNG) and operating within corporate groups, with the distinction between Polish (FPG) and international corporate groups (FIG). For that purpose we used Kruskal-Wallis non-parametric analysis of variance since, to evaluate the variables, we used the ordinal scale and there were more than three different groups of entities (FNG, FPG and FIG).

Table 2. Operationalisation of variables

| Variable | Operationalisation | Internal consistency |
|---|--|--|
| Sources of competitive advantage in the crisis period (2009) | 13 indicators on a 7-point Likert scale, where “-3” stands for “ <i>much worse than direct competitors</i> ”, and “3” stands for “ <i>much better than direct competitors</i> ”. The set of indicators included resources and capabilities. | |
| Resources | Material resources, human resources, intangible resources (knowledge, brand, patents, etc.), financial resources. | |
| Capabilities | Logistics (<i>performance and efficiency</i>), production (<i>performance and efficiency</i>), marketing and sales (<i>effectiveness and efficiency</i>), service (<i>effectiveness and efficiency</i>), supplies (<i>performance and efficiency</i>), technology (<i>advancement and efficiency</i>), management of human resources (<i>efficiency and performance</i>), firm management systems (<i>efficiency and effectiveness</i>), quality control (<i>efficiency</i>) | Cronbach’s Alpha (2009)=0.979 |
| Performance in the crisis (2009) and post-crisis period(2011-the time of prosperity, 2013) | | |
| Subjective measures | 5 variables (<i>profitability, sales growth, market share, overall financial condition, customer satisfaction</i>) | Cronbach’s Alpha (2009)=0.958,(2011)=0.947(2013)=0.948 |
| Objective measures | 4 variables related to the financial position of a firm: <i>the profit margin (EBIT/revenues), sales growth (based on company revenues - year to year), return on equity</i> | |

Common method bias is possible as our data are to a large extent based on perceptual measures from single respondents of each firm. To decrease the risk of common method bias that could artificially inflate the observed relationships between variables (Campbell and Fiske, 1959), respondents were not aware of the hypothesised relationships shown in the study. Additionally, we included data, such as profit margin (EBIT/revenues), sales growth (based on company revenues year to year) and return on equity, based on secondary information from AMADEUS.

ANALYSIS AND RESULTS

Sources of competitive advantage in the period of the economic crisis –corporate group affiliates against the non-group firms

We tried to investigate whether the enhanced resources and capabilities of firms operating within the corporate groups, as detailed in the literature, could explain their better performance in the crisis and post-crisis periods. At first we analyzed the sources of competitive advantage of the firms representing the three distinct groups in 2009. Then we verified whether some additional company characteristics (e.g. company size) affected the study. As no evidence was found, we have included these characteristics in the research. A closer look at the resources and capabilities of FNG, FPG and FIG allows us to state that the highest mean values were reported among FIG (Table 4). Firms affiliated within international corporate groups perceived their resources and capabilities in the crisis year 2009 better than the affiliates of Polish corporate groups and the rest of the entities. In order to verify whether the differences in the resources and capabilities of FNG, FPG and FIG are statistically significant, we used the non-parametric analysis of variance. The results presented in Table 3 include critical values and significance levels in relation to the sources of competitive advantage, where clear differences were observed in the distribution of the answers related to the evaluation of its particular elements. The obtained significance levels (p-values) for the differences in resources and capabilities of firms from the three defined types of corporate groups were lower than 0.05, thus they are statistically significant. It justifies the hypothesis that firms operating within corporate groups are better equipped to cope with unfavourable external circumstances.

Performance in the period of the economic crisis and shortly after – corporate group affiliates against the non-group affiliates

Performance of the firms was evaluated with the use of two types of variables; objective measures based on financial data retrieved from the electronic Amadeus database - profit margin (EBIT/revenues), sales growth (based on company revenues - year to year), return on equity) and; subjective measures which present the perception of profitability, sales growth, market share, overall financial condition, and customer satisfaction [as perceived by the managers who represented these companies] (see Table 2). Analysing the descriptive statistics for the objective measure we notice that the highest mean values in the crisis year 2009 are characteristic of FPG with one exception - return on equity is highest for FIG and FNG (Table 3).

Table 3. Resources and capabilities in 2009 – perspective of FNG, FPG, FIG - descriptive statistics and non-parametric analysis of variance

| Sources of competitive advantage | Type of corporate group if any | MEAN ^a | SD ^a | Kruskal-Wallis test | Level of significance |
|---|--------------------------------|-------------------|-----------------|---------------------|-----------------------|
| Material resources (available machines. Assets and infrastructure) | FNG | 0.45 | 0.92 | H=43.277 | p =0.000 |
| | FPG | 0.54 | 1.00 | | |
| | FIG | 1.13 | 1.17 | | |
| Human resources | FNG | 0.49 | 0.82 | H=47.7891 | p =0.000 |
| | FPG | 0.58 | 0.94 | | |
| | FIG | 1.16 | 1.12 | | |
| Intangible resources (knowledge. brand. patents. etc.) | FNG | 0.50 | 0.90 | H=44.352 | p =0.000 |
| | FPG | 0.54 | 1.00 | | |
| | FIG | 1.16 | 1.14 | | |
| Financial Resources | FNG | 0.40 | 0.96 | H=44.903 | p =0.000 |
| | FPG | 0.49 | 1.06 | | |
| | FIG | 1.13 | 1.17 | | |
| Logistics (efficiency and effectiveness) | FNG | 0.49 | 0.76 | H=61.519 | p =0.000 |
| | FPG | 0.59 | 0.91 | | |
| | FIG | 1.18 | 1.03 | | |
| Production (efficiency and effectiveness) | FNG | 0.79 | 0.95 | H=25.758 | p =0.000 |
| | FPG | 0.79 | 1.05 | | |
| | FIG | 1.26 | 1.29 | | |
| Marketing and sales(effectiveness and efficiency) | FNG | 0.47 | 1.23 | H=25.025 | p =0.000 |
| | FPG | 0.50 | 1.38 | | |
| | FIG | 1.04 | 1.67 | | |
| Service (efficiency and effectiveness) | FNG | 0.32 | 1.10 | H=24.022 | p =0.000 |
| | FPG | 0.32 | 1.29 | | |
| | FIG | 0.92 | 1.59 | | |
| Supply (efficiency and effectiveness) | FNG | 0.80 | 0.93 | H=25.984 | p =0.000 |
| | FPG | 0.77 | 1.03 | | |
| | FIG | 1.25 | 1.29 | | |
| Technology (advancement and performance) | FNG | 0.45 | 0.91 | H=43.194 | p =0.000 |
| | FPG | 0.53 | 1.02 | | |
| | FIG | 1.14 | 1.16 | | |
| HR management (efficiency and effectiveness) | FNG | 0.49 | 0.82 | H=55.732 | p =0.000 |
| | FPG | 0.60 | 0.96 | | |
| | FIG | 1.22 | 1.13 | | |
| Company management systems(efficiency and effectiveness) | FNG | 0.50 | 1.21 | H=24.362 | p =0.000 |
| | FPG | 0.48 | 1.35 | | |
| | FIG | 1.03 | 1.66 | | |
| Quality control (efficiency) | FNG | 0.32 | 1.09 | H=21.079 | p =0.000 |
| | FPG | 0.29 | 1.25 | | |
| | FIG | 0.87 | 1.60 | | |

^a Mean and SD of resources and competences.

In 2011, a period associated with economic prosperity in Poland, the top position belonged to FIG, despite sales growth being better in the case of FPG. Two years later in 2013, the sales growth of firms was the highest in the case of FIG, but profit margin and return on equity was better for FPG. The evaluation of performance with the use of these measures didn't provide a conclusive picture.

Table 4. Objective performance indicators in 2009, 2011 and 2013 - perspective of FNG, FPG, FIG - descriptive statistics

| Objective performance indicators | Type of corporate group if any | 2009 | | 2011 | | 2013 | |
|----------------------------------|--------------------------------|-------|-------|-------|------|-------|-------|
| | | MEAN | SD | MEAN | SD | MEAN | SD |
| Sales growth | FNG | 0.83 | 11.03 | 0.14 | 0.28 | -0.01 | 0.24 |
| | FPG | 2.31 | 27.79 | 0.75 | 7.50 | 0.05 | 0.69 |
| | FIG | 0.81 | 8.01 | 0.22 | 0.33 | 0.06 | 0.23 |
| Profit margin | FNG | -0.01 | 0.74 | -0.20 | 3.37 | -0.07 | 2.20 |
| | FPG | 0.09 | 1.18 | 0.00 | 0.23 | 0.11 | 1.20 |
| | FIG | 0.04 | 0.11 | 0.05 | 0.08 | 0.03 | 0.31 |
| Return on equity | FNG | 0.16 | 0.80 | 0.10 | 1.04 | -0.53 | 11.79 |
| | FPG | 0.15 | 1.08 | 0.06 | 0.81 | 0.27 | 1.93 |
| | FIG | 0.16 | 1.39 | 0.13 | 1.21 | 0.21 | 0.37 |

The subjective measures bring a more clear and unambiguous picture. FIGs perceived their performance as better than FNG and FPG in 2009 and in the post-crisis time in Poland (Table 5). FNG evaluated the subjective measures of performance as better in the crisis year than FPG with one exception – client satisfaction. The post-crisis time brought the relatively best position of FIG and then FPG. However, bearing in mind the scale used to evaluate the performance (see Table 2) we have to state that the evaluation is quite low since the mean values for resources and capabilities in 2011 and 2013 oscillate between 0.45 and 1.42. However, the worst results are a characteristic of the time of the economic crisis, and reveal an awareness within the firms that they did not operate very well in this period but that they were better than their competitors. Looking at the performance measures of FIG and FPG against the FNG we can notice that the first two types of entities reported better results which can be associated with their resistance to the unfavourable external conditions.

Table 5. Subjective performance indicators in 2009, 2011 and 2013 - perspective of FNG, FPG, FIG – descriptive statistics

| Subjective performance indicators | Type of corporate group if any | 2009 | | 2011 | | 2013 | |
|-----------------------------------|--------------------------------|------|------|------|------|------|------|
| | | MEAN | SD | MEAN | SD | MEAN | SD |
| Profitability | FNG | 0.50 | 1.34 | 0.45 | 1.24 | 0.71 | 1.35 |
| | FPG | 0.38 | 1.48 | 0.53 | 1.40 | 0.69 | 1.54 |
| | FIG | 0.86 | 1.74 | 1.10 | 1.67 | 1.38 | 1.50 |
| Sales growth | FNG | 0.62 | 1.37 | 0.51 | 1.28 | 0.72 | 1.34 |
| | FPG | 0.51 | 1.49 | 0.54 | 1.38 | 0.73 | 1.52 |
| | FIG | 0.98 | 1.73 | 1.10 | 1.69 | 1.39 | 1.51 |
| Market share | FNG | 0.51 | 1.32 | 0.48 | 1.28 | 0.69 | 1.35 |
| | FPG | 0.41 | 1.49 | 0.53 | 1.40 | 0.71 | 1.56 |
| | FIG | 0.89 | 1.66 | 1.09 | 1.69 | 1.39 | 1.50 |
| Overall financial condition | FNG | 0.61 | 1.42 | 0.60 | 1.35 | 0.68 | 1.39 |
| | FPG | 0.53 | 1.48 | 0.67 | 1.41 | 0.69 | 1.55 |
| | FIG | 1.03 | 1.69 | 1.29 | 1.61 | 1.37 | 1.59 |
| Client satisfaction | FNG | 0.78 | 0.79 | 0.80 | 0.77 | 0.81 | 0.77 |
| | FPG | 0.90 | 0.88 | 0.92 | 0.87 | 0.92 | 0.87 |
| | FIG | 1.41 | 1.04 | 1.41 | 1.04 | 1.42 | 1.04 |

In order to check whether the differences in the performance of FNG, FPG and FIG, evaluated with the subjective measures, are statistically significant we used the Kruskal-Wallis test. The results are presented in Table 6. The obtained significance levels (p-values) for the differences in the performance of firms not involved in any corporate group and firms involved in Polish or international corporate groups are below 0.05 and thus are statistically significant. It justifies the hypothesis that firms operating within corporate groups were able to cope better with unfavourable external circumstances.

Table 6. Subjective performance indicators in 2009, 2011 and 2013 - perspective of FNG, FPG, FIG – non-parametric analysis of variance

| Subjective performance indicators | 2009 | | 2011 | | 2013 | |
|-----------------------------------|---------------------|-----------------------|---------------------|-----------------------|---------------------|-----------------------|
| | Kruskal-Wallis test | Level of significance | Kruskal-Wallis test | Level of significance | Kruskal-Wallis test | Level of significance |
| Profitability | H=15.385 | p = 0.001 | H=30.45400 | p = 0.000 | H=30.309 | p = 0.000 |
| Sales growth | H=14.009 | p = 0.001 | H=25.833 | p = 0.000 | H=30.862 | p = 0.000 |
| Market share | H=14.697 | p = 0.001 | H=27.141 | p = 0.000 | H=31.758 | p = 0.000 |
| Overall financial condition | H=16.476 | p = 0.000 | H=33.298 | p = 0.000 | H=31.515 | p = 0.000 |
| Client satisfaction | H=45.6326 | p = 0.000 | H=43.57174 | p = 0.000 | H=42.685 | p = 0.000 |

In hypothesis 2 we indicated that the corporate group affiliated firms enjoyed better performance than the non-affiliated firms during the economic crisis and shortly after. The hypothesized explanation for that could be resources and capabilities that form the sources of competitive advantage. To check the potential interdependencies between the sources of competitive advantage and the performance of firms, in the crisis time and shortly after, we calculated the Spearman's rank correlation coefficient for the indicators of the sources of competitive advantage and performance indicators. The results are presented in table 7, 8 and 9. The highest correlation coefficients for sources of competitive advantage and all performance indicators considered for FPGs, FNGs and FIGs were in 2009. The value dropped in the years 2011 and 2013 but was still significant at the level of above 0.4. The strongest correlation between the sources of competitive advantage and performance measures in the crisis year 2009 was characteristic for FIGs, the second position belonged to FNGs.

Table 7. Correlation coefficients for indicators of the sources of competitive advantage in the crisis time and performance measures – perspective of FPG

| | RS1 | RS2 | RS3 | RS4 | RS5 | RS6 | RS7 | RS8 | RS9 | RS10 | RS11 | RS12 | RS13 | |
|------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2009 | P1 | 0.657 | 0.588 | 0.618 | 0.672 | 0.673 | 0.767 | 0.831 | 0.865 | 0.764 | 0.652 | 0.574 | 0.839 | 0.801 |
| | P2 | 0.673 | 0.597 | 0.653 | 0.683 | 0.704 | 0.782 | 0.893 | 0.892 | 0.780 | 0.674 | 0.596 | 0.904 | 0.859 |
| | P3 | 0.692 | 0.600 | 0.647 | 0.692 | 0.684 | 0.765 | 0.857 | 0.885 | 0.760 | 0.697 | 0.608 | 0.866 | 0.832 |
| | P4 | 0.642 | 0.598 | 0.643 | 0.681 | 0.680 | 0.759 | 0.899 | 0.881 | 0.765 | 0.648 | 0.601 | 0.914 | 0.840 |
| | P5 | 0.680 | 0.651 | 0.607 | 0.618 | 0.665 | 0.548 | 0.622 | 0.634 | 0.540 | 0.676 | 0.648 | 0.613 | 0.620 |
| 2011 | P1 | 0.508 | 0.504 | 0.527 | 0.514 | 0.584 | 0.408 | 0.575 | 0.555 | 0.436 | 0.519 | 0.546 | 0.593 | 0.665 |
| | P2 | 0.527 | 0.522 | 0.528 | 0.525 | 0.591 | 0.465 | 0.622 | 0.602 | 0.479 | 0.536 | 0.564 | 0.632 | 0.705 |
| | P3 | 0.538 | 0.531 | 0.533 | 0.539 | 0.599 | 0.476 | 0.624 | 0.600 | 0.498 | 0.546 | 0.573 | 0.631 | 0.705 |
| | P4 | 0.548 | 0.549 | 0.582 | 0.583 | 0.657 | 0.520 | 0.698 | 0.685 | 0.544 | 0.557 | 0.574 | 0.714 | 0.756 |
| | P5 | 0.689 | 0.638 | 0.614 | 0.609 | 0.676 | 0.552 | 0.626 | 0.639 | 0.537 | 0.674 | 0.634 | 0.612 | 0.625 |
| 2013 | P1 | 0.481 | 0.443 | 0.492 | 0.497 | 0.621 | 0.466 | 0.650 | 0.611 | 0.482 | 0.493 | 0.465 | 0.669 | 0.660 |
| | P2 | 0.487 | 0.447 | 0.473 | 0.497 | 0.651 | 0.482 | 0.674 | 0.632 | 0.483 | 0.489 | 0.484 | 0.680 | 0.676 |
| | P3 | 0.503 | 0.460 | 0.492 | 0.509 | 0.652 | 0.492 | 0.674 | 0.632 | 0.503 | 0.514 | 0.502 | 0.685 | 0.685 |
| | P4 | 0.483 | 0.447 | 0.497 | 0.517 | 0.606 | 0.457 | 0.650 | 0.620 | 0.466 | 0.487 | 0.465 | 0.663 | 0.657 |
| | P5 | 0.696 | 0.624 | 0.613 | 0.613 | 0.677 | 0.548 | 0.629 | 0.640 | 0.527 | 0.679 | 0.632 | 0.612 | 0.626 |

RS1 - material resources, RS2 - human resources, RS3 - intangible resources (knowledge, brand, patents, etc.); RS4 - financial resources; RS5 – Logistics (performance and efficiency), RS6 - production (performance and efficiency), RS7 - marketing and sales (effectiveness and efficiency), RS8 - service (effectiveness and efficiency), RS9 - supplies (performance and efficiency), RS10 - technology(advancement and efficiency), RS11 - management of human resources (efficiency and performance), RS 12 - firm management systems (efficiency and effectiveness), RS13 - quality control (efficiency). P1 - profitability, P2 - sales growth, P3 - market share, P4 - overall financial condition, P5 - customer satisfaction.

Correlation coefficients in 2009 were relatively the lowest for FPG, which could indicate that in the crisis time the impact of internal factors on the performance of the Polish group affiliates may have been weakened because of unfavourable external conditions. FPGs are groups where the parent company is headquartered in Poland which means that the transmission of negative changes in the Polish economy in 2009 happened via the interactions among the siblings affiliated in the group and located in Poland and interactions between the parent company headquartered in Poland and other group affiliated firms. As far as FIGs are concerned the interactions affected by the situation in the Polish market took place just among the group affiliates operating in the Polish market. The transmission of external shocks, a characteristic of the Polish market in 2009, was possible via the interactions among group affiliates located in this market and not via the relations with the parent company operating in a different national market. The interactions with the international parent company in that year could have been the remedy against the negative impact of interactions among Polish-based affiliates. The correlation coefficients presented in tables 7, 8, 9 are statistically significant with $p < 0.05$.

Table 8. Correlation coefficients for indicators of the sources of competitive advantage in the crisis time and performance measures – perspective of FIG

| | RS1 | RS2 | RS3 | RS4 | RS5 | RS6 | RS7 | RS8 | RS9 | RS10 | RS11 | RS12 | RS13 | |
|------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2009 | P1 | 0.817 | 0.798 | 0.811 | 0.821 | 0.804 | 0.789 | 0.854 | 0.889 | 0.791 | 0.820 | 0.770 | 0.858 | 0.834 |
| | P2 | 0.773 | 0.757 | 0.767 | 0.772 | 0.772 | 0.842 | 0.908 | 0.910 | 0.844 | 0.771 | 0.731 | 0.913 | 0.885 |
| | P3 | 0.824 | 0.801 | 0.820 | 0.825 | 0.803 | 0.814 | 0.877 | 0.905 | 0.816 | 0.829 | 0.783 | 0.881 | 0.865 |
| | P4 | 0.768 | 0.744 | 0.756 | 0.770 | 0.778 | 0.862 | 0.929 | 0.915 | 0.865 | 0.770 | 0.725 | 0.925 | 0.908 |
| | P5 | 0.878 | 0.848 | 0.881 | 0.866 | 0.858 | 0.781 | 0.856 | 0.877 | 0.778 | 0.876 | 0.837 | 0.853 | 0.844 |
| 2011 | P1 | 0.556 | 0.546 | 0.582 | 0.551 | 0.638 | 0.613 | 0.662 | 0.690 | 0.615 | 0.548 | 0.565 | 0.666 | 0.768 |
| | P2 | 0.551 | 0.534 | 0.579 | 0.547 | 0.638 | 0.621 | 0.672 | 0.695 | 0.619 | 0.544 | 0.558 | 0.675 | 0.769 |
| | P3 | 0.550 | 0.541 | 0.576 | 0.553 | 0.646 | 0.628 | 0.677 | 0.699 | 0.626 | 0.550 | 0.564 | 0.678 | 0.774 |
| | P4 | 0.586 | 0.582 | 0.606 | 0.587 | 0.699 | 0.647 | 0.696 | 0.711 | 0.651 | 0.582 | 0.589 | 0.699 | 0.775 |
| | P5 | 0.878 | 0.848 | 0.881 | 0.866 | 0.858 | 0.781 | 0.856 | 0.877 | 0.778 | 0.876 | 0.837 | 0.853 | 0.844 |
| 2013 | P1 | 0.479 | 0.486 | 0.479 | 0.483 | 0.676 | 0.536 | 0.555 | 0.566 | 0.539 | 0.478 | 0.475 | 0.562 | 0.571 |
| | P2 | 0.468 | 0.472 | 0.473 | 0.459 | 0.653 | 0.514 | 0.536 | 0.552 | 0.517 | 0.458 | 0.455 | 0.546 | 0.557 |
| | P3 | 0.476 | 0.483 | 0.480 | 0.478 | 0.673 | 0.532 | 0.552 | 0.566 | 0.532 | 0.476 | 0.469 | 0.557 | 0.572 |
| | P4 | 0.478 | 0.493 | 0.474 | 0.479 | 0.665 | 0.530 | 0.548 | 0.556 | 0.534 | 0.478 | 0.474 | 0.553 | 0.568 |
| | P5 | 0.865 | 0.847 | 0.872 | 0.854 | 0.848 | 0.772 | 0.846 | 0.870 | 0.769 | 0.867 | 0.827 | 0.845 | 0.837 |

Table 9. Correlation coefficients for indicators of the sources of competitive advantage in the crisis time and performance measures – perspective of FNG

| | RS1 | RS2 | RS3 | RS4 | RS5 | RS6 | RS7 | RS8 | RS9 | RS10 | RS11 | RS12 | RS13 | |
|------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2009 | P1 | 0.702 | 0.635 | 0.684 | 0.761 | 0.654 | 0.612 | 0.812 | 0.808 | 0.609 | 0.718 | 0.639 | 0.780 | 0.771 |
| | P2 | 0.680 | 0.609 | 0.680 | 0.712 | 0.684 | 0.670 | 0.858 | 0.835 | 0.663 | 0.688 | 0.606 | 0.836 | 0.813 |
| | P3 | 0.687 | 0.674 | 0.698 | 0.706 | 0.696 | 0.610 | 0.812 | 0.823 | 0.626 | 0.714 | 0.663 | 0.800 | 0.782 |
| | P4 | 0.666 | 0.632 | 0.656 | 0.704 | 0.692 | 0.676 | 0.886 | 0.847 | 0.670 | 0.680 | 0.614 | 0.867 | 0.828 |
| | P5 | 0.638 | 0.650 | 0.669 | 0.638 | 0.652 | 0.418 | 0.639 | 0.660 | 0.427 | 0.692 | 0.626 | 0.650 | 0.656 |
| 2011 | P1 | 0.459 | 0.425 | 0.475 | 0.495 | 0.557 | 0.519 | 0.675 | 0.629 | 0.514 | 0.477 | 0.416 | 0.652 | 0.680 |
| | P2 | 0.516 | 0.486 | 0.535 | 0.532 | 0.609 | 0.542 | 0.737 | 0.702 | 0.541 | 0.531 | 0.472 | 0.722 | 0.748 |
| | P3 | 0.503 | 0.501 | 0.528 | 0.509 | 0.625 | 0.524 | 0.729 | 0.699 | 0.533 | 0.524 | 0.480 | 0.728 | 0.741 |
| | P4 | 0.520 | 0.500 | 0.524 | 0.533 | 0.649 | 0.544 | 0.750 | 0.724 | 0.550 | 0.540 | 0.474 | 0.740 | 0.762 |
| | P5 | 0.645 | 0.646 | 0.663 | 0.633 | 0.643 | 0.393 | 0.624 | 0.658 | 0.405 | 0.673 | 0.628 | 0.650 | 0.662 |
| 2013 | P1 | 0.477 | 0.450 | 0.487 | 0.462 | 0.638 | 0.494 | 0.629 | 0.627 | 0.485 | 0.473 | 0.443 | 0.637 | 0.639 |
| | P2 | 0.484 | 0.437 | 0.478 | 0.470 | 0.640 | 0.491 | 0.632 | 0.634 | 0.490 | 0.468 | 0.434 | 0.639 | 0.637 |
| | P3 | 0.456 | 0.445 | 0.473 | 0.459 | 0.627 | 0.474 | 0.633 | 0.621 | 0.494 | 0.463 | 0.439 | 0.640 | 0.634 |
| | P4 | 0.485 | 0.459 | 0.481 | 0.443 | 0.641 | 0.479 | 0.632 | 0.657 | 0.494 | 0.474 | 0.441 | 0.652 | 0.655 |
| | P5 | 0.625 | 0.634 | 0.653 | 0.617 | 0.645 | 0.389 | 0.621 | 0.649 | 0.391 | 0.653 | 0.616 | 0.638 | 0.657 |

CONCLUSION, LIMITATIONS AND IMPLICATIONS FOR FURTHER STUDIES

Our research corroborates the findings of previous studies on the impact of group affiliation on the sources of competitive advantage and performance of firms. Based on the methodology presented before, first we show that the group affiliated entities enjoy better resources and capabilities against the non-group affiliated firms and second, thanks to being better equipped they can achieve better performance even in the crisis time and shortly after. The results of the analysis, with the use of descriptive statistics, clearly demonstrate that corporate groups can be regarded as bundles of particular resources and firms within these groups can take advantage of the resources and capabilities embedded in the inter-firm ties. The statistically significant differences within the sources of competitive advantage among the firms affiliated in the Polish groups, international corporate groups, and stand-alone firms prove that the affiliation matters for the sources of competitive advantage not only in times of prosperity but during a period of economic crisis.

Our descriptive findings reflect the assumption that the crisis time affects the firms since the assessment of resources and capabilities was rather low when we take into account the scale used in the survey. But looking for the highest ranks we can easily notice that the best “scores” go to the firms affiliated

within international corporate groups. This result can be on one hand surprising and on the other hand not. Bearing in mind the fact that the economic crisis was first noticeable in 2008, not in Poland but in other countries that, in many cases, were the location of headquarters of parent firms in international groups, the result is surprising. However, contradictory reasoning can be that the pool of resources and capabilities in the case of international group affiliated firms was greater shortly before the crisis, which is why even in 2009 their sources of competitive advantage were better evaluated.

Better resources and capabilities, which are characteristic of Polish and especially international group affiliated entities against stand-alone firms, translate into better assessment of performance measures of firms involved in both types of corporate groups. In this context we can state that both hypotheses were confirmed. And in particular, FIG's greater resilience to the crisis, which is proved by their relatively better performance, can be explained by their access to external and intra-group resources and capabilities. It may have given these firms the support needed for their relatively higher profitability, sales growth, market share, overall financial situation and perceived client satisfaction. All in all, our findings suggest that Polish firms affiliated in international corporate groups were more resilient to the economic crisis despite the commonly accepted thesis that international corporate groups may have acted as synchronization factors among crisis phenomena across different national markets.

The study provides some practical implications related to the justification for the existence of corporate groups in general and during the period of economic crisis in particular. The international group affiliated firms excel in all dimensions of their performance in the crisis and in the post-crisis period. The Polish group affiliated firms faced the worst performance (subjective measures) in the crisis period 2009 compared to the non-group affiliated firms with just one exception – client satisfaction. It is not surprising since the unfavourable external settings put stronger pressure on firms headquartered in Poland and operating under the supervision of a parent entity headquartered in Poland. External shocks usually increase the coordination cost that emerges to some extent among networked organizations. The growth of coordination costs can be linked to the fact that the negative external circumstances influence firms directly and indirectly. The direct impact emerges thanks to the firm and external environment entities interactions. The additional indirect impact is related to the networked firms that can absorb and experience the crisis through their relationships with other firms. In this context the relationships can work as a kind of pipeline of external shocks. The impact of negative changes in the external environment can be strengthened by the networked realm in which corporate group affiliates operate.

The findings are in line with the need to develop and broaden the research on embedded competencies. In the discussion focused on stand-alone firms the concept of core competencies is used and scholars underline that even firms with similar resources and capabilities can differ in terms of their competitive advantage. We can explain it by referring to the concept of competencies. Competencies are related to the coordination and exploitation of resources and capabilities. Firms differ in terms of their coordination abilities. According to Eriksen and Mikkelsen (1996), we can define competencies as the “organizational capital” that supports a firm’s integration of resources into “idiosyncratic value propositions”. The coordination directly linked to competencies and the organizational capital is of even greater importance in the case of group affiliated firms that operate within different social and economic ties. The affiliated entities get the chance to increase their competitive advantage thanks to the competencies embedded in the network of a corporate group. The access to the embedded competencies is determined by the relations of particular firms and the structure of the whole network of relations. Thanks to the relations within corporate groups the interactions among group affiliates are not anonymous and the firms can create trust-based relationships (Uzzi, 1999) which further create information transfer and even collaborative attitudes of group affiliates. That can all contribute first to the sources of competitive advantage and second to the performance of the group affiliated firm. Hence we argue that the methodological contribution of this paper is the manifestation of the significance of the concept of embedded competencies. This approach to the upgrading of competitive advantage calls for more conceptual and empirical studies.

Our research is subject to several limitations. Firstly, the theoretical background provides a rather blurry hypothesis on the possible better performance of the firm that is a corporate group affiliate in comparison to the non-affiliated firms. Therefore, we made a simple division in group affiliates (FPGs and FIGs) and non-group affiliates (FNGs). But perhaps a more detailed distinction (e.g. the one suggested by the CSOP and indicated in the introduction to the paper) will help to obtain more transparent and even more unequivocal findings. Secondly, although the study does refer to the manufacturing sector, which is the biggest in terms of the number of companies, at the same time it does neglect all the other industries. It is possible to broaden the scope of our analysis and verify how performance is related to corporate group affiliation in other industries. Additionally it would be useful to conduct the analysis within particular industries to take into account their idiosyncrasies. This would allow for a more detailed insight into the matter.

The limitations of the study suggest that there is a possibility to conduct a more in-depth analysis that would, however, require a much broader scope

of information. It is also possible to enrich the studies in a cross-country analysis. It would be worth observing, how the relation between the group affiliation and performance evolved in other countries.

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Abstract (in Polish)

Grupy kapitałowe są szczególnym przypadkiem powiązań sieciowych, które mogą stanowić źródło przewagi dla firm. Pozwalają jednostkom obniżyć koszty, tworzą dodatkowe źródła zasobów, zwiększają elastyczność operacji i odpowiedzi na turbulencje w gospodarce, co jest szczególnie istotne w czasach kryzysu gospodarczego. Istotą niniejszej publikacji jest zbadanie wpływu uczestnictwa w grupie kapitałowej na szeroko rozumianą konkurencyjność firmy. Pierwszym celem jest porównanie, czy firmy należące do grupy kapitałowej wykazywały wyższą konkurencyjność czynnikową. Po drugie weryfikujemy, czy podobna relacja była widoczna w przypadku wyników osiągniętych przez te firmy. Badanie zostało zaprojektowane na podstawie pogłębionych badań literaturowych i przeprowadzone za pomocą metody CATI. W jego wyniku weryfikujemy hipotezę, że im wyższa konkurencyjność czynnikowa firmy w czasie kryzysu tym lepszą osiąga ona pozycję konkurencyjną. Badania empiryczne przeprowadzono na ponad 700 firmach sektora produkcyjnego w Polsce w czasie trwania kryzysu i krótko po jego zakończeniu. W analizie wykorzystano analizę klastrową, testy nieparametryczne i analizę korelacji.

Słowa kluczowe: grupy kapitałowe, kryzys ekonomiczny, efektywność, współpraca sieciowa.

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Perception of Export Barriers at Different Stages of the Internationalization Process - Evidence from European SMEs

*Aleksandra Wąsowska*¹

Abstract

This paper explores the evolution of export barriers along the firm's internationalization process. Based on a sample of 7,515 European SMEs, we investigate the differences perceived by different groups of firms: companies uninterested in exports, future exporters, pre-exporters, experimental exporters, involved exporters, active exporters, committed exporters and failed exporters. We study both external barriers (i.e. arising from the environment in home and foreign markets) and internal barriers (i.e. related to the company's resource endowment, marketing and strategy). We find statistically significant differences between some of the studied groups, thus supporting the notion that the perception of internationalization barriers changes along the firm's lifecycle.

Keywords: *export barriers, internationalization process, SMEs, Europe.*

INTRODUCTION

The perception of export barriers by a company's decision-makers is one of the key factors shaping the internationalization behaviour of firms (Arteaga-Ortiz & Fernandez-Ortiz, 2010). More specifically, it has an influence on the decision to start exporting, increase commitment abroad or withdraw from a foreign market. Moreover, it has an impact on the overall internationalization path, delimitating 'conventional' internationalisers from international new ventures (Kahiya, 2013), that is, firms expanding abroad very early in their lifecycle (Oviatt & McDougall, 1994).

Extant research on barriers to internationalization yields a number of conclusive findings. First, internationalization barriers may be both internal (i.e. firm-specific) and external (i.e. environment-specific), and may relate both to home-country conditions and target-country context. These barriers may be classified in more details, with a number of possible classifications

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available (e.g., Artega-Ortiz & Fernando-Ortiz, 2010). Second, the perception of barriers varies across firms, depending on firms' organisational characteristics, such as age (e.g., Leonidou, 1995b), as well as their country of origin (e.g., Cahen, Lahiri & Borini, 2016). Third, while export barriers hamper internationalization, they do not prevent it completely. Therefore, some non-exporters are able to overcome export barriers and enter the internationalization path. Some barriers are, however, residual in nature, and they continue to exist at subsequent stages of the internationalization process. Fourth, some authors indicate that the perception of export barriers varies at different stages of the internationalization process.

Although significant contributions to the literature on export barriers have been made, there are still important knowledge gaps. First, the majority of studies are based on relatively small samples from single countries, which limits the generalisability of findings (Kahiya, 2013). Second, while there are studies examining barriers along the internationalization process (e.g., Suarez-Ortega, 2003; Uner, Kocak, Cavusgil & Cavusgil, 2013), none of them includes the very specific stage: de-internationalization. Little is known about 'failed exporters', that is companies that tried to enter foreign markets or used to export, but withdrew from this activity. Moreover, there is a paucity of studies following the theoretical classification of export barriers into external and internal. Therefore, our understanding of the evolution of these two types of barriers over the internationalization process is limited.

In this paper we aim to fill the gaps identified in extant literature by investigating the evolution of internal and external export barriers over the internationalization process. Specifically, we formulate the following research question: do small and medium-sized enterprises (SMEs) at different stages of their internationalization process differ in their perception of internal and external export barriers? In conceptualising the internationalization process we follow the notion that both exporting and non-exporting are heterogeneous phases, and that different groups of non-exporters (e.g., future exporters and failed exporters) and exporters (e.g., experimental exporters, committed exporters) need to be treated separately. Thus, we compare 8 groups of firms, 4 of them non-exporters (uninterested in exporting, future exporters, pre-exporters, and failed exporters), and 4 of them exporters (experimental exporters, involved exporters, active exporters, and committed exporters). We focus on SMEs, following the notion that these companies are more affected by export barriers than their larger counterparts (Morgan & Katsikeas, 1997) and therefore the understanding of the perception of export barriers of SMEs is particularly relevant to both theory and practice (Artega-Ortiz & Fernandez-Ortiz, 2010).

The structure of the paper is as follows. We first present the review of literature on the internationalization process and barriers to internationalization, and we formulate our research hypotheses. We proceed with the overview of research methods applied in the paper. We then present the data analysis. We conclude the paper by providing implications for theory and practice of International Business (IB).

LITERATURE REVIEW

Internationalization process

Internationalization has been defined as ‘the process of increasing involvement in international operations’ (Welch & Luostarinen, 1988, p. 36) or ‘the process of adapting firm’s operations (strategy, structure, resources, etc.) to international environments’ (Calof & Beamish, 1995, p. 116). While the former definition is based on an assumption that firms increase their commitment to international markets, the latter permits a broader view in which commitment to foreign markets may be increased, decreased or even abandoned. Therefore, this definition encompasses not only international growth but also de-internationalization, which is ‘any voluntary or forced actions that reduce a company’s engagement in or exposure to current cross-border activities’ (Benito & Welch, 1997).

A number of internationalization models have been offered in the IB literature, depicting the ‘stages’ of the internationalization process. For example, Johanson and Wiedersheim-Paul (1975) propose a 3-stage model, including (1) no regular export activity/no resource commitment abroad, (2) exporting to psychologically close countries via independent reps/agents, (3) exporting to more psychologically distant markets/establishment of sales subsidiaries. Wiedersheim-Paul, Olson and Welch (1978) focus on non-exporters, dividing them into three groups, corresponding to their ‘internationalization stage’, i.e. (1) domestic oriented firms, with no willingness to start exporting, (2) passive non-exporters, exhibiting a moderate willingness to start exporting, (3) active non-exporters, very willing to start exporting. Cavusgil (1982) offers a 5-stage model, including pre-involvement (stage 1), reactive involvement (stage 2), limited, experimental involvement (stage 3), active involvement (stage 4) and committed involvement (stage 5). A number of other models have been reviewed by Leonidou and Katsikeas (1996) and Crick, Chaudhry and Batstone (2001). The underlying theoretical assumptions of the stage models have been outlined by the Uppsala scholars (Johanson & Vahlne, 1977). They suggest that internationalization is gradual, since it is driven by experiential learning, needed to overcome the ‘liability

of foreignness' and the 'psychic distance' between the home market and the target country.

The 'gradual' models of internationalization have received a lot of criticism. A rich body of literature on 'international new ventures' (e.g., Oviatt & McDougall, 1994) and 'born globals' (e.g., Knight, 1996) questions the adequacy of 'stage' models to describe the behaviour of firms entering foreign markets at the early stage of their lifecycles and dynamically expanding abroad. Forsgren (2002) indicates numerous ways to overcome 'psychic distance', other than experiential learning (e.g., imitation, search, acquisition of foreign firms), which may allow faster internationalization. A wide body of IB literature grounded in the network-based view argues that business networks shape the firm's internationalization process, offering a vehicle for accelerated internationalization (e.g., Chetty & Campbell-Hunt, 2003). This argument has been recognised by the Uppsala scholars who, in their revised model, acknowledge that the main theoretical barrier to internationalization is the 'liability of outsidership' rather than the 'liability of foreignness' (Johanson & Vahlne, 2009).

Cricks (2004) points at another limitation of the stage models, arising from the assumption that subsequent decisions made in this process lead to an increased commitment to foreign markets. Due to their forward-moving nature, these models do not take into account de-internationalization. As a consequence, such models overlook potential differences between different groups of non-exporters (e.g., companies not yet interested in foreign markets and companies which had entered foreign markets and failed). Ignoring the heterogeneities within the group of non-exporters undermines the understanding of export barriers perceived by companies at different stages of the internationalization process.

Barriers to internationalization

Export barriers, closely related to the concept of liability of foreignness (Kahiya, 2017), are typically defined as 'any attitudinal, structural, operative or other obstacles that hinder or inhibit companies from taking the decision to start, develop or maintain international activity' (Leonidou, 1995a, p. 31). The problem of export barriers, first indicated by Bilkey (1978), has been one of the key themes in IB literature ever since. Early studies on export barriers were conducted in the U.S. Rabino (1980) investigated the perception of export barriers by U.S. small high-technology firms. He revealed the importance of five major factors: paperwork, finding a distributor, non-tariff barriers, honouring letters of credit, communication with customers in the foreign markets. In a study on the U.S. paper industry, Bauerschmidt, Sullivan

and Gillespie (1985) found four key categories of export barriers: strategic, informational, process-based and operational barriers.

Since the 1990s, a number of studies on export barriers have been conducted in more diverse country settings, including Finland, Greece, Brazil and Turkey. For example, Cahen et al. (2016) focus on barriers to internationalization perceived by Brazilian new-technology firms. Their study is based on a notion that barriers to internationalization are, to some extent, country-specific and that those perceived by emerging market firms are different from those faced by developed-market firms (Ojala & Tyrvainen, 2007). The study revealed that institutional barriers, organizational capability barriers and human resource barriers were crucial obstacles of internationalization (Cahen et al., 2016).

Leonidou (1995a) classified export barriers into two categories: internal (i.e. firm-specific, related to the company's resource endowment and strategy) and external (i.e. environmental-specific, related to the home country context or conditions in the target market) (Leonidou, 1995a). Building on this broad typology, Arteaga-Ortiz and Fernandez-Ortiz (2010) proposed the following classification: knowledge barriers, resource barriers, procedure barriers, exogenous barriers. Leonidou (2004) provided a comprehensive analysis of export barriers faced by SMEs, based on a systematic review of empirical studies. Extending his previous classification, he identified major internal (i.e. informational, functional, marketing) and external (i.e. procedural, governmental, task, and environmental) barriers. An extensive overview of export barriers faced by SMEs, based on Leonidou's classification, has been recently offered by Narayanan (2015).

Kahiya (2013) suggested that internal barriers arise from constraints relating to resources, management, marketing and knowledge. Resource-related constraints include limitations in short-term financing, shortages of labour skills, as well as insufficient production capacity. SMEs are particularly prone to resource-related constraints, due to the 'liability of smallness'. Managerial-related constraints include lack of vision, fear of losing control (Hutchinson, Fleck & Lloyd-Reason, 2009), as well as a lack of 'global mindset' (Nummela, Saarenko & Puumalainen, 2004). Marketing-related constraints include both market entry barriers, such as an inadequate marketing budget, inadequate marketing information (Da Rocha, 2008) and lack of international reputation (Ratajczak-Mrozek, 2014) and marketing mix barriers, such as adaptation of products to the conditions of foreign markets. Knowledge-related constraints relate to insufficient knowledge of export procedures and foreign business practices (Kahiya, 2013), lack of information to locate and analyse foreign markets, as well as an overall lack of knowledge that would allow the identification of business opportunities (Mori & Munisi, 2012).

External barriers include constraints arising from the characteristics of the home market (e.g., remote location, lack of domestic infrastructure supporting internationalization), host-market (e.g., import duties, political risk) and industry (e.g., high level of competition) (Kahiya, 2013).

A large number of studies on export barriers focused on non-exporters. For example, Leonidou (1995b) found that for this group of firms, competition (both foreign and domestic) was the most important barrier to internationalization. However, while export barriers hamper internationalization, they do not have enough power to prevent it completely (Leonidou, 2004). Export barriers may be overcome by planning, gathering resources or entrepreneurial impetus. These measures may allow non-exporters to enter the internationalization path. However, some of the export barriers are residual and remain important even for firms that already pursue an internationalization path (Suarez-Ortega, 2003).

While export barriers exist at every stage of the internationalization process, their nature tends to vary across different stages (Morgan, 1997). Thus, a number of studies have analysed how the perception of export barriers changes along the internationalization process. The majority of studies in this research stream investigated differences in the perception of export barriers by internationalised and domestic firms. For example, in their study on Portuguese SMEs, Pinho and Martins (2010) revealed that the main barriers for non-exporters were related to the lack of market knowledge, lack of qualified export personnel and other HR resources, lack of technical suitability, degree of industry competition and lack of financial assistance. For exporters, the main barriers were related to warehousing and control of the physical product flow. Thus, barriers perceived by non-exporters are 'strategic', i.e. related to the lack of resources and market structure, while barriers relevant to exporters are 'operational' in nature. Also, barriers indicated by non-exporters are purely based on perception of international activity, while barriers indicated by exporters are more 'experiential', that is, they result from first-hand experience in international markets (Pinho & Martins, 2010).

Other studies investigated differences in perception of barriers between sporadic and regular exporters (Kaleka & Katsikeas, 1995), in companies with different market experience (Katsikeas & Morgan, 1994) and companies with different levels of export intensity (Sharkey, Lim & Kim, 1989). For example, Sharkey et al. (1989) found that while marginal exporters did not differ from non-exporters, a significant difference existed between marginal exporters and active exporters. Shaw and Darroch (2004) compared non-exporters, likely exporters and exporters.

In a study of the Spanish wine industry, Suarez-Ortega (2003) compared four groups of companies: uninterested non-exporters, interested non-exporters, initial exporters and experienced exporters. She found that the more advanced the internationalization stage, the lower the perceived export barriers. Moreover, the study revealed that the importance of different types of export changes over time. For uninterested exporters, resource barriers were the most important. For interested exporters, knowledge barriers were the most significant. The most significant difference between initial exporters and experienced exporters was marked by procedural barriers.

Uner et al. (2013) explored differences in perception of export barriers among born globals and firms at different stages of internationalization (i.e. domestic marketing, pre-export, experimental involvement, active involvement, commitment involvement). They address the question of whether export barriers are stable over time, that is, whether they remain the same at different stages of the internationalization process. They conclude that these barriers differ mainly for born global, and firms at the first stage of internationalization (i.e. domestic marketing and pre-export stage).

Kahiya and Dean (2016), based on a sample of New Zealand SMEs, tested a set of hypotheses on the relationships between export stage and the influence on export barriers. They studied four types of internal barriers (i.e. managerial focus and commitment, resource factors, marketing barriers, knowledge and experience problems) and three types of external barriers (i.e. export-procedure barriers, economic obstacles, political-legal constraints). They found that resource constraints, marketing barriers, knowledge and experience barriers, and export procedure barriers were 'export stage dependent' (Kahiya & Dean, 2016, p. 75) and that differences existed only when comparing the early and the very advanced export stages.

Based on the findings of previous studies, we expect that the perception of export barriers differs in subsequent stages of the internationalization process. We argue that the evolution of perceived external and internal barriers needs to be studied separately, due to the different nature (i.e. environment-specific versus firm-specific) of these barriers. Moreover, we believe that it is essential to include into the analysis the 'last' stage of internationalization - withdrawal from foreign markets. We expect that, upon internationalization failure, perceived export barriers (both internal and external) will be higher than during the 'export' stages.

Thus, we formulate the following set of hypotheses:

- **H1.** Companies at different stages of the internationalization process differ in their perception of external export barriers. More specifically:
- **H1a.** Failed exporters perceive external export barriers as significantly higher than all other group of companies.

- **H1b.** Uninterested exporters perceive external export barriers as significantly higher than future exporters, pre-exporters and all groups of exporters.
- **H1c.** Future exporters perceive external export barriers as significantly higher than pre-exporters and all groups of exporters.
- **H1d.** Pre-exporters perceive external export barriers as significantly higher than all groups of exporters.
- **H1e.** For exporters, the perceived external export barriers decrease in the subsequent stages of internationalization, resulting in significant differences in perceived external barriers between exporters at different stages of internationalization.
- **H2.** Companies at different stages of the internationalization process differ in their perception of internal export barriers. More specifically:
 - **H2a.** Failed exporters perceive internal export barriers as significantly higher than all other group of companies.
 - **H2b.** Uninterested exporters perceive internal export barriers as significantly higher than future exporters, pre-exporters and all groups of exporters.
 - **H2c.** Future exporters perceive internal export barriers as significantly higher than pre-exporters and all groups of exporters.
 - **H2d.** Pre-exporters perceive internal export barriers as significantly higher than all groups of exporters.
 - **H2e.** For exporters, the perceived internal export barriers decrease in the subsequent stages of internationalization, resulting in significant differences in perceived internal barriers between exporters at different stages of internationalization.

RESEARCH METHODS

In this study we use data collected by the Flash Eurobarometer survey, focused on the internationalization of European SMEs (European Commission, 2015). The survey covered 14,513 SMEs from the 28 European Union (EU) countries and 6 non-EU countries. It was conducted in June 2015 by the research agency TNS Political & Social, with the use of a computer-assisted telephone interview. Top executives with decision-making responsibilities in the company (e.g., CEO, general manager, financial director) were eligible as respondents.

The Flash Eurobarometer survey applies the general definition of SMEs used in official European statistics (e.g., Eurostat) (i.e. enterprises with less than 250 employees) (European Commission, 2015). In this study we apply an additional criterion, i.e. ownership structure (independence) (Coviello & McAuley, 1999), in order to account for the fact that dependent SMEs (i.e. those that are subsidiaries of larger corporations), ‘behave like large ones’

and are more open to international business than independent companies (Airaksinen, Luomaranta, Alajääskö & Roodhuijzen, 2015). Thus, from the Flash Eurobarometer database we select only independent SMEs. Moreover, we exclude companies from six non-EU countries covered by the survey. We exclude all the observations with missing data. Our final sample is composed of 7,515 independent SMEs from the EU-28.

The publicly available Flash Eurobarometer report (European Commission, 2015) presents distributions of answers to questions included in the survey, which are analysed at an aggregate level. For the purpose of the present study, we were granted access to raw, firm-level data collected within the project. We conducted our own operationalisation of variables and statistical analysis (using IBM SPSS), allowing us to answer our research question.

Following previous studies, we classify the studied companies into different categories, corresponding to their internationalization stage. First, following the arguments of Crick (2004), we account for the potential differences between various groups of non-exporters, differentiating between companies expressing no interest in exporting, companies planning international expansion in the future, companies currently trying to enter foreign markets and companies which have withdrawn from foreign markets. Thus, we use four categories of non-exporters: 'uninterested', 'future exporters', 'pre-exporters' and 'failed exporters'. Second, we also categorize different groups of exporters, based on the foreign sales to total sales (FSTS) ratio, extensively used in the IB literature to indicate the export performance (Reid, 1982) and the overall importance of exports to a firm's strategy (Lee & Yang, 1990).

In order to classify companies into different categories, we used the following questions from the Eurobarometer questionnaire: 'Have you ever exported, tried to export or considered exporting your products, and/or services?' (for non-exporters, i.e. companies which have not recorded any foreign sales) and 'In 2014, approximately what percentage of your sales came from each of the following markets?' (for exporters). Depending on the chosen answer, the classification was as follows: (1) uninterested (chosen answer: 'You will probably never export.'), (2) future exporters (chosen answer: 'You are considering it for the future'), (3) pre-exporters (chosen answer: 'You are trying to do it now'), (4) experimental exporters (companies with FSTS below 25%), (5) involved exporters (FSTS ranging from 25% to 50%), (6) active exporters (FSTS ranging from 50% to 75%), (7) committed exporters (FSTS above 75%), (8) failed exporters (chosen answer: 'You used to export but you stopped doing it.' or 'You tried, but you have given up.'). The characteristics of the studied sample are presented in Table 1.

Table 1. Sample characteristics

| | Frequency | % of Total |
|--|-----------|------------|
| Industry | | |
| Manufacturing (NACE category C) | 1825 | 24.3% |
| Retail (NACE categories G) | 2431 | 32.3% |
| Services (NACE categories H/I/J/K/L/M/N/Q/R/S) | 1918 | 25.5% |
| Industry (NACE categories B/D/E/F) | 1341 | 17.8% |
| Total | 7515 | 100% |
| Size | | |
| 1-9 employees | 3264 | 43.4% |
| 10-49 employees | 2862 | 38.1% |
| 50-249 employees | 1389 | 18.5% |
| Total | 7515 | 100% |
| Internationalization stage | | |
| Uninterested | 2507 | 33.4% |
| Future exporter | 702 | 9.3% |
| Pre-exporter | 213 | 2.8% |
| Experimental exporter | 1971 | 26.2% |
| Involved exporter | 576 | 7.7% |
| Active exporter | 499 | 6.6% |
| Committed exporter | 725 | 9.6% |
| Failed exporter | 322 | 4.3% |
| Total | 7515 | 100.0% |

Source: Own calculations based on raw data from Flash Eurobarometer (European Commission, 2015).

In order to measure export barriers, we used the following question from the Eurobarometer survey: ‘If your company were to export, tell me if each of the following difficulties would be a major problem, a minor problem or not a problem at all.’ Respondents were provided with a list of 12 potential export barriers. Following previous studies (e.g., Leonidou, 2004), for the purpose of this study we differentiate between internal barriers and external barriers. We define internal barriers as constraints relating to resources, management, marketing and knowledge (Kahiya, 2013). We define external barriers as constraints arising from the characteristics of the home market, host-market and industry (Kahiya, 2013).

Thus, both types of export barriers have been measured with six questions, assessed on a 3-point Likert scale. Internal barriers are measured with the following items: (1) The financial investment is too large, (2) Your company does not have specialised staff to deal with exports, (3) Your company does not know the rules which have to be followed (e.g., labelling), (4) Your company lacks the language skills to deal with foreign countries, (5) Your company does not know where to find information about the potential market, (6) Your company’s products and/or services are specific to your

country's market. (Cronbach's Alpha = 0.785). External barriers are measured with the following items: (1) Resolving cross-border complaints and disputes is too expensive, (2) The administrative procedures are too complicated, (3) Identifying business partners abroad is too difficult, (4) Delivery costs are too high, (5) Dealing with foreign taxation is too costly, (6) Payments from other countries are not secure enough. (Cronbach's Alpha = 0.806). Although export barriers are often measured on a 7-point Likert scale, for the present study, based on a large, international sample, we accept the 3-point scale. In doing so, we follow the findings of Jacoby & Mattell (1971) who compared scales with different number of scale points used for Likert-type items and found no statistically significant difference in reliability and validity across different rating formats. We therefore follow their conclusion that 'three-point Likert scales are good enough' (Jacoby & Mattell, 1971, p. 495).

In order to compare the effect of the internationalization stage on export barriers we use a one-way ANOVA. The details of this procedure are presented in the following section of the paper.

ANALYSIS

First, we calculated descriptive statistics presenting both types of export barriers in different groups (see Table 2).

Table 2. Descriptive statistics

| | N | External barriers | | Internal barriers | |
|-----------------------|------|-------------------|-------|-------------------|-------|
| | | Mean | SD | Mean | SD |
| Uninterested | 2507 | 2.092 | 0.646 | 1.956 | 0.603 |
| Future exporter | 702 | 2.006 | 0.538 | 1.775 | 0.494 |
| Pre-exporter | 213 | 1.782 | 0.540 | 1.648 | 0.496 |
| Experimental exporter | 1971 | 1.687 | 0.532 | 1.484 | 0.450 |
| Involved exporter | 576 | 1.684 | 0.506 | 1.442 | 0.435 |
| Active exporter | 499 | 1.685 | 0.494 | 1.415 | 0.392 |
| Committed exporter | 725 | 1.633 | 0.516 | 1.348 | 0.367 |
| Failed exporter | 322 | 1.930 | 0.600 | 1.684 | 0.480 |
| Total | 7515 | 1.859 | 0.602 | 1.661 | 0.554 |

Source: Own calculations based on raw data from Flash Eurobarometer (European Commission, 2015).

In order to enhance the understanding of the evolution of export barriers at different stages of the internationalization process, we drew the corresponding chart (see Figure 1). The analysis of descriptive statistics reveals that in all groups of companies external barriers are perceived as higher than internal barriers. Moreover, we observe a decline in perceived barriers (both external and internal) in subsequent stages of the internationalization process (with the exception of the last stage - barriers perceived by failed

exporters are higher than for exporters). Also, the decline in perceived internal barriers over subsequent stages is more dynamic than the decline in perceived external barriers.

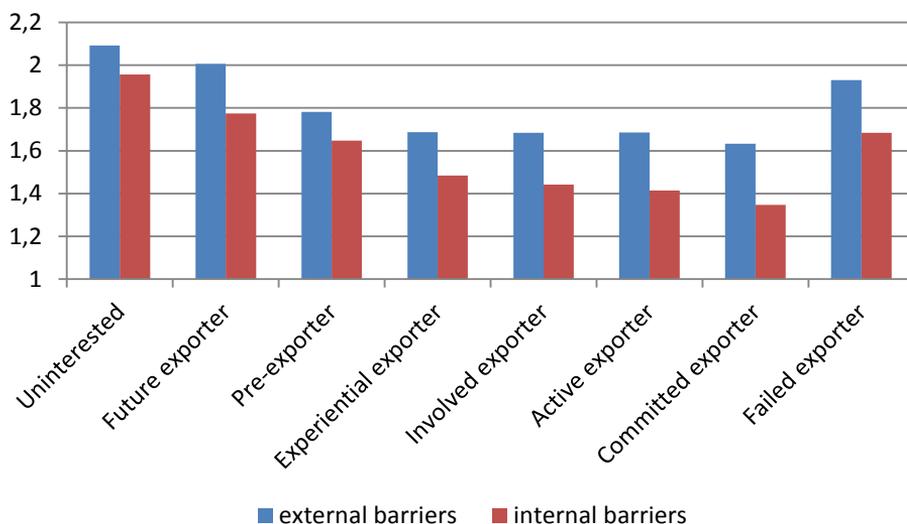


Figure 1. Perception of export barriers at different internationalization stages

In order to test for the significance of differences between various groups, we then proceed to ANOVA analysis. We first used Levene’s test to verify the supposed homogeneity of variances across groups. Since the homogeneity assumption is not met, we use Welch’s F-test. Analysis of variance showed the main effect of a company’s internationalization stage on perception of both types of export barriers was significant: $F(7.1596.578) = 119.297$, $p < 0.001$ for external barriers and $F(7.1605.178) = 232.267$, $p < 0.001$ for internal barriers. Since the samples are of unequal size, in the post-hoc analyses we used the Games-Howell test (see Table 3).

Post-hoc analysis indicated that for failed exporters the perceived export barriers (both external and internal) were significantly lower than for uninterested companies. Moreover, there were no significant differences between failed exporters, future exporters and pre-exporters. However, failed exporters perceived external and internal barriers as significantly higher than all groups of exporters (experimental, involved, active and committed).

Table 3. Differences in export barriers perception - Games-Howell test

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|----------------------------|-----------|-----------|-----------|-----------|----------|----------|----------|-----------|
| External barriers | | | | | | | | |
| (1) uninterested | | 0.086** | 0.310*** | 0.405*** | 0.408*** | 0.407*** | 0.459*** | 0.162*** |
| (2) future exporters | -0.086** | | 0.224*** | 0.319*** | 0.322*** | 0.322*** | 0.374*** | 0.076 |
| (3) pre-exporters | -0.310*** | -0.224*** | | 0.095 | 0.098 | 0.098 | 0.149** | -0.148 |
| (4) experimental exporters | -0.405*** | -0.319*** | -0.095 | | 0.003 | 0.003 | 0.054 | -0.243*** |
| (5) involved exporters | -0.408*** | -0.322*** | -0.098 | -0.003 | | -0.000 | 0.051 | -0.246*** |
| (6) active exporters | -0.407*** | -0.322*** | -0.098 | -0.003 | 0.000 | | 0.052 | -0.246*** |
| (7) comitted exporters | -0.459*** | -0.374*** | -0.149** | -0.054 | -0.051 | -0.052 | | -0.298*** |
| (8) failed exporters | -0.162*** | -0.077 | 0.148 | 0.243*** | 0.246*** | 0.246** | 0.298*** | |
| Internal barriers | | | | | | | | |
| (1) uninterested | | 0.182*** | 0.308*** | 0.472*** | 0.514*** | 0.541*** | 0.608*** | 0.272*** |
| (2) future exporters | -0.182*** | | 0.127* | 0.290*** | 0.333*** | 0.356*** | 0.427*** | 0.090 |
| (3) pre-exporters | -0.308*** | -0.127* | | 0.164* | 0.206** | 0.233** | 0.300** | -0.036 |
| (4) experimental exporters | -0.472*** | -0.290*** | -0.164* | | 0.042 | 0.069* | 0.136*** | -0.200*** |
| (5) involved exporters | -0.514*** | -0.333*** | -0.206*** | -0.042 | | 0.027 | 0.094** | -0.242*** |
| (6) active exporters | -0.541*** | -0.359*** | -0.233*** | -0.069* | -0.027 | | 0.067 | -0.269*** |
| (7) comitted exporters | -0.608*** | -0.427*** | -0.300*** | -0.136*** | -0.094** | -0.067 | | -0.336*** |
| (8) failed exporters | -0.272*** | -0.090 | 0.036 | 0.200*** | 0.242*** | 0.269*** | 0.336*** | |

*p<0.05; **p<0.01; ***p<0.001.

Source: Own calculations based on raw data from Flash Eurobarometer (European Commission, 2015).

Therefore, we find support for hypotheses H1a and H2a only in relation to differences between failed exporters and exporters. Conversely, we find no support for the notion that failed exporters perceive export barriers as significantly higher than other groups of non-exporters. Contrary to our expectations, failed exporters perceive export barriers as significantly lower than uninterested exporters. No statistically significant differences exist between failed exporters and the two remaining groups of non-exporters (i.e. future and pre-exporters).

Companies uninterested in exports significantly differed from other groups in their perception of export barriers. More specifically, they perceived both internal and external barriers as higher than other groups. Therefore, we find full support for research hypotheses H1b and H2b.

For future exporters, internal and external export barriers were perceived as lower than in the case of uninterested companies and higher than in the case of pre-exporters, experimental exporters, involved exporters, active exporters, and committed exporters. Therefore, we find full support for research hypotheses H1c and H2c.

No statistically significant difference was observed between pre-exporters and experimental, involved and active exporters in their perception of external barriers. Pre-exporters differed only from committed exporters and they perceived external barriers as significantly higher. Therefore, research hypothesis H1d was supported only in relation to the difference between pre-exporters and committed exporters.

As for the perception of internal barriers, significant differences between pre-exporters and all groups of exporters existed. More specifically, pre-exporters observed higher internal barriers than all groups of exporters. Therefore, we find full support for hypothesis H2d.

Four groups of exporters (experimental, involved, active, and committed) did not differ in their perception of external barriers. Therefore, we find no support for research hypothesis H1e.

Some significant differences existed in the perception of internal barriers, thus providing partial support for research hypothesis H2e. More specifically, experimental exporters perceived internal barriers as significantly higher than active and committed exporters. Also, for involved exporters, internal barriers were higher than for committed exporters.

DISCUSSION

Our analysis revealed that perceived export barriers change during the internationalization process. However, not all the differences between the subsequent internationalization stages turned out to be statistically significant. Our findings shed light on the nature of barriers hampering the international growth of firms, from one stage to another.

Our results reveal that one group of firms - companies uninterested in exports - significantly differed from all other groups in perception of both external and internal barriers. We conclude that uninterested exporters constitute a particular group of companies, which perceive extremely high external and internal export barriers and are unlikely to enter the internationalization path in the near future. These companies account for 33.4% of our research sample. Given the sampling frame used in the Flash Eurobarometer study, this number is probably representative for the population of European SMEs.

Future exporters (9.3% of our research sample) differed from all other groups (both in terms of external and internal export barriers), with the exception of failed exporters. They perceived export barriers as higher than exporters and as lower than uninterested exporters. Interestingly, the difference between uninterested exporters and future exporters is much higher for internal barriers than for external barriers. We may conclude that the

decline in the perceived internal barriers (e.g., resulting from the accumulation of resources) is the key prerequisite for gaining interest in exports. Internal constraints (e.g., lack of managerial skills, liability of smallness) seem to constitute the most important mental barrier that prevents managers from considering international expansion. This finding may be illustrated by two contrasting cases of Polish SMEs. The CEO of a company offering safety audit services, declaring no interest in internationalization, pointed to the role of internal export barriers: 'in order to enter a foreign market we would have to significantly increase our production capacity, invest in advertising, build an international reputation. We simply cannot afford it'. The CEO of a Polish born-global company offering beauty products, declared in turn that the lack of mental barriers constituted a pre-requisite for a rapid international expansion of the company: 'together with my business partner, we consider ourselves global citizens and we knew from the beginning that we didn't want to focus on Poland, we wanted to go global'².

Pre-exporters (2.8% of our sample) differed from the companies at the precedent stage of the internationalization process, i.e. future exporters, in both external and internal barriers. However, the major difference was observed for external barriers. Therefore, we may conclude that the key challenge in the transition from 'future exporters' (i.e. thinking about exporting) to 'pre-exporters' (i.e. actually starting to export) is to overcome external barriers (i.e. deal with administrative procedures, foreign taxation).

The transition from pre-exporters to experimental exporters is marked by a significant decline in internal barriers, with no significant change in external barriers. In a similar vein, the perception of external barriers does not change in a significant way in the subsequent stages of exporting (experimental exporters - involved exporters - active exporters - committed exporters). Even the most 'distant' stages of exporting (experimental exporters versus committed exporters) do not differ significantly in terms of the perception of external barriers. This is in line with the findings of Kahiya and Dean (2016), who concluded that some of the barriers (e.g., economic obstacles and political and legal barriers) were not 'export stage dependent'.

While the most 'distant' stages of exporting (experimental exporters versus committed exporters) do not differ in terms of the perception of external barriers, they do, however, differ in the perception of internal barriers: significant differences exist between experimental and active exporters, experimental and committed exporters, as well as involved exporters and committed exporters.

Our findings reveal that companies which have decided to withdraw from export activity perceive export barriers (both internal and external)

² Interviews conducted by the author in March 2016.

as significantly higher than current exporters. Interestingly, contrary to our expectations, failed exporters do not differ in their perception of export barriers from pre-exporters and future exporters. They are, however, significantly different from uninterested companies. Contrary to our expectations, for this group of companies internal and external export barriers are significantly lower than for uninterested exporters. We conclude that, although 'failed exporters' perceive export barriers as significantly higher than exporters, their attitude towards export activity may still be more favourable than for some non-exporters (i.e. uninterested companies). Considering the fact that their perceived export barriers are not higher than for future exporters and pre-exporters, we may conclude that 'failed exporters' may be prone to re-initiate export activity in the future. This conclusion is in line with the notion that some companies withdraw from foreign operations and, after a certain period of 'time-out', re-enter foreign markets (Welch & Welch, 2009). For example, in 2001, CVO Group, an online recruitment company from Estonia, temporarily suspended its operations in Russia, Bulgaria and Romania, only to re-enter these markets in the following three years (Visaak, 2006).

CONCLUSION

In this paper we investigated the evolution of internal and external export barriers during the internationalization process. We asked whether SMEs at different stages of their internationalization process differed in their perception of internal and external export barriers. We found significant differences between some of the studied groups, thus supporting the notion that the perception of export barriers evolves along the internationalization process. Our findings allow us to draw three important conclusions.

First, similar to Suarez-Ortega (2003), we observe a general decline of export barriers from one stage to another, with the exception of the 'ultimate' stage (i.e. export withdrawal), when perceived export barriers rise again. Thus, we conclude that the perception of export barriers is in fact an important factor differentiating one group from another.

Second, we conclude that the relative importance of different types of export barriers (i.e. internal versus external) changes along the internationalization process. At the very early stages of this process, internal barriers (e.g., lack of knowledge, financial shortages, and lack of qualified staff) play a major role, as they constitute a mental barrier preventing managers from considering international expansion. In the subsequent stage, external barriers become more important. The transition from 'future exporters' (i.e. companies considering expansion in the future) to 'pre-exporters' (i.e. companies actually undertaking efforts to enter foreign markets) depends

mostly on overcoming perceived external barriers (i.e. finding a foreign partner). In the following stages of the internationalization process, internal barriers again become a crucial factor differentiating one group from another. A significant decline in perceived internal constraints along the internationalization process may be explained by the effects of learning and accumulation of resources (e.g., market knowledge, internationalization knowledge, and specialised staff).

Third, we observe that non-exporters are a heterogeneous group, encompassing firms uninterested in exporting, companies considering internationalization in the future, companies preparing to start exporting and companies that have already withdrawn from export activity. These sub-groups face different internationalization barriers, as well as a different set of incentives to undertake export activity. This observation should be taken into consideration by researchers who, contrary to common practice, should not treat 'non-exporters' as a homogeneous group. Also, public policy makers should be careful in designing public support programs for internationalization. Due to the heterogeneity among non-exporters; the significant role of mental barriers in initiating exporting; as well as the changing nature of export barriers along the internationalization process in the subsequent stages; the effectiveness of such programs may be very limited.

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Abstract (in Polish)

Artykuł podejmuje temat zmian w postrzeganiu barier eksportowych w toku procesu umiędzynarodowienia firmy. Na podstawie próby 7515 europejskich małych i średnich przedsiębiorstw, zbadano różnice w postrzeganiu barier przez różne grupy firm: przedsiębiorstwa niezainteresowane eksportem, przyszłych eksporterów, pre-eksporterów, sporadycznych eksporterów, zaangażowanych eksporterów, aktywnych eksporterów, zaawansowanych eksporterów oraz byłych eksporterów. Zbadano zarówno bariery zewnętrzne (tj. uwarunkowane sytuacją na rynku krajowym

i na rynkach zagranicznych) jak i wewnętrzne (tj. związane z zasobami, strategią, działaniami marketingowymi firmy). Badanie wskazuje na istotne różnice pomiędzy częściami z analizowanych grup, dostarczając dowodów na to, że postrzeganie barier eksportowych zmienia się w kolejnych etapach internacjonalizacji.

Keywords: *bariery eksportowe, proces internacjonalizacji, małe i średnie przedsiębiorstwa, Europa.*

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Supplying Spin-Offs: Collaboration Practices in the Perpetuation of an Organization

Katja Maria Hydle¹ and Kjersti Vikse Meland²

Abstract

This paper focuses on the collaboration practices between spin-offs and their customers and suppliers. With empirical material from seven cases of incumbent-backed spin-offs, we find that suppliers are highly involved in the development of the innovation that spin-offs are based upon and specifically, the practices of understanding customers, identifying a market gap and collaborating with suppliers. We contribute to the spin-off literature by revealing which activities are at play for successful spin-offs, and we contribute to practice theory by empirically uncovering the general understandings in the perpetuation of an organization and the nets between the spin-offs and their suppliers.

Keywords: *corporate spin-offs, customers, suppliers, practices, general understandings.*

INTRODUCTION

Business relations, such as customers, suppliers and strategic partners, represent the potential for increased value creation, and learning and innovation. This paper explores spin-offs and their relations to the external environment. A spin-off is understood to be a new organization that is formed by a split from another organization (Wallin, 2012). In the spin-off literature, there is a clear distinction between university or academic spin-offs (De Cleyn & Braet, 2010; Rasmussen, Mosey & Wright, 2011) and corporate spin-offs (Bergh, Johnson & Dewitt, 2008; Bergh & Lim, 2008; Bruneel, Van de Velde & Clarysse, 2013; Clarysse, Wright & Van de Velde, 2011). Our focus is on corporate spin-offs. Inspired by Chesbrough (2002) and Clarysse et al. (2011), we understand spin-offs as new legal entities created to develop and commercialize products or services based on either technologies belonging

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to the 'parent' firm and/or opportunities identified when working for the parent company. The new firm, we designate as the 'child' firm, whereas the established firm is called the parent firm. We focus on incumbent-backed spin-offs, which result from the exploitation of an opportunity by employees, and on parent-backed spin-offs, which are initiated by parent firms (Bruneel et al., 2013).

Existing research on corporate spin-offs suggests that spin-offs occur when the external environment is strong for spinning off (Hellmann, 2007). According to Hellmann, the external entrepreneurial environment complements a firm's internal innovation and finds that employee-driven innovation can be taken advantage of through spin-offs if there is a strong external entrepreneurial environment. However, what a particularly good or strong external environment consists of is not discussed. Since spin-offs are dependent on the external environment, understanding how customers and suppliers are related to the spin-off is therefore important. The corporate spin-off literature draws primarily on the financial field for information concerning shareholder wealth and stock markets, and on the entrepreneurship and innovation field for innovation, start-ups, research and development and technology (Wallin, 2012). In corporate spin-off literature, there is thus little emphasis on the relation between customers and suppliers, which is concerning. However, there are many research streams available with respect to this relation.

Research on customer co-creation and interaction has been studied from two main perspectives: i) a supplier perspective in which researchers have taken a supplier perspective and emphasized customer participation (Jaakkola & Halinen, 2006; Mills, Chase & Margulies, 1983), and ii) a buyer perspective in which the interest has been focused on the involvement of suppliers in R & D and product improvements (Chien & Chen, 2010; Handfield, 1999; Wasti & Liker, 1997). In the literature on supplier involvement, which is primarily based on research on new product development (Chien & Chen, 2010; Handfield, 1999; Wasti & Liker, 1997), supplier influence on design, which can be achieved through information sharing, suggestions or participation, has been noted as an important dimension in the evaluation of involvement (Wasti & Liker, 1997). These different perspectives on customer co-creation and supplier involvement for innovation are highly relevant but are not highlighted in relation to spin-offs in particular. Spin-offs are, by definition, spun off to further develop products or services that were identified when working for the parent company. Although innovation is part of the reason why firms are spun off, we cannot assume that research on customer co-creation and supplier involvement for innovations are directly applicable to

spin-offs. We therefore ask the following research question: *How do spin-offs relate to customers and suppliers?*

To view how customers and suppliers are part of a spin-off, we turn to practice theory to capture what is actually done (Schatzki, 2006). Practice theory is found to be useful for viewing the enacted entrepreneurial activities (Johannisson, 2011, 2012, 2014; Keating, Geiger & McLoughlin, 2014; Steyaert & Landström, 2011). This article uses practice theories in organization studies, which are powerful lenses with which to view spin-offs as organizations as they occur (Schatzki, 2005; Schatzki, 2006; Schatzki, Knorr Cetina & von Savigny, 2001). This article, with a focus on external relations with customers and suppliers, has a twin paper that explores the internal relations between parent and child firms; these papers complement each other in exposing the practices for successful spin-offs.

Our study contributes to the existing literature as follows. First, we add to the innovation literature by examining how knowledge regarding customers and collaboration with suppliers influences spin-offs. We provide new insights into corporate entrepreneurship research by focusing our analysis on the spin-off level rather than solely on the parental level (Clarysse et al., 2011). Furthermore, we contribute to practice theory by empirically exploring how networks are important during the occurrences of an organization.

LITERATURE REVIEW

Drawing on the innovation field to understand corporate spin-offs, we first turn to product innovation. In the literature on product innovation, Danneels (2002) claims that firms developing new products need simultaneous competences that relate to both technology and customers. Customer competence is understood as the knowledge of customer needs and processes, distribution and sales channels, communication channels and company/brand reputation (Danneels, 2002). Customer focus is emphasized as key to enhancing innovation and enabling firms to sustain their competitive advantage in diverse research fields, such as strategy (Fjeldstad, Snow, Miles & Lettl, 2012; Foss, Laursen & Pedersen, 2011) and innovation (Chesbrough, 2003; Chesbrough, 2006). An understanding of open innovation emphasizes that customer co-creation and supplier relations are important parts of innovation (Chesbrough, 2003; Chesbrough, 2011; Chesbrough & Crowther, 2006). The term 'open innovation' was introduced by H.W. Chesbrough (2003) who asserted that this approach would reduce innovation costs and time. Another research stream (Baldwin & von Hippel, 2011) divides it among innovations by i) a single-user individual or a single firm that creates an innovation to use it, ii) the producer or firm wants to profit from its product

by selling it to others, and iii) open collaborative projects in which the contributors share the work (Baldwin & von Hippel, 2011). The researchers find that producer innovation without collaboration will be displaced by individual user innovation and open collaborative innovation (Baldwin & von Hippel, 2011). These insights are highly relevant for spin-offs since they begin from the firm and have an innovation output with varying degrees of collaboration with the external environment.

With an emphasis on the collaboration with the external environment, research on interorganizational collaborations is also relevant (Levina, 2005; Levina & Vaast, 2005). Interorganizational collaboration involves the development of shared practices between the participating firms (Levina & Vaast, 2008). Differences in organizational contexts are found to be mediated through shared organizational practices that have been developed (Levina & Vaast, 2008). These shared practices were created around joint development work and enabled participants to identify with one another and with their shared work (Levina & Vaast, 2008, p. 320). However, the research stream is young and based on the work of only a few researchers (Berends, van Burg & van Raaij, 2011; Levina & Vaast, 2005; Sydow, Windeler, Schubert & Möllering, 2012). Thus, to capture how successful spin-offs relate to customers and suppliers, we use practice theory to identify the activities involved.

Practice theory views practices as a set of organized activities (Schatzki, 2010, 2012; Schatzki et al., 2001). Practices are social phenomena in which multiple people participate. According to Schatzki (2005), a practice involves: i) practical understandings of the actions that are part of the practice, ii) rules or instructions, iii) teleological-affective structures that are acceptable for participants to use, and iv) general understandings of the work to be performed and the interaction involved. Because we want to focus on the interaction with others and the understanding of the work that is performed, the *general understanding* of practices is highly relevant. General understanding is referred to as the tact, courtesy, treatment of third persons, and matters germane to those specific practices (Schatzki, 2010). To understand an organization, it is necessary to view the actions that form it and the material arrangements in which those actions are performed. Although we focus on the practices of the spin-off and the external relations, we do not focus on the workings of an established organization; we aim at the origin and the perpetuation required to make the organization come about (Schatzki, 2005). The general understanding for an organization to occur is so far solely explained in relation to practice emergence as “the distillation of common general understandings” (Schatzki, 2013, p. 37). To view the perpetuation of an organization, it is necessary to identify other nets to which the organization is closely tied:

"To grasp the ties among these nets is to study, among other things, commonalities and orchestration in their actions, teleological orders, and rules; chains of action, including harmonious, competitive, and confliction interactions; material connections among nets; and the desires, beliefs, and other attitudes that participants in one net have towards to other nets. (Schatzki, 2005, p. 476)".

In other words, we will need to uncover the actions and activities directed to customers and suppliers or those between the spin-offs and their customers and suppliers. We will use these insights from practice theory regarding the general understandings and the nets to which the spin-offs are tied.

RESEARCH METHODS

To view how spin-offs relate to customers and suppliers, we wanted to identify the interactions between them. We performed a collective case study with 7 spin-off cases (Silverman, 2005). This study is based on empirical case materials derived from 25 interviews in 7 cases of spin-offs dated from 2013 and 2014 in the south-western part of Norway. Each spin-off case involves interviewing representatives from both the parent firm and the spin-off. We conducted semi-structured theory-informed interviews on spin-off processes, inquiring about their practices and activities, with an interview guide for the parent firms and one for the child firms. For every case, the objective was to interview all those involved in the spin-off process; however, it soon occurred to us that there were not that many people involved. Hence, we interviewed the CEO or the strategic manager behind the spin-off from both the parent and child firm. During the interviews, we were informed about external persons who had been important during certain spin-offs, which caused us to enlarge the interview scope for those cases to include interviews with a third party such as investors, board members, customers or suppliers, who had closely followed the spin-off process. The unit of analysis is the practices from the idea to full realization of the spin-off. When studying spin-offs, we investigated them from idea to establishment with respect to the internal and external actors involved, the activities involved, the use of innovation processes such as stage-gate processes, the access to financial support, the use of established or emergent networks, the experience needed, and the knowledge and capabilities involved. We followed a semi-structured interview guide, and each interview lasted between one and two hours. The interviews were recorded and transcribed. To preserve anonymity, we identify the cases with the numbers 1 to 7 and explain whether the interviews stems from parent or child firm or from a third party (Table 1).

Table 1. Overview of interviews in parent and child firms and third-party interviews

| Spin-offs | Parent firm interviews | Child firm interviews | Third-party interviews |
|-------------|------------------------|-----------------------|------------------------|
| 1 | 2 | 1 | 2 |
| 2 | 1 | 1 | 1 |
| 3 | 2 | 2 | |
| 4 | 1 | 1 | 1 |
| 5 | 2 | 1 | 1 |
| 6 | 1 | 1 | 1 |
| 7 | 2 | 1 | |
| 7 Spin-offs | 11 interviews | 8 interviews | 6 interviews |

The 7 cases are incumbent-backed spin-offs in oil and gas, maritime, and information and communication technologies (ICT). Table 2 provides an overview of the cases, where we understand spin-off success as still being operational and in business. Case 2 is a spin-off that remains in progress, whereas Case 5 was a spin-off that was terminated and the spin-off child firm was closed; however, the employees of the child firm returned to the parent firm (Table 2).

Table 2. Overview of the different cases of parent and spin-off companies

| Case | Parent company established | Spin-off established | No of employees in 2014 | Revenues | Spin-off success |
|------|----------------------------|----------------------|-------------------------|------------------|---------------------|
| 1 | 1966 | 2012 | 20 | Positive results | Yes |
| 2 | 2010 | 2014 | 2 | Not yet | On-going |
| 3 | 1987 | 2004 | 30 | Positive results | Yes |
| 4 | 1979 | 2004 | 10 | Positive results | Yes |
| 5 | 1973 | 2012 | None | Positive results | No (Dissolved 2013) |
| 6 | 1999 | 2013 | 20 | Positive results | Yes |
| 7 | 1948 | 2006 | 33 | Positive results | Yes |

The analysis was conducted in several steps. We used an iterative strategy going back and forth between the empirical material and theories, called mystery construction (Alvesson & Kärreman, 2007, 2011), and also referred to as abduction (Pierce, 1978). According to Alvesson and Kärreman (2007), there are three steps for this strategy: applying a theory, being surprised by empirical findings and phenomena that are not addressed in the theory and articulating a new theory intended to resolve the surprise found. First, the data were examined in relation to the research question - how do spin-offs relate to customers and suppliers? - with specific consideration for the activities related to customers and suppliers. During the interviews and data analysis, we found that supplier involvement was considerable in relation

to the spin-offs and the development of the spin-off's product, technology, services and systems. Thus, we were surprised when we identified how much collaboration there was between the spin-off and their suppliers. Iterating between in-depth analysis of the empirical findings from each spin-off case and comparisons across the spin-off cases, and connections to the literature (Alvesson & Kärreman, 2007), we thus returned to the literature and found different characteristics of collaboration for innovation, collaboration practices and practices involving nets. Across the cases, the general understandings of the customers and the market gap to fill were surprisingly similar, and we did not find differences related to industries, which is why we do not focus on those related industries. Thus, we categorized our collected material according to the emerging themes of understanding customers, identifying market gaps and collaborating with suppliers. This information is reported in the Findings and further analysed in the Discussion and Conclusions.

ANALYSIS/STUDY

Our findings indicate that successful spin-offs are a result of: i) understanding customers' or customer's customers' needs, ii) identifying a gap in the market, and iii) collaborating with suppliers to develop and test prototypes (Table 3).

Table 3. Cases in relation to their customers and suppliers

| Case | Customers' needs | Market gap | Suppliers' collaboration | Successful Spin-off |
|------|--|---|---|---------------------|
| 1 | Understanding customers' technical needs based on senior personnel with lengthy experience in industry | Delivering complete and tailor-made ship bridge solutions | Collaboration with suppliers with whom they have a long-term relationship | Yes |
| 2 | Understanding customers' needs through understanding their businesses and lengthy experience from working in the industry | Need for a tailor-made and online business management system. A new type of online platform with both standard and tailor-made modules | Not applicable yet because they are still exploring customer needs through pilot customers and internal use and are in the process of spinning off | Ongoing |
| 3 | Some employees had earlier been employed by the spin-off company's largest customer. Spin-off firm established because two customers wanted to outsource their engineering services. Therefore, employees have strong knowledge regarding customer needs | Localization of department offices close to industrial and public customers in rural areas. The plan and area consultancy companies are often located in cities | Spin-off selling complete plan & aerial services collaborating with suppliers to offer more services that are specialized such as radon measurement | Yes |

| Case | Customers' needs | Market gap | Suppliers' collaboration | Successful Spin-off |
|------|---|--|---|---------------------|
| 4 | Understanding customers' technological needs and difficulties of implementation and the need for new technologies | The technology is needed worldwide within offshore | Daily operational collaboration | Yes |
| 5 | Understanding that customers need integrated rig services | A need for locally positioned services for the offshore rig market | Did not work in a collaborative manner. Issues unresolved | No |
| 6 | Understanding how customers and end customers need new services and products | A need for elderly to be more secure at home | Daily operational collaboration | Yes |
| 7 | Understanding that customers need integrated services, therefore three firms operating as one. | Delivering integrated energy services | Top managerial collaborations and daily operational collaboration | Yes |

Understanding customers' needs

The spin-off informants emphasized the importance of understanding both customers' needs or customer's customers' needs, and the potential challenges in serving them. This understanding occurred through a variety of means. In certain spin-off cases, senior personnel had previous work experience with the same type of companies that they now were targeting as customers: *"Both I and my colleague have been working at major oil and gas companies [i.e., companies holding licenses to operate and/or being operators of oil and gas fields] and have first-hand knowledge of both their technological needs and difficulties of implementation,"* (Case 4, CEO, child firm). *"I have worked with machining. I started in 1998, so I've been here a while. Before I took over the child company I was head of another child company [of the mother firm]"* (Case 1, CEO, child firm).

In other cases, the understanding was said to originate from decades of working with the same type of customers: *"The Company started out serving the oil and gas business 40 years ago. We know the needs of the different actors of the business"* (Case 5, CFO, parent firm). *"It's a combination of all the knowledge we have gained over many years as a company. But remember that even though we took over in 2004, the company goes back to 1966. There are many people who have been here for 30 years. They have good knowledge in creating products for the offshore industry because we have only focused on sea and offshore."* (Case 1, CEO, parent firm)

In certain spin-off cases, the companies' understanding of the customers was completed by direct encounters with customer's customers, with possible users, and end customers: *"Our experience as an energy utility has*

taught us how to provide customers with different kinds of services through cables. To be able to provide services such as alarms and so on for the elderly, we sat down with nurses from the local councils to learn from their experiences” (Case 2, CEO, child firm). “The ship bridge solutions, we had an idea to create a better working environment for those on board. Make it tidy, interchangeable and flexible so customers could choose instrumentation and adapt the bridge solutions to their needs in a simple way” (Case 1, CEO, parent firm). “All employees have to understand how (customer’s) business works. Every employee here has a good business sense. It is important to us. When the CEO of a big shipping company calls and says there’s something wrong with our billing system, the employee who answers the phone has to understand what the CEO is talking about” (Case 2, CEO, parent firm).

Understanding the customers and their needs from years of experience relates to organizing the practices and the general understandings (Schatzki, 2010). The general understandings refer to the treatment of third persons, tact, courtesy and matters germane to the practices, which are clearly revealed through understanding the customers.

Identifying a market gap

We found that the spin-off entrepreneurs had identified a gap in the marketplace: *“We know there is a gap here, that there is a market for it. Those who had the system were Cisco, and they withdrew it [the system] and I don’t think they withdrew it because it was bad. I think they withdrew it because they understood the idea was destructive to their existing business” (Case 6, COO, parent firm). “For our clients, it is advantageous to contact us because they can buy all services from one company. Otherwise, the client must first consult and write a contract with company A, then go on to the next company, to B, and so on” (Case 3, CEO, child firm).*

Viewing the gap in the market that appeared after another firm left or before the development begins is a common trait: *“The development starts when one sees a need. The seller sees a need for a new solution for the subsea cameras or that the well-boats need to control the fish when they are in the tanks. Then, ‘we need a new camera’ he says. Then, we take a spin-off from the camera, and we make one that is light intensive. Lots of incremental products come out of what we already have” (Case 1, CEO, parent firm).*

Others receive enquiries and understand the market potential during the development:

“We have received enquiries from China.... We have been in Indonesia and Malaysia...we have been in Brunei several times and I have given presentations in Brunei.... Well, the market for offshore water, as I have said

I have been in Saudi Arabia several times, where they have an enormous installation where they produce and lead water to oilfields in the west part of Saudi Arabia.... Only the offshore market in total globally regarding water injection, there are estimates of about 60–70 billion dollars per year. If we have a technology that is better than our competitors, then there are some percentages of these...” (Case 4, CEO, child firm).

Identifying a market gap requires understanding possibilities in relation to the products that can be offered. Identifying a gap is important to be able to believe in and develop the products or solutions to offer. To fulfil customers' needs and to develop the product, suppliers are involved through collaboration.

Collaborating with suppliers

The spin-offs relied heavily on the successful involvement of and collaboration with suppliers. To the extent that the spin-off company's product is something that must be developed, there were extensive collaborations with technical suppliers, often mechanical or electronic workshops. These suppliers help develop and test prototypes and were viewed as an integral part of the innovation process. In the cases where the suppliers took part from the idea stage and to full production, they co-created the product: *“We have our supplier here in the region, which is a highly skilled business, which can take things from the very idea stage and aspect stage to prototype and full production and mass production”* (Case 6, CEO, parent firm).

The important role of suppliers for prototyping, servicing, launching and commercializing the spin-off's service and product is highlighted: *“It's a combination we use...it's a skill to play on. We use very competent companies that we work with, while we do a lot ourselves. The civil engineers here, they must be practical and we hire in electricians and mechanics.... However, it is especially when we are in the pilot test stage... I have two rocket scientists who work here for me. One has built electronics; the other has programmed control systems for missiles.... Now we go from pilot to industrial activities.... We have a company that, among other things, also makes electronics for F16 fighters; they are helping with the design, making the power supply that we will use”* (Case 4, CEO, child firm).

The collaboration with suppliers was extensive. When inquiring into how the involvement of suppliers related to the spin-off, the informants stressed a close collaboration. *“The idea came from a local maritime electronic company, who collaborated with a local ship design company. The person said: ‘It is a large market, but we cannot either draw or manufacture this kind of ship bridge solution, but we want to sell and market the product’. This*

kind of cooperation we have had for years” (Case 1, CEO, parent firm). Most companies emphasized that they preferred using local suppliers so that they could follow the process closely. *“To build the sensors we need, we use our supplier located not far away”* (Case 2, CEO, child firm).

In the following, we make a division between operational collaboration and top managerial collaboration. We first emphasize cases in which the collaboration has been successful, and then turn to cases in which the collaboration has stalled.

Operational collaboration

There were many accounts of successful operational collaboration between the spin-offs and their suppliers: *“Those who have been closest to the collaboration have had daily contact with the spin-off, on the technical side. We have weekly phone meetings also on the technical side regarding the development. And commercially, there have been weekly contacts there too”* (Case 6, third party). *“We are three companies that work closely together. We have three marketing departments...to work with those two companies with the most experience in the region is an asset. So yes, we have weight”* (Case 7, CEO, child firm). *“We began to work on this idea (bridge solution). We had some knowledge about it, and we worked closely with him [engineer at a ship design company] and we worked closely with another company within ship consulting”* (Case 1, CEO, parent firm).

With regard to the occasions when a spin-off did not work, we found that in Case 5, the collaboration with the supplier was not successful. We were told from different perspectives that this lack of collaboration was the main reason why the top management of the parent firm dissolved the entire spin-off (for an exposition of the managerial involvement and its role in the spin-off, please refer to the twin paper): *“So we agreed on the basic premises. There were three partners here. One supplier had the main contract. In addition, we had to go through this supplier to talk with the third firm. A bit awkward really. And this was one of the reasons why it did not work out in the end. Too many special interests”* (Case 5, CEO, child firm). *“The other supplier company was very clear that they wanted to be part of this and that the spin-off company could use the supplier company. So the supplier company was in the same situation as the spin-off firm. They have not called off the deal, but they clearly said ‘we have not managed to reach our goals to collaborate with an oil company, and people who can work with us. Therefore, we do not ask for exclusivity any longer’”* (Case 5, third party). Both the child firm and the third party explained how a lack of operational collaboration with the supplier was a large part of the reason why the spin-off did not succeed.

Top managerial collaboration

Collaboration with suppliers also occurred at a managerial level. Problems, disagreements or deviations from existing plans were elevated to a managerial level in order to secure collaboration between partners: *“We managers, together with the managers of the suppliers, we are able to sit down there and talk...when we disagree on something then, I say ‘ok, but then you owe me two pints’, ‘OK then’. You must be at a level that makes you flexible....Are you too inflexible and begin to bill? It’s guaranteed to become troublesome. You cannot capture everything in such large projects. We are talking about projects of the size of 100 million in total. And then we cannot start going bananas because someone or something is not going according to plan. You need to go up one level to the managerial. Then, you have to look a little bigger on it....The balancing act I think is important.... In each project, it is impossible in advance to know about everything. But we are very clear that we do not accept turmoil in the projects. So, when things occur, it just gets noted down, and so we, [at a managerial level] treat it afterwards, so that it is something we must learn for the next time. And the economic bit in between here, we have written an agreement on how to deal with things. And then we left it up to me and the other manager, and then he and I agreed. In that way, the operational level is not sitting and arguing about the 10 thousand”* (Case 7, CEO, parent 2).

Successful collaboration with customers is also a managerial strategy: *“We say it to both customers and suppliers; we do not want to replace suppliers or customers. We do not believe that it gives us something of value in the long term. We want long-term relationships. And we choose to prioritize those customers who prioritize us. So, that...there have been some quite hectic times here. Sometimes, customers come with a project and I tend to say that ‘Basically, if it is only this project, then it is not interesting for us’. Because we have no faith in prioritizing disposable connections. If we see an opportunity to have a cooperation over time, then we want to be a part”* (Case 7, CEO, parent 1).

Supplier collaboration at a managerial level appears to be important for successful partnerships. A lack of successful supplier collaboration exposes how important it is for the spin-offs: *“We saw that the willingness to be involved long term was not big enough. Supplier A had trouble doing what they said they would do. To be part of building multipurpose buildings that would be large enough facilities for all of us and with a cluster effect immediately. It was not implemented, and it was, excuse the expression, a bit amateurish and a dilatory treatment of this because it goes a little beyond the level of competence they have really.... And then supplier B who thought that we should do everything...writing back to us that ‘maybe this can be difficult,*

you should create xxx, you should do...'; it was difficult for our board to strategically burn for the matter. So, that was why the tripartite collaboration was dissolved ... The location is ideal, the investments are ideal, there are many things that are ideal. However, the structured partnership model... it became an enemy. It looked very good to begin with, but I guess when you look back a year from now, one of those suppliers are gone" (Case 5, CEO, child firm).

Due to a lack of successful supplier collaboration, the board of Case 5 did not approve further operations; Case 5 as a spin-off was dissolved, and the employees returned to the parent firm. Successful collaboration with suppliers both at an operational and at a managerial level is shown to be highly important for spin-offs.

DISCUSSION

We set out to answer the following research question: *How do spin-offs relate to customers and suppliers?* We found that understanding customers and identifying market gaps involved general understanding from practice theory, whereas collaborating with suppliers exposed the net ties. Our findings reveal how customers and suppliers are involved in spin-offs. Practice theory's strength is to grasp which activities are performed and the practices they form. The nets, the actors' relations and implications for the spin-offs when not successful demonstrate how these are important.

The findings elaborate upon and extend innovation literature and perspectives on customer focus and supplier involvement. Our findings show that customer understanding is highly important for the spin-off to be successful. This finding is in accord with the literature on innovation, in which customer focus is an integral component (Chesbrough, 2003; Chesbrough, 2006; Danneels, 2002; Fjeldstad et al., 2012; Foss et al., 2011). This finding is not surprising; however, the extensive collaboration between the spin-offs and their suppliers is more of a surprise. The important role of suppliers for prototyping, servicing, launching and commercializing the spin-off's service and product was found to be critical. Whereas our findings show that suppliers play a key role in providing technological knowledge to the spin-offs, Clarysse et al. (2011) found that the technological knowledge characteristics of the spin-off's performance were found within the spin-off firm. Thus, we extend existing spin-off literature by exposing that technological knowledge critical to the spin-off often stems from suppliers.

Our findings of the close collaboration between spin-offs and suppliers are in line with what Baldwin and von Hippel (2011) denote as open collaborative projects in which the contributors share the work. We exposed

how the suppliers are participating as co-developers and co-creators during prototyping, servicing, launching and commercializing the spin-off's service and product. In several cases, the suppliers even shared the financial burden for the product, systems and service development. In addition, the practices involved assuring close collaboration at all levels. There were daily technical and operational collaborations, managerial collaboration and board-level collaboration between the spin-offs and their suppliers. Thus, our findings extend Baldwin and von Hippel's (2011) understanding of open collaborative projects in specifying how suppliers are participating both at an operational and a managerial level. To the spin-off literature, our findings extend the entrepreneurship and innovation field (Wallin, 2012) regarding external entrepreneurial collaboration (Hellmann, 2007).

Our contribution to practice theory in relation to the perpetuation of an organization is the focus on inter-organizational practices. First, we found that the general understanding is highly important for customer relations and for identifying a market gap. Second, the nets to the suppliers, both at an operational and at a managerial level, exposed the activities involved and how the actors are linked through these ties. There were daily chains of action between the spin-offs and the suppliers at an operational level. When there were disagreements, these were discussed at a managerial level and occasionally taken to the boards. On occasions in which there was an excessive quantity of 'special interests', or in which the supplier failed to deliver, the spin-off was dissolved, as in Case 5. In line with Schatzki, who emphasized that the harmonious, competitive and conflicting interactions during the chains of action among the nets is important to uncover (Schatzki, 2005, p. 476), we found that the interactions were addressed at all levels, and when the interactions were overly conflicting, the ties were cut, and the spin-off was dissolved. Thus, the nets with suppliers are critical for successful spin-offs, and the practices of collaboration with suppliers are manifold. Thus, our contribution to interorganizational collaboration practices is that we found that the practices involved daily operational and technical collaboration as well as managerial collaboration. In accordance with Levina and Vaast (2008), these shared practices were created around joint development work and enabled participants to identify with each other and with their shared work. Our contribution to this new research stream is the uncovering of operational and managerial collaboration for the spin-offs to be dissolved or successful.

CONCLUSION

This paper contributes to interorganizational collaboration practices, innovation literature and to perspectives on customer co-creation and

supplier involvement. Suppliers who will collaborate are important for the commercialization of a spin-off, and the interorganizational collaboration practices are extensive. The strength of the empirical material is the triangular view of the parent firms, the child firms and third parties that have been involved during the spinning off. A limitation of this study is that we have not been able to follow the practices of collaboration over time. Instead, we addressed the activities of collaboration in retrospect with several spin-off cases to identify the phenomena of how spin-offs relate to customers and suppliers (Schatzki, 2016). Future studies could follow the interorganizational collaboration practices between a spin-off and a supplier to uncover how the nets develop in time and space. How the nets elaborate and how the different ties between the spin-offs and the suppliers develop are unresolved questions for future research.

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Abstract (in Polish)

Artykuł dotyczy współpracy pomiędzy firmami spin-off a ich klientami i dostawcami. Materiał empiryczny dotyczący siedmiu przypadków firm spin-off wspieranych przez tradycyjnych uczestników branży, wskazano że dostawcy są w znaczącym stopniu zaangażowani w rozwój innowacji, na których opierają się firmy spin-off, jak również omówiono praktyki rozumienia klientów, identyfikowania luk rynkowych i współpracy z dostawcami. Wkład do literatury dotyczącej spółek odpryskowych polega na identyfikacji działań, które przyczyniają się do sukcesu spin-offów, pozwalając na pogłębienie zrozumienia sposobów utrwalania organizacji i sieci relacji pomiędzy spin-offami i ich dostawcami.

Słowa kluczowe: korporacyjny spin-off, klienci, dostawcy, praktyki, ogólne rozumienie.

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Strategic Management of Agribusiness: Determinants and Trends

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Abstract

Intense changes have arisen in global agriculture, yielding a new market reality that is more complex and competitive than before. To confront these changes, a renewed perspective on the practice of agribusiness management is necessary. However, studies in this critical line of research are scant. This study updated the outlook on the strategic management of agribusiness in Taiwan by conducting in-depth interviews with 10 expert agripreneurs. The results indicated that agribusiness strategies can be categorised as targeting one of three dimensions: the external environment, the internal environment, and sustainable development. This paper discusses each dimension in detail and suggests five broader trends of strategic management.

Keywords: *agribusiness, agribusiness entrepreneurs, strategic management, sustainable development.*

INTRODUCTION

Over the past three decades, dramatic structural changes have occurred in agriculture worldwide as a result of globalisation, economic liberalisation, environmental regulation, rapidly shifting societies, and reduced protection of agricultural markets that are increasingly complex and competitive (Boehlje, Doehring & Sonka, 2005). These changes direct the emergence of new customer bases and consumption behaviour patterns for agricultural supply manufacturers, distributors, and retailers. To properly confront these changes, a new perspective on the strategic management of agribusiness is necessary. Strategy typically refers to the ability of an organisation to position itself in the market in a way that best suits its resources and competences. Actual business conditions require prompt adaptation strategies (i.e., strategic

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management) that suit dramatic changes, especially in the agricultural sector (Rankin, Gray, Boehljec & Alexander, 2011; Rogers & Caswell, 1988).

Accordingly, three critical strategic considerations should be examined in agribusiness: (1) managerial decisions must be made in an environment of increasing risk and uncertainty, (2) developing and adopting technology and new innovations is critical to long-term financial success, and (3) responding to changes in industry structure, the competition landscape, and industry boundaries is essential to maintaining market position (Boehlje, Roucan-Kane & Bröring, 2011). In essence, the strategic decisions of agribusiness managers must be based on internal considerations of costs, technology, risks, financial planning, and managerial resources, as well as external considerations of synergies, differentiation, market positioning, and marketing strategies. In addition, Rankin et al. (2011) suggested that the sustainability dimension of strategies deserves specific attention when discussing the strategic management of agribusiness.

Agribusiness managers are usually sensitive to their financial position, government environmental regulations, the bargaining power of their customers, and the identification of product rivals (Westgren, Sonka & Litzenberg, 1988). However, the aforementioned changes indicate an urgent need to update the managerial practices of agribusiness operators, which increasingly must include principles of entrepreneurship (McElwee, 2008). This necessitates a revisiting of the strategic management of agribusiness, particularly in Asia-Pacific countries where agriculture has a crucial role in the socioeconomic fabric. Nevertheless, academic studies in this area have been limited to date. This manuscript reports the results of such a research effort and analyses the resulting new perspective on the strategic management practices of expert agripreneurs in Taiwan. We hope that these brief but critical research findings can generate unique academic and practical contributions.

LITERATURE REVIEW

Strategic management for agribusiness

Academic research into strategic management dates to the 1950s. The focus of strategic management has shifted from business policy to competitive advantage and finally to corporate governance. Strategic management has also been transformed from focusing on long-range planning, five-force analysis, strategic advantage, core competency, and blue ocean strategy to incorporating flexible corporate strategies appropriate for the rapidly changing modern environment (Financial Times, 2015). Earlier studies of

agribusiness management (e.g., Rogers & Caswell, 1988; Westgren & Cook, 1986) have indicated that agricultural researchers have ample opportunities to contribute to the area of strategic management, and these studies have urged meaningful, timely, and applicable research in this critical field.

Strategic management is defined as the process of examining both present and future environments, formulating an organisation's objectives, and making, implementing, and controlling decisions focused on achieving these objectives in present and future environments (Smith, Arnold & Bizzell, 1985). Strategic management can also be defined as the process of managing the pursuit of organisational goals while managing the relationship of an organisation to its environment (Higgins & Vincze, 1993). Dess, Lumpkin, and Taylor (2005) held that strategic management comprises the analysis, decisions, and actions that an organisation executes to create and sustain competitive advantages; in other words, strategic management involves the formulation and implementation of major goals and initiatives by a company's top management on behalf of the company's owners.

Nag, Hambrick, and Chen (2007) indicated that a company's goals and initiatives are formulated and implemented according to the consideration of resources and an assessment of the internal and external environments in which the organisation competes. Academics and corporate managers have developed numerous models to assist in strategic decision making in the context of complex environments and competitive dynamics (Ghemawat, 2002; Westgren & Cook, 1986). These models, including Pearce and Robinson's strategic management model, Porter's forces driving industry competition, the BCG growth-share matrix, and the McKinsey model for business portfolios, have all suggested that both internal and external environments should be considered.

In light of the structural changes in agriculture resulting from climate change and urbanisation trends, the requirements for new entrants, innovation, and social entrepreneurship have become clear. Agricultural practitioners increasingly require entrepreneurship, in addition to sound management and craftsmanship, to be sustainable in the future (McElwee, 2008). On the basis of the aforementioned studies, agricultural attributes, and global sustainability, Rankin et al. (2011) indicated that the strategic management of agribusiness must consider the dimension of sustainability. Therefore, the following literature review is divided into three parts: the external environment, the internal environment, and sustainable development.

External environment

Traditionally, strategic management models have identified the main elements of external environments as including: the general economy, the regulatory environment, customer markets, competition, suppliers, labourers, and technology (Dess et al., 2005; Smith et al., 1985). Westgren et al. (1988) identified several external environments that should be considered in agribusiness management, namely the general business environment, industry trends, analysis of competitors, and potential industry entrants. In addition to the domestic market, international agricultural policies critically influence agribusiness performance (Kennedy, Harrison & Piedra, 1998). Determinants of agricultural export performance may include environmental factors (e.g., hostility and price competition), aspects of export competitive advantage (e.g., firm export competence, export channel knowledge, product adaptation, competitive price, and distributor support), and channel relationship antecedents (e.g., information exchange and cooperation) (Karelakis, Mattas & Chrysochoidis, 2008).

Government policy is usually a double-edged sword, creating both advantages and disadvantages for agribusiness. Harling (1994) concluded that government protection is finite, and that business strategies appropriate when a market is protected can be inappropriate when protection is removed. Hartwich and Negro (2010) showed that governments support innovation initiatives through various funding schemes that do not explicitly foster collaboration. Rosairo, Lyne, Martin, and Moore (2012) further indicated that agribusiness management problems may increase if governments do not plan to facilitate their policies.

The capacity of agribusinesses to respond to changes in industry structure, the competitor landscape, and industry boundaries is essential to maintaining market position (Dobson, 1992). Empirical results suggested that the strategies of product development applied by successful agribusinesses are the key to their faster growth relative to competitors (Giannakas & Tzouvelekas, 1998). In addition to research and development (R&D) investment and the risk of failure, agribusiness product-innovation strategies mainly depend on competitors' counterstrategies (Russo, Cardillo & Perito, 2003).

Traditionally, most agricultural firms are family businesses in which family interactions must be incorporated into agribusiness operations (Heiman, Just, McWilliams & Zilberman, 2001). Nowadays, the role of diverse social networks as strategic resources should be noted when considering the external environment of agribusiness management. These networks are created by farmers in various forms for their mutual benefit, such as strategic alliances, joint ventures, partnerships, integration, cooperatives, and value chains. The proper operation of these social networks not only allows farmers

to manage and customise their production according to consumer needs but also helps farmers achieve scale economies, reduce transaction costs, accelerate information gathering, share R&D outcomes, expand distribution channels, and eventually promote industrial status (Amanor-Boadu, Marletta & Biere, 2009; Bhuyan, 2005; De Moura, Martin & Mollenkopf, 2009; Gall & Schroder, 2006).

In summary, the critical external environmental factors for the strategic management of agribusiness are: the general business environment, agroindustrial trends, government policy, international and domestic competition, potential industry entrants, the supply chain, distribution channels, and family interactions.

Internal environment

The main elements of the internal environment identified by the strategic management literature typically include: business functions (marketing, finance and accounting, production and operation, human resources, R&D, and management information systems), the value chain, and business portfolios (Dess et al., 2005; Smith et al., 1985). Among the critical issues raised by the agribusiness literature, strategic positioning and goal setting are frequently mentioned. These actions are crucial in helping agribusinesses confront structural change in the industry (Goldsmith & Gow, 2005). Westgren et al. (1988) indicated that agribusinesses with formal planning systems are relatively more concerned with future financial performance, whereas firms with informal planning systems focus more on current measures of financial position. Westgren et al. indicated that product-oriented firms are more sensitive to the potential for identifying new markets than are commodity-oriented firms. In addition, Baker and Leidecker (2001) suggested that the use of a mission statement, long-term goals, and ongoing evaluation are heavily emphasised by high-performing agribusiness.

Providing a quality product can be considered the most essential service of an agribusiness. Russo, Cardillo, and Perito (2003) emphasised the critical roles of R&D investment and the risk of failure in product-innovation strategies. Capitano, Coppola, and Pascucci (2010) suggested that the capacity to build relationships in product markets is the determinant of product innovation, and that the territorial context determines the relevance of each driving factor of innovation. Liu, Kemp, Jongma, Huang, Dons, and Omta (2014) further argued that integrative capabilities play a crucial role in innovation novelty, which enhances product superiority, and in improving functional capabilities and gaining market potential. In addition, Gellynck, Cárdenas, Pieniak, and Verbeke (2015) confirmed that trust and innovative

entrepreneurial orientation influence farmers' absorptive capacity, and that innovative entrepreneurial orientation influences agribusiness performance.

Marketing is another critical aspect of agribusiness management. A previous study showed that market-oriented agribusinesses are highly innovative and achieve superior performance (Micheels & Gow, 2008). A well-balanced marketing plan emphasises overall superiority, and must be designed for both retailers and consumers (Hsu & Wann, 2004). Vertical coordination mechanisms must be installed in the marketing plan, leading to competition among retail chains and thus ensuring quality and building brand equity (Hanf & Kühn, 2005). Moreover, prior research has indicated that store atmosphere, customer service, and product quality are the main marketing factors that influence customer satisfaction regarding agrifood retailing (Lülfes-Baden, Spiller, Zühlsdorf & Mellin, 2008). Although many farmers have strong marketing preferences associated with traditional spot markets, scholars and practitioners have urged that Internet strategies should be adopted in a supply-distribution management framework (Henderson, Dooley, Akridge & Carerre, 2005), particularly the use of social media and customer relationship management systems for agrifood retailing (House, House & Mullady, 2008; Torres, Jr., Akridge, Gray, Boehlje & Widdows, 2007).

Furthermore, the performance of other aspects of management is also crucial for agribusiness. For example, Harling (1988) indicated that agribusinesses with high returns on assets have more diversified product lines, are superior at controlling general expenses, and have fewer assets. Baker, Starbird, and Harling (1994) determined that factors critical to successfully managing quality in agro-industry are top management, the role of the quality department, employee relations, employee training, and process management. Martinez and Poole (2004) suggested that a move towards flexibility and adopting an entrepreneurial style are both likely to contribute to improved agribusiness performance. In addition, Henderson et al. (2005) indicated that Internet strategies are more likely to be adopted in larger firms with a global scope.

In summary, the critical internal environmental factors for the strategic management of agribusiness include: goal setting, strategic positioning, quality product, service innovation, marketing management, vertical coordination, customer service, top management, employee relations, cost control, and financial management.

Sustainable development

In the past 20 years, numerous agricultural studies have focused on sustainable development (Hansford, Cary & Coath, 2003; Horrigan, Lawrence

& Walker, 2002; Thompson, 2007). The sustainability of the agrifood system and farming as a multifunctional enterprise is of increasing importance. Häni, Pintér, and Herren (2007) indicated that successful short- and long-term adaptation to endogenous and exogenous, biotic and abiotic, and social and economic forces requires access to information and indicators on the current situation as well as possible future trends in the ecological, social, and economic domains of sustainability. Lubell, Hillis, and Hoffman (2011) reported that a central goal of most sustainable agriculture programmes is to encourage growers to adopt practices that jointly provide economic, ecological, and social benefits.

Previous studies have developed various tools for measuring the concept of agricultural sustainability. For example, Zahm, Viaux, Girardin, Vilain, and Mouchet (2007) proposed the French *indicateurs de durabilité des exploitations agricoles* (IDEA) method, which covers 16 objectives: coherence, biodiversity, soil preservation, water preservation, atmosphere, product quality, ethics, local development, landscape preservation, citizenship, the management of non-renewable natural resources, human development, quality of life, adaptability, employment, and animal well-being. Häni, Stämpfli, Gerber, Porsche, Thalmann, and Studer (2007) proposed the RISE (response-inducing sustainability evaluation) model, which contains 12 indicators covering ecological (natural resources and their management), economic, and social aspects fundamental to the sustainability of agricultural production. The natural resources aspect comprises energy, water, soil, and biodiversity; the management aspect comprises emission potential, plant protection, and waste; the economic aspect comprises economic stability, economic efficiency, and the local economy; and the social aspect comprises working conditions and social security.

From the perspective of agribusiness, Lubell et al. (2011) suggested that cooperation, innovation, and knowledge gaps are likely to be relevant for the resilience and sustainability of numerous types of socioecological systems. Rankin et al. (2011) determined that strong management pressures have a substantial relationship with the level of an agribusiness's sustainability initiatives. Other pressures include competition, government regulations, the media, the company's primary function, and company size. Furthermore, Ross, Pandey, and Ross (2015) indicated that agribusinesses may transition their sustainability initiatives to focus on internal initiatives that address environmental and supply chain concerns over time. From the perspective of consumption, Nasir and Karakaya (2014) determined that socially responsible, health-oriented, utilitarian, and hedonic consumption patterns are significant predictors of intention to purchase organic foods. In addition, environmental

responsibility could act as a moderating factor between socially responsible consumption behaviour and intention to purchase.

METHOD

Participants and procedures

Because of the preliminary nature of the current study, a qualitative method was adopted for exploring the strategic management of Taiwanese agribusiness. The research participants did not allow us to conduct a detailed investigation into their professional lives to study their managerial practices. Therefore, we adopted a semi-structured interviewing method rather than a case study approach. According to Cohen and Crabtree (2006), semi-structured interviews are preceded by informal and unstructured interviews to allow researchers to develop a deep understanding of the topic of interest, which aids in formulating relevant and meaningful questions. In this study, semi-structured in-depth interviews were conducted with 10 expert agripreneurs in Taiwan. Prior to each interview, we invited the participants to read a letter of informed consent and obtained the participants' verbal consent to participate in this study.

For inclusion in the current study, participants had to (i) have been involved in agroindustry for more than 10 years and have been responsible for leading or managing a production-oriented agribusiness; (ii) have received central or local government recognition (e.g., the One Town One Product Award or Agribusiness Science & Technology Innovation Award); (iii) be a renowned expert in the Taiwanese agroindustry; and (iv) be willing to be interviewed. These criteria allowed for a certain degree of diversity in the participants, such as different fields of agriculture (e.g., crop, fertiliser, tea, fruit, and beekeeping). Therefore, a broad range of expert managers' experiences could be explored. The ages of the participants ranged from 35 to 78 years. The participants were coded as M1 to M10.

Data collection

Semi-structured in-depth interviews were conducted from 5 May 2015 to 10 June 2015 as a flexible and responsive approach to determine the recent managerial practices of the study participants. The interviews, which lasted for approximately 120–150 minutes, were audio-recorded and transcribed after receiving permission from the participants. The process was identical for all interviews to ensure uniform quality. The following prompts derived from the literature review were included in the topic guide to elicit the

experiences and opinions of each participant: ‘What external environment factors influence the operation of your agribusiness?’ and ‘How do you handle these factors in terms of strategic management?’ We then asked additional questions regarding the external environment and inquired about the other two dimensions, namely the internal environment and sustainable development. Table 1 lists the questions for each dimension of strategic management.

Table 1. Interview questions for the three dimensions of strategic management

| Dimension | Interview Questions |
|-------------------------|---|
| External environment | <p>What is the future development of agroindustry? What opportunities will appear for Taiwanese agroindustry?</p> <p>Who are the competitors your agribusiness faces? How do you confront this competition? How do you enhance the competitive advantages of your agribusiness?</p> <p>What are your cooperative strategies for dealing with your suppliers? How do you ensure supply quality and efficiency?</p> <p>What are the distribution channels you cooperate with? How do you ensure distribution stability?</p> |
| Internal environment | <p>What are the goals and direction of your agribusiness? What are your plans for different product lines? Do you have any thoughts about new product development?</p> <p>What are your marketing plans and approaches? Do you have any innovative marketing strategies for the future?</p> <p>What are your organisational structure, human resource, and financial management plans for facilitating future development?</p> |
| Sustainable development | <p>What social responsibilities should an agribusiness carry? Do you have any ongoing practices and future plans for ecological sustainability and social responsibilities based on satisfactory economic performance?</p> |

Data analysis

The three authors of this study coded the interview transcripts independently to avoid influencing each other. A ‘theory-driven’ strategy based on the literature review was used as the initial coding framework, which allowed new themes to emerge from the data analysis process (Braun & Clarke, 2006). The interview transcripts were thus indexed and mapped according to the three dimensions (external environment, internal environment, and sustainable development). The synthesised data were examined to identify explanatory accounts that emerged in the process.

To ensure the quality of this study, triangulation was performed, resulting in the following measures for reliability and validity: (i) a topic guide was used to ensure that a similar range of topics was discussed with each participant; (ii) each interview transcript was sent to the participant for revision and confirmation; (iii) the coding process was performed by all three researchers;

and (iv) the researchers compared the transcript contents with the reviewed literature to determine whether any topics required further discussion.

The inter-rater reliability of each theme was independently calculated by two raters (the first and corresponding authors), which prevented the raters from influencing each other. Cohen's kappa statistical test was used to measure intercoder reliability and revealed significant consistency in the scores assigned by an expert in agribusiness management (the second author). The Cohen's kappa of this study was 0.86 (> 0.70), indicating a significant correlation ($p < 0.01$) between the results of each rater (Banerjee, Capozzoli, McSweeney, & Sinha, 1999).

RESULTS

External environment

Three themes related to the external environment emerged during the analysis process, namely agricultural development trends, agroindustry competition analysis, and social networks. Each subtheme is discussed as follows.

Agricultural development trends

The participants perceived the *agroindustrial environment* to be an essential aspect of agribusiness strategy, making comments such as 'We previously focused only on planting, but now consumers are increasingly concerned about the quality and safety of our products' (M3), and 'We invested in agriculture, and have specialised in home-grown nontoxic organic fruits and vegetables for our own supermarkets. After withstanding 3 years of losses, we finally broke even this year' (M10). This result agreed with those of previous studies (e.g., Kennedy et al., 1998), indicating that closely monitoring the dynamics of the consumption market and responding to them appropriately are essential strategies in modern agribusiness.

The participants indicated that *international trading* was also a critical aspect of agribusiness strategy, stating that 'the Japanese government sends experts to the countries that import its products to learn their pricing policy and market channels. These experts then analyse and provide business information to Japanese farmers. High-quality Taiwanese fruits are considered satisfactory by Japanese and Singaporean customers' (M4). Another participant said, 'Customer selection of imported products largely depends on national image' (M8). This result agreed with those of previous studies (e.g., Karelakis et al., 2008) indicating that a customer-oriented (rather than

product-oriented) approach should be considered in international agricultural trading to establish a market position and develop product features.

The participants noted the dual effects of *government policy*, namely creating advantages and causing problems, as indicated in the literature. For example, participants stated that ‘Taiwanese farmers have abundant opportunities, but numerous innovative actions are restricted by government regulations’ (M2), and that ‘The government should determine Taiwan’s position and strategic values in the global market, and then make policies to guide domestic farmers’ (M4). This result agreed with prior research (Hartwich & Negro, 2010; Rosairo et al., 2012), which suggests that the government should have a clear plan to support innovation through various funding schemes, and simultaneously foster agribusiness collaboration.

Risk assessment was another crucial aspect of agribusiness strategy noted by the participants, in comment such as ‘Today’s agribusinesses must be capable of performing risk assessment. Even in the case of a climate problem, there must be a stop-loss point’ (M6), and ‘I have invested in several product certifications, but there are certainly unforeseeable risks ahead that I need to prepare alternatives for’ (M9). This result agreed with those of earlier studies (e.g., Russo et al., 2003) indicating that a cautious assessment regarding the risks of R&D investment is a crucial strategy for agribusinesses facing environmental uncertainties.

Agroindustry competition analysis

The participants indicated that identifying the *core competence* of an agribusiness was the most effective strategy for enhancing competition, stating, for example: ‘The core competence may depend on the market and competitors rather than ourselves. To me, ensuring product quality is the best core competence’ (M7), and ‘We have adopted an ERP [enterprise resource planning] system to stabilise our planned production, which is irreplaceable’ (M9), and ‘Our ecological farming and quality monitoring systems, which gained us ISO 2200, HACCP [Hazard Analysis Critical Control Point], and ASC [Aquaculture Stewardship Council] certificates, are a powerful weapon for outperforming competitors’ (M10). This result concurred with those of prior research (Dobson, 1992; Giannakas & Tzouvelekas, 1998), indicating that unique agribusiness management and technology have become increasingly crucial as agroindustry has become more competitive.

The development of *competitor counterstrategies* was also frequently mentioned by the participants. For example, participants stated: ‘Product quality must be good, or we will not be able to sell our products in high-end distributors like Costco. Compared with competitors, our product quality

is certificated' (M9). This result concurred with those of previous studies (e.g., Russo et al., 2003), which have suggested that product differentiation and quality certification are appropriate strategies for gaining competitive advantages in agroindustry.

Another relevant strategy noted during the interviews was competing with *potential entrants*, with participants stating, for example, 'Our strategy is mass production to block competitors and potential entrants' (M1), 'Only by establishing a unique brand emphasising the differentiation of product quality can we win price wars initiated by potential entrants' (M4), and 'Agriculture itself has a certain professional threshold. Partners in a vertical alliance have greater chances of becoming competitors' (M6). This result concurred with those of prior research (Russo et al., 2003; Westgren et al., 1988) in indicating that promoting production efficiency, reducing costs, and enlarging the economic scale are feasible competitive strategies.

Social networks

Agricultural production, processes, and distribution involve specific professions and complex networks, among which the *supply chain* is crucial, according to the participants. For example, participants said: 'We adopt information technology intensively. From planting to harvesting, we have a strong alliance with automatic control vendors' (M8), 'Having a stable supply and maintaining a certain quality are crucial for the domestic small-scale agricultural system' (M9), and 'I have travelled around Taiwan and developed a comprehensive farming map. I know what, where, and how to purchase what I need' (M10). This result echoed those of previous studies (e.g., Amanor-Boadu et al., 2009), which have indicated that Taiwanese agricultural workers, particularly technology vendors and expert farmers, must consider supply chains as a strategic resource.

Because the agribusinesses owned by the participants in this study were production-oriented, *distribution channel* was frequently mentioned while discussing social networks; for example, participants said: 'The major distributors we cooperated with were renowned supermarkets including Costco. Soon, after the Internet of Things has matured, our products may be sent to consumers directly' (M1), 'Selling has been a big obstacle to small or traditional agricultural workers. The price is controlled by distributors who may not spend time promoting the product value' (M3), 'Modern farmers must understand marketing to deal with various distributors' (M4), and '20% of our products are sold in farmers' markets, 30% by distributors, and the rest in our own store' (M6). This result, like those of previous studies (Bhuyan, 2005; De Moura et al., 2009), indicated that marketing has become

an essential skill for modern farmers, helping them promote product value, manage interactions with distributors, and increase revenue.

In addition to noting supply chains and distribution channels, the participants emphasised the critical role of *strategic alliances* in agribusiness strategy, stating, for example: 'Taiwanese agriculture benefits through strategic alliances, which create brand names, expand market size, provide consultation, and sell agriproducts or package plant exports' (M2), 'We need innovative thinking to lead young farmers and their partners to create a new business model through strategic alliances' (M3), and 'I am good at information flow and resource integration, enabling me to think from both the production and consumption side. I am thus able to identify and develop different alliances to break into the market' (M4). This result echoed those of previous studies (e.g., Gall & Schroder, 2006), indicating that both horizontal and vertical strategic alliances among the actors involved in production, processing, and distribution are crucial to small-scale Taiwanese agribusiness.

A total of 4 of the 10 participants were involved in family businesses; hence, *family interaction* was commonly suggested as a critical aspect of strategic management. For example, participants stated: 'Family support is particularly important during the period of early operation. In addition, the interaction between generations is critical during business transition, which is time-consuming and often rife with conflict' (M3), 'My father did not know how essential brand management, multiple channels, and new product development are. Communication with him was difficult, even, I would say, useless' (M5), 'This is a third-generation tea business. My father criticised my efforts at branding as nonsense until I turned a profit' (M7), and 'My dad thought that I was crazy when I prepared to apply for certification. The certification requires a few million [Taiwanese] dollars to maintain per year and involves evaluation by foreigners. He became silent after our products were allowed to be sold in Costco and even exported abroad' (M9). This result, which is supported by prior research (Heiman et al., 2001), indicated that continual communication and accumulated achievements are a common agribusiness strategy for managing family dynamics or generational conflicts.

Internal environment

Four themes related to the internal environment emerged during the analysis process, namely goal setting, production management, marketing management, and business administration.

Goal setting

Compared with traditional farmers, new-generation farmers, particularly agripreneurs, stressed *business philosophy* more when discussing their managerial practices. For example, participants stated: 'I plan to use part of my land for organic farming. It will create value for me' (M3), 'After all these years, I decided to come back to Taiwan to participate in land reform and help improve domestic agroindustry' (M4), 'I have spent most of my life in high-tech business and decided to engage in a career closer to the land and people' (M6), and 'By using specific baking techniques, I divide tea products into 10 categories, which enables customers to enjoy different tastes' (M7). This result agreed with those of earlier studies (e.g., Baker & Leidecker, 2001), indicating that the dual goals of environmental protection and value creation were common among the participants.

The participants also stressed the importance of *vision development* for agribusiness, saying 'We wish to cultivate 40 young generations of organic farmers, and for each of them to transfer their techniques and experiences to 40 farms. Our agricultural dream is to facilitate Taiwan becoming an organic nation' (M8), and 'We are the first cooperative in Taiwan with certified product traceability. We have developed an operation process specific to a small-scale farming system based on the core technology of a large-scale system' (M10). This result concurred with those of previous studies (e.g., Leidecker, 2001), indicating that the participants sought traceability certification and technique transfer to support their missions and achieve their goals.

Business transformation is another crucial strategy cited by the participants, who said, for example: 'A capable entrepreneur should be able to handle both red ocean and blue ocean markets. The red ocean market is certain and large—the main battlefield. The blue ocean market may currently be a niche but is also a future red ocean' (M1), 'In addition to selling fertiliser, we have engaged in the manufacture of fertiliser-making equipment, and then sold the equipment, techniques, and even the materials. Some of our equipment is patented' (M2), and 'We are continually expanding and learning by doing, and are gradually being accepted by consumers' (M3). This result agreed with those of prior research (e.g., Westgrem et al. (1988), indicating that product-oriented entrepreneurs are sensitive to changes in the market and capable of restructuring their agribusinesses accordingly.

The participants frequently mentioned the inevitable *internationalisation* of Taiwanese agribusiness because of the participation of the Taiwan government in the World Trade Organisation. For example, 'I do not think pricing competition is a good idea for a small-scale farming system. By securing the quality of our agriproducts and shaping Taiwan as a high-standard living environment, Taiwan will gain a prestigious image and its products will be

accepted by advanced customers' (M4), 'Taiwanese agriculture has plenty of professional techniques and managerial knowledge that can be packaged as consultation services' (M8), and 'I expended enormous effort to apply for certifications such as ASC and ISO to cross over the trade barrier to various international markets' (M9). This result echoed those of earlier studies (e.g., Kennedy et al., 1998), indicating that product quality and agricultural knowledge are feasible internationalisation strategies for Taiwanese agribusiness. In addition, this result suggested that the government should exert more effort in elevating Taiwan's image abroad.

Production management

The participants perceived *product quality* as the most crucial requirement in agribusiness, saying, for example: 'Consumers will not return if product quality does not meet their expectations. Agriproducts cannot just rely on gimmicks or advertisements; if they do, they will not survive long' (M1), and 'The chickens I breed are higher-quality than those of my competitors in terms of both appearance and taste. It is an unbeatable strategy' (M6). This result concurred with those of earlier studies (Capitanio et al., 2010; Lülfs-Baden et al., 2008), indicating that maintaining high product quality is one of the most effective strategies for creating differentiated value.

The participants stressed that instead of relying on the weather, optimising *operation management* to secure product quality and profit was critical for Taiwanese agribusinesses. Participants said, for example: 'We can analyse the accumulated data of our automated systems to establish long-term temperature- and humidity-monitoring and feedback mechanisms' (M1), 'We have done well in materials management, which in turn has generated profits' (M2), 'From planting to harvesting, automated production systems help us reduce manpower and costs, improve production efficiency and product quality, and break through environmental limitations to achieve planned production' (M8), and 'We record every detail of the production process in the computer system. Even quality investigators from Japan are persuaded by our records' (M10). This result echoed those of previous studies (e.g., Boehlje et al., 2011), indicating that enhancing operation management through ICT systems aids Taiwanese agribusinesses in satisfying customers, confronting competition, and generating profits.

Although Taiwanese agribusinesses are small in scale, the participants suggested that *R&D investments for innovation* were necessary. For example, 'We found that the biodegradation of earthworm stools makes soil fertile. In other words, earthworms can be both feed and fertiliser and thereby generate derivative products' (M2), 'I often observe competitors' business models.

If they are the same as mine, I will make mine different' (M3), 'The initial pineapple cake mix is combined with butter, milk, eggs, and fragrance oil. I use tea to moderate the smell and differentiate the product' (M5), and 'We imported new breeds of vegetables from Japan and modified the traditional planting method. We started to make a profit and were even able to sell the product back to Japan after 5 years of losses' (M10). This result echoed those of previous studies (Gellynck et al., 2015; Liu et al., 2014), indicating that investment in product or process innovation can enhance product attractiveness, reduce production costs, and increase market potential.

Marketing management

Marketing has long been a weakness of Taiwanese agribusinesses, but new generations of agripreneurs are focusing on the development of diverse *marketing strategies* to increase revenue. For example, participants stated: 'Although attractive packaging cannot hide rotten apples, I must admit that branding and package design in the agrifood market have improved greatly in the past 10 years in Taiwan' (M1), 'Taiwanese agrifood product development must have value-added concepts. Agribusiness must understand and embed customer-perceived values, such as place attachment and environmental friendliness, into product design' (M3), and 'Faced with an ever-changing market, product diversity and even product demand can be effective marketing strategies' (M5). This result concurred with those of earlier research (Micheels & Gow, 2008), indicating that to promote consumer perceptions of product quality and superiority, marketing strategies can focus on consumer needs, product differentiation, local attributes, and environmental friendliness.

In addition to noting marketing strategies, the participants emphasised the importance of *branding* on the basis of market positioning and product values. For example, participants stated: 'We have a brand under which we offer low-cost products. "Low cost" is a type of branding strategy that does not mean low quality' (M1), 'A brand can represent a company's image, providing a quality guarantee to its consumers' (M5), and 'I have tried to establish a standard tea taste, which is my branding strategy, and then I can position my products at specific consumption levels' (M7). This result echoed prior research (e.g., Hanf & Kühn, 2005), indicating that agribusiness branding is a shaping process based on product quality and market niche that must be continually invested in and carefully maintained.

Customer service was another crucial marketing management aspect indicated by the participants, who said, for example: 'Involving customers in the design and manufacturing process is also a type of customer service, allowing them to input feedback and see our commitment to product quality'

(M5), ‘Some of my FB [Facebook] fans look at my farm pictures and doubt whether they are real. I then invite them to visit the site. They love the farm trips I arrange’ (M6), and ‘I strive for the youth market by using advanced high-pressure extraction and ice droplet techniques to provide pre-packaged cold drinks to young customers’ (M7). This result concurred with those of earlier studies (Boehlje et al., 2005; Lülfs-Baden et al., 2008), indicating that designing participative experiences and satisfying consumption preference are feasible strategies for increasing realistic interaction and emotional links with customers, which in turn promote customer satisfaction and loyalty.

The participants also cited *social media* as a strategic practice in marketing management. For example, participants said: ‘Participating in exhibitions is a basic activity for brand expansion, but usually does not yield many orders. I believe social media offers opportunities in e-commerce’ (M3), ‘I am searching for opportunities to cooperate with some cultural and creative shops, and with social media’ (M4), and ‘We used social media to set up a network of markets, stressing “same-day harvesting and shipping and next-day arrival”. We began a membership program, which incorporated bonus point’s accumulation to establish customer loyalty. We need professionals to run this platform’ (M8). This result concurred with those of earlier studies (Henderson et al., 2005; House et al., 2008), indicating that effectively exploiting social media is a necessary strategy for reaching out to potential customers, establishing customer relationships, and building customer loyalty.

Business administration

The participants indicated that *financial management* was critical for agribusiness success, saying, for example: ‘Traditional family businesses tend to be concerned with revenue, but I care about financial planning and innovation investments’ (M6), ‘I am considering establishing a holding company to introduce funds from capital markets’ (M8), and ‘I am not sure whether I want to introduce venture capital into my company at this time’ (M9). This result concurred with those of earlier studies (Boehlje et al., 2011; Westgren et al., 1988), indicating that in addition to ensuring profits, the financial management of modern agribusiness should include raising and allocating capital for both short-term and long-term objectives.

Employee development was also frequently noted by the participants, who said, for example: ‘Through the application of automated systems, chicken breeding has become a business that does not entirely rely on experience. I hope this change will attract more young people to the industry, and we can assist them through remote-monitoring techniques’ (M1), ‘The

business of waste recycling requires professional certification. We provide our employees with the necessary training and help them apply for certificates. Soon after they are certified, we raise their salaries. Our employees have more certificates than our competitors do' (M2), and 'In traditional family businesses, employee relationships do not really require specific care. New generations of agribusinesses must pay attention to employee development to attract talented partners' (M10). This result agreed with those of previous studies (e.g., Baker et al., 1994), indicating that reducing workload by using IT technology, offering more professional knowledge and skills, and increasing incomes and ownership are viable strategies for attracting and maintaining employees in rural agribusiness.

Sustainable development

Three themes related to sustainable development emerged during the analysis process, namely ecological protection, social responsibility, and economic development.

Ecological protection

The participants indicated that *ecological protection* was the first step to sustainable development. For example, participants said: 'If we do not handle poultry droppings, who will do it? Industrial manufacturers use these as fuel, which causes air pollution. Some partners and employees question why I invest equipment to process this litter. "It is a waste of money", they said. ... Waste processing must comply with regulations. We cannot hurt our land' (M2), 'If the farmer does not take care of the land, the land will not produce any healthy goods. "Organic" means "back to nature"' (M3), 'I was an engineer in the semiconductor industry, and witnessed wastewater pollution every day. I felt bad and decided to quit, turning to organic farming. If the land is destroyed, it will not return to how it once was. I keep telling my friends this' (M6), and 'I encourage farmers to return to traditional agricultural practices. This not only generates quality crops but is also good for the land' (M7). This result agreed with those of earlier studies (Hansford et al., 2003; Thompson, 2007), indicating that insistence on ecological protection and organic practices is the most effective mechanism for sustainable development.

Social responsibility

In addition to emphasising ecological protection, the participants stressed the broader concept of *social responsibility*, saying, for example: 'Organic farming

is not an easy task, but we are more than happy to share our experience. I feel that it is our responsibility' (M2), 'If our experiments in farming practices and online commerce succeed, I will share these experiences in detail, which will benefit society as a whole' (M3), 'The key difference is the people. Domestic agriculture needs to be reformed. The whole system needs to be changed' (M4), 'Agribusinesses should help farmers sell products and make a reasonable profit. We help producers do some processing and packaging, which generates profits, and we enable consumers to eat safe and healthy food. This is our responsibility—to make everyone happy' (M5), and 'We have a responsibility to share. When I make a profit, I donate some of it to charity' (M6). This result concurred with those of earlier studies (Horrigan et al., 2002; Lubell et al., 2011), indicating that knowledge transfer, the sharing of experiences, environmental friendliness, humanitarian assistance, and social care are perceived as the social responsibilities of modern agribusinesses.

Economic development

The participants all agreed that agribusiness is distinct from philanthropy and that making a reasonable profit and facilitating *economic development* are crucial for sustainable development. For example, participants said: 'I hope that every Taiwanese agribusiness will become a social enterprise with dual goals of economic development and social impact. For instance, taking 30% of your profits and investing it back in the land and the people facilitates a greater scale of sustainable development' (M4), 'It is critical to develop agricultural companies into creative businesses. Quality products with exceptional packaging guarantee a market' (M5), and 'We are building a cultivation platform for the transfer of agricultural knowledge. We wish to quickly cultivate hundreds of young farmers to act as seeds in each rural town in Taiwan. We promise them that we will purchase 100% of their harvests' (M10). This result agreed with those of earlier studies (Häni et al., 2007; Lubell et al., 2011), indicating that the development of agrisocial enterprises, the business models of these enterprises, and lessons learned from creative industry can be critical guides to economic development for Taiwanese agribusiness.

DISCUSSION

According to the results, the strategic management of Taiwanese agribusiness can be planned and assessed using three dimensions: the external environment, the internal environment, and sustainable development (see Figure 1). Each dimension has subthemes, which are discussed as follows.

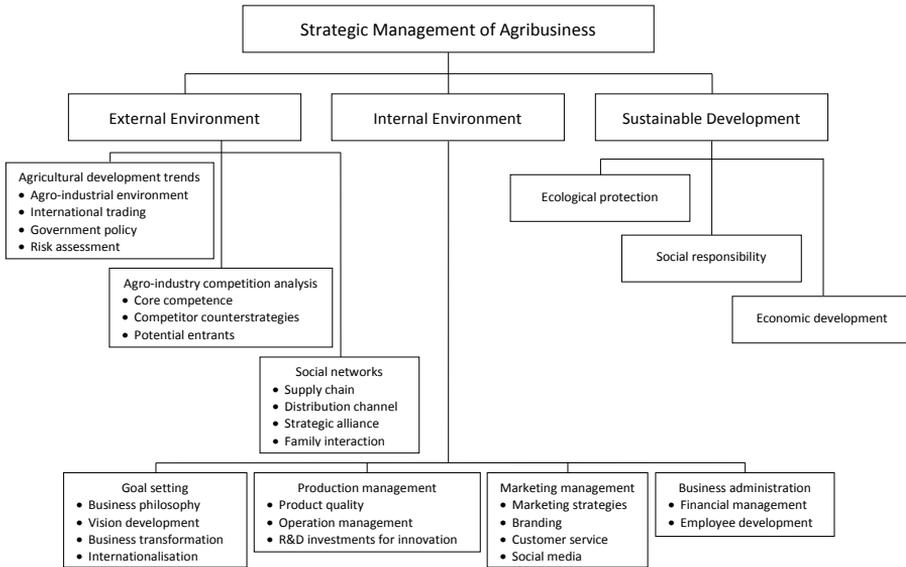


Figure 1. Strategic management of Taiwanese agribusiness

External environment

Although most of the aforementioned agribusiness strategies related to the external environment align with those reported in previous research, the results of our study revealed several noteworthy topics that warrant future inquiry. First, the participants in this study seldom mentioned export competence or product adaptation, which were proposed by Karelakis et al. (2008) as key strategies. This may have been because production-oriented agribusinesses may not require export competence and because foreign customers may prefer natural rather than adaptive agricultural products. Future research should examine food processing- and commodity-oriented agribusinesses to determine whether demand differs according to export competence and product adaptation.

Second, although prior research indicated that government initiatives do not foster collaboration (Hartwich & Negro, 2010), the participants in this study seldom complained about this; rather, they stressed the need to assess R&D risks. This result can be explained by the fact that the Taiwanese government usually subsidises individual agribusinesses rather than encouraging collaboration among businesses. Because of Taiwan’s small-scale agricultural system, most agricultural companies tend to be highly cautious about R&D investments. This explains why the participants emphasised the importance of risk assessment.

Third, building on earlier studies (e.g., Dobson, 1992; Russo et al., 2003), the current study contributed to the understanding that management and technology have become the core competence of Taiwanese agribusiness. The strategies of product differentiation, production efficiency, quality certification, cost reduction, and increasing economic scale particularly benefit competitive advantages in the Taiwanese agroindustry. The aforementioned strategies seem more feasible for a small-scale agriculture system than product innovation does.

Fourth, the recent literature on agribusiness strategy (e.g., Bhuyan, 2005; De Moura et al., 2009) has stressed that social networks are a strategic resource. The results of this study demonstrated that specific types of supply chains (i.e., technology vendors and knowledgeable experts) and strategic alliances (both horizontal and vertical) benefit Taiwanese agribusiness. The results also indicated that marketing is essential knowledge for contemporary farmers, and that accumulated achievements can resolve generational conflicts. However, these results did not illuminate the possible role of farming cooperatives, nor highlight the potential of NGOs or social enterprises in social networks; thus, these topics warrant further research.

Internal environment

As with the findings related to the external environment, most of the findings on strategies related to the internal environment concurred with those of previous studies; however, we observed some notable results reflecting the specific context of Taiwanese agribusiness. First, this study elucidated the transformation of goal setting from profit orientation to environmental friendliness and value creation, indicating that the business philosophy of modern agripreneurs differs greatly from that of older generations. Whether this also reflects these entrepreneurs' flexible marketing strategies and diverse income channels merits further research.

Second, the participants all emphasised the importance of enhancing operation management through ICT systems and creative investments. Taiwan has long been a world leader in ICT hardware manufacturing. Taiwan-based firms account for more than 90% of global notebook and tablet production (Yee, 2014). This industrial development has profoundly affected the decisions and practices of Taiwanese agribusinesses. In addition, the small scale of Taiwanese agriculture limits agripreneurs' financial planning abilities. However, the current results revealed that young generations of Taiwanese agribusiness workers are making creative and flexible investments for innovations in both agricultural products and processes.

Third, to these agripreneurs, product differentiation, local attributes, branding maintenance, designing participative experiences, and environmental friendliness were essential marketing strategies. Although prior research (e.g., Hanf & Kühn, 2005) has demonstrated the crucial role of vertical coordination in marketing plans, the participants in this study did not emphasise this role. This was possibly because these production-oriented participants did not thoroughly engage in the marketing planning process. Furthermore, the participants did not articulate how to achieve a balance between product quality and marketing planning for consumers. These results indicate the need for further investigation.

Fourth, regarding business administration, the participants stressed the importance of human resources and financial capital. Raising and allocating capital requires entrepreneurs to possess financial knowledge, management experience, and organisational vision, which are generally insufficient in small-scale agribusinesses. In addition, from 1992 to 2012, the agricultural population declined from 1 million to 640,000 (Agricultural Statistics Yearbook, 2013). As of 2015, the average age of farmers was 63 years, highlighting the serious lack of young people entering agriculture in rural Taiwan. Therefore, reducing workloads, adding values, and increasing the incomes and ownership of agriculture businesses have become strategies to attract young generations to engage in rural agricultural work. These difficult realities reflect the need for future theoretical and practical research.

Sustainable development

The concept of sustainable development has spread across the world. Taiwan is no exception. First, although the participants in this study strongly emphasised the importance of ecological protection and organic practices, they did not include agricultural multi-functionality, one of the most critical aspects of modern agriculture. In addition, sustainable development can be assessed using various indicators (e.g., Häni, Stämpfli et al., 2007; Zahm et al., 2007), only some of which were mentioned by the participants. These deficiencies probably stem from the participants being production-oriented entrepreneurs, resulting in incomplete perspectives. Furthermore, the development of agrisocial enterprises, the business models of these enterprises, and lessons learned from the creative industry as detailed by the participants seem promising for agribusinesses, both domestically and globally. These topics could also be future directions for agribusiness research.

RESEARCH LIMITATIONS

The results of this study offer potential contributions to research on the strategic management of Taiwanese agribusiness, but several study limitations should be acknowledged. First, the current study was limited to production-oriented agripreneurs. Future research could replicate this study design and focus on participants with other orientations (i.e., processing or commodities) to explore a broader range of strategic management. Second, we interviewed 10 renowned agripreneurs, and data saturation was achieved (i.e., no new themes emerged) after eight interviews were conducted. However, several critical topics, such as agricultural multi-functionality and social enterprise, were not covered in the present study and require further exploration. Third, agricultural problems are increasingly solved by teams; however, we did not collect data from the participants' team members. Consequently, any potential influences of teamwork on agribusiness management were not examined, and these factors should therefore be considered in future research.

Fourth, comparing the strategic management of expert agripreneurs with that of naïve entrepreneurs might be an insightful research direction. Identifying the differences between these two groups might yield valuable information regarding entrepreneurial education in the agricultural field. Fifth, the strategies of agripreneurs cannot be realised without feedback from alliance partners and responses from competitors; however, we did not consider these in our study. How effective these strategies would be is a topic warranting further study. Sixth, the research method adopted in the present study involved semi-structured in-depth interviews. The method, design, and process adopted in this study could be transformed into a series of case studies to obtain a wider range of insights. Finally, the participants were Taiwanese agripreneurs who had been identified through the authors' personal relationships and invited to participate in the study. Future research could extend participation on a global scale to examine the possible impact of sociocultural contexts.

CONCLUSION

Despite the limitations of this study, we believe that our research provides insights into the complexities of agribusiness management, from which some notable conclusions can be drawn and summarised as follows. First, the strategic management of agribusiness, particularly in a Taiwanese context, can be organised and evaluated in three dimensions: the external environment, the internal environment, and sustainable development. Figure 1 provides such a strategic framework for future directions for both

theoretical and applied studies regarding agripreneurship, the strategic management of agribusiness, and agricultural education. Second, new generations of agripreneurs closely monitor the dynamics of domestic and international markets and respond accordingly, and view product differentiation, quality certification, production efficiency, cost reduction, branding, and economic scale as strengthening their competitiveness. Third, the social networks these entrepreneurs handle differ in diversity. For example, they perceive technology vendors and expert farmers as their critical supply chains. In addition, marketing knowledge has become a necessity for performing horizontal and vertical coordination.

Forth, newer generations of agripreneurs typically have clearer goals and a stronger business philosophy than older generations do. They know that quality products and agricultural knowledge are weapons for internationalisation, and these entrepreneurs are capable of restructuring their agribusinesses to fit the changing world market. Fifth, these agripreneurs use ICT systems and flexibility to invest in product and process innovations that improve operation management and enhance production efficiency, which in turn promotes product quality. Sixth, the marketing strategies of these entrepreneurs focus on consumer needs, product differentiation, local attributes, environmental friendliness, participative experience, social media, and continual branding investments. Seventh, entrepreneurs exert great effort in financial management and human resources management to attract diverse capital into rural agricultural areas. Finally, belief in organic practices, knowledge transfer, the sharing of experiences, environmental friendliness, humanitarian assistance, and social care enables agripreneurs to outperform their competitors. The possibility of transformation into an agrisocial or creative enterprise facilitates the achievement of the AgriGold dream.

Examining these conclusions reveals five broader trends of strategic management: (1) innovative technology must be continually developed and adopted to secure long-range success; (2) corporate decisions must be made on the basis of social responsibility and business ethics in an environment of increasing uncertainty; (3) the values of ecological friendliness must be strengthened and delivered to alter the conditions and methods of competition; (4) the practices of sustainable development must be modified in response to changes in industry structure and boundaries; and (5) each organisation must be viewed as a unique collection of resources and relationships to be developed and innovated.

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Abstract (in Polish)

Światowe rolnictwo przechodzi intensywne zmiany, które tworzą nową rzeczywistość rynkową, będącą znacznie bardziej złożoną i konkurencyjną niż dotychczas. W celu zmierzenia się z tymi zmianami, niezbędna jest nowa perspektywa na praktyki zarządzania w rolnictwie. Badania nad tym krytycznym zagadnieniem są jednak ograniczone. Artykuł oferuje aktualne spojrzenie na zarządzanie strategiczne w przemyśle rolnym na Tajwanie poprzez pogłębione wywiady z 10 ekspertami agrobiznesu-przedsiębiorcami. Wyniki pozwoliły dokonać podziału strategii agrobiznesu w oparciu o trzy wymiary: otoczenie zewnętrzne, środowisko wewnętrzne i zrównoważony rozwój. Artykuł szczegółowo omawia każdy z wymiarów i identyfikuje pięć szerszych trendów w zarządzaniu strategicznym.

Słowa kluczowe: agrobiznes, agrobiznes przedsiębiorcy, zarządzanie strategiczne, zrównoważony rozwój.

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Innovation in Public Sector Management Control Systems in the Context of New Public Management: A Case of an Australian Public Sector Organization

Anup Chowdhury¹ and Nikhil Chandra Shi²

Abstract

This study is about the exploration of innovative management control systems in the context of New Public Management (NPM) initiatives. NPM initiatives created the changes to the structure and processes of public sector organizations with the objective of getting them to run better. A government department in the Australian Capital Territory (ACT) has been selected as the field for investigation. This study draws on a single theoretical perspective, Giddens's structuration theory to understand the management control systems evolved in the researched organization. Qualitative research methodology is applied to obtain a better understanding of the phenomena. Case-based research method is used in developing a complete understanding of the relative role of controls in the management of organizational performance. In this study, it is argued that the researched organization has adopted various management control tools to improve its performance and demonstrate transparency and accountability. Some of the control tools it has adopted are the innovations in the public sector. It appears from the case that these adopted management control tools forced the researched organization towards better performance supporting the rationale of adopting New Public Management practices.

Keywords: *innovation, management control systems, New Public Management, public sector organization, structuration theory.*

INTRODUCTION

The performance of public organizations in industrial economies in the 1980s has been the target of severe questioning and pressuring for government cost cutting. The main reason for such questioning was the comparison with private sector standards of returns on investment and it turned public

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sector organizations from a service orientation to a commercial orientation (Mascarenhas, 1996). In this context the practitioners started to adopt new management approaches as the basis for improving performance in the public sector (Metcalf & Richards, 1992; Osborne & Gaebler, 1992; Hughes, 1995; Girishankar, 2001; Robbins, 2007; Christiaens & Rommel, 2008; Broadbent & Guthrie, 2008; Alam & Nandan, 2008; Dooren, Bouckaert, Halligan, 2010; Walker & Boyne, 2010; Hoque & Adams, 2011). This new management approach in the public sector creates the changes to the structures and processes of public sector organizations with the objective of getting them to run better (Pollitt & Bouckaert, 2004). More precisely this new approach is centred on New Public Management (NPM) ideals (Hood, 1991; Dunleavy & Hood, 1994; Hood, 1995).

The term 'New Public Management' is used to describe the changing style of governance and administration in the public sector. The most definitive characteristic of the NPM is the greater salience that is given to what has been referred to as the three 'Es'- *economy, efficiency and effectiveness* (Barrett, 2004). The NPM movement has emphasised the value of market efficiency in the public sector and stimulated various managerial innovations (Moon, 2000; Tooley, 2001; Luke, 2008; Christiaens & Rommel, 2008). NPM has shown a remarkable degree of consensus among the political leadership and opinion makers of various countries like Australia, New Zealand, Canada, the United Kingdom and Austria about the desired nature of change (Maor, 1999). In the UK it was government's modernization agenda and was based on 'New Public Financial Management' (Broadbent & Laughlin, 2005). In the USA the state governments had also enthusiastically embraced the idea of managing for results. It represented a victory of NPM policy ideas transported from New Zealand, The United Kingdom and Australia (Moynihan, 2006).

A management control system is a broad term that encompasses management accounting systems and also includes other controls such as personnel or clan controls. Chenhall (2003) mentioned that Management control systems not only focus on the provision of more formal, financially quantifiable information to assist managerial-decision making but also concentrate on external information related to markets, customers, competitors, non-financial information, a broad array of decision support mechanisms and informal personal and social controls. It has been observed worldwide that the public sector organizations have been encouraged to develop market based mechanisms of control which are financial or budgetary, performance indicators, performance based pay, competition through privatization and contracting out, and the introduction of internal market models (OECD, 1995). To establish these types of control in public sector organizations it is necessary to allocate human, physical, technological and

financial resources in a better coordinated way. A well designed management control system can play a pivotal role in this regard. Groot and Budding (2008) pointed out a good number of New Public Management (NPM) reforms related to the improvement of Planning and Control of government entities. Jansen (2004) also argued that adoption of NPM implies that the emphasis in management control of governmental organizations needs to change from a focus on information concerning input to information on other elements of the transformation process.

In the public sector there has been a long tradition that the public organizations provide utilities and services to the fabric of society. A movement away from this situation has emerged and emphasis is put on efficiency, economy, effectiveness, and streamlining managerialism. The public sector copied some of these control tools from the private sector. Some of the control tools they have come up with have been implemented on a modified basis and some of the control tools are unique to the public sector, and these constitute the innovation in the public sector. Mulgan and Albury (2003) defined innovation in the public sector as the creation and implementation of new processes, products and services and methods of delivery, which result in significant improvements in the efficiency, effectiveness or quality of outcomes. In the public sector some innovations are transformational because it represents a substantial departure from the past. Other innovations are incremental in nature.

During the last 30 years the three tiers of Australian government (Commonwealth, State and Local) have implemented a series of financial and administrative reforms linked to the new public management. Since the early 1980s the Australian public sector have undergone major changes in its philosophy, structure, processes, and orientation and the main objectives of these changes were to establish formal rational management, necessity for clear goals, corporate plans, internal and external accounting systems with clear responsibility lines for output performance measurement (Parker & Guthrie, 1993). Over the last two decades, in Australia, the public sector has come under increasing pressure to improve performance and demonstrate transparency. As a consequence of these pressures in a changing environment, public sector organizations have adopted management techniques and control strategies. These innovative management control systems are now widely used in the Australian public sector. Against this background the wide-ranging reforms and NPM approach in the Australian public sector offer a context for the present study.

RESEARCH QUESTIONS

Many authors have defined management control systems in many ways and as a result different typologies of management control have evolved to define management behavior. For example, Anthony and Govindarajan (2007) mentioned that in all organizations, managers are engaged in two important activities. One is planning and the other is control. Merchant and Van der Stede (2012) mentioned that management control includes all the devices or systems that managers use to ensure that the behaviors and decisions of their employees are consistent with the organization's objectives and strategies. Simons (1995) defined management control systems as the formal, information-based routines and procedures that managers use to maintain or alter patterns in organizational activities. It can be seen that management control systems are a broader concept which include different components and are used for varying purposes.

Berry, Coad, Harris, Otley and Stringer (2009) found that during the last two decades, the concept of 'new organizational forms' has gained currency and transformation is more prevalent in some sectors, especially in the public sector. The authors claimed that from the 1980s onwards, new public management reforms have introduced into public sector organizations managerial processes from the private sector. These reforms open the door to more dynamic, action research type activities to observe the consequences of management control systems design and its use over a period of time following a change. In the light of reforms in the Australian public sector over the last thirty years, this study is about the exploration of innovative management control tools adopted in the public sector in the context of New Public Management (NPM) initiatives. A government department, in the Australian Capital Territory (ACT) has been adopted as a field for investigation for the purpose of this exploration. The study will seek answers to the following research questions:

- a) How has the researched organization adopted innovative management control tools within their organization?
- b) In what ways are these innovative tools linked to the organizational actions of the researched organization?
- c) How have these tools contributed to and shaped new organizational culture within the researched organization?

RESEARCH METHOD, DATA COLLECTION AND DATA ANALYSIS

The organization investigated under this study is a government department in the Australian Capital Territory involved in service delivery. Fieldwork started in January 2008 and continued until June 2009. A follow-up period of fieldwork for the purposes of clarification took place from June 2010 to

January 2011, in November and December 2011 and in February and March 2012. The method of data generation and collection adopted in this research was open-ended intensive field research using the interpretive tradition in qualitative research. The main data sources for this study were archival official documents and interviews. Direct observations of actors' activities were also used in this study to supplement and complement the archival documents and interview data. In this case study, documentary evidence provided an important data source. The researchers were interested to explore people's perceptions and these came out of interviews. The epistemological position also influenced the researchers to conduct interviews because it allows a legitimate or meaningful way to generate data by talking interactively with people, to ask them questions, to listen to them, to gain access to their accounts and articulations, or to analyse their use of language and construction of discourse (Mason, 2002). The interview method used in this study was unstructured and open-ended. Any research involving human and animal subjects requires ethical clearance from the relevant institution (Hoque, 2006). The present research, as it involved human subjects, was approved by the Committee for Ethics in Human research at the University of Canberra, Australia. At the very beginning of each of the interview sessions the researcher discussed the background issues with the participant in an informal way according to the respondents' characteristics (say for example, job position). Before conducting the interviews one of the researchers listed the discussion issues. However, during the interview sessions, they were not followed up in a fixed order. The duration of these interviews were about an hour on average. The interview proceedings were recorded on a voice recorder with the consent of the participant. For safety reasons, back-up notes were also taken and checked and compared when the transcriptions were made. The interview tapes were transcribed later word for word. Key interview transcripts were fed back to the respective interviewees to establish the validity of the interview data.

Direct observation was also used in this study to supplement and corroborate the archival documents and interview data. In this study, observation data came from casual watching and attending a number of informal meetings and information sessions within the department. One of the researchers attended five morning tea sessions where he observed that staff were involved in discussing and debating organizational matters. It helped the researcher to gain first-hand information about the organization.

In qualitative research, data analysis requires that the researcher be comfortable with developing categories and making comparisons and contrasts (Creswell, 2007). In this study, the researcher analyzed data using the approach provided by Miles and Huberman (1994). In the first stage data

reduction was done. In this research, the researchers organized the data first from the interview transcripts and then from field notes. Then the transcripts were printed and researcher marked the key points and made a summary. After that the data chunks were coded manually, focusing on themes from the research questions and the theoretical framework chosen for the study. The field notes taken during the observation were organized according to the themes. The documents collected during the field work were also organized at this stage. The second major flow of analysis activity was 'data display'. At this stage the researchers displayed the interview transcripts and the field notes into broad groups. These groups were NPM, management control systems, innovative techniques. The purpose of the display was for an immediate access. It helped the researcher to see what happened in the researched organization. It also helped to find out the main direction and missing links of the analysis. The third stream of analysis activity was conclusion drawing and verification. It aided the analyst to interpret displayed data and to test the findings. At this stage, the researchers developed an in-depth understanding of the data and searched for other possible explanations for the data to make conclusions. Provisional conclusions were tested for verification purposes. In this study, the researchers tested the findings against the theoretical framework and reviewed understanding of the phenomena which they gathered from the organization against this theoretical framework.

THEORETICAL FRAMEWORK FOR THE STUDY

Some scholars argued that a prior theoretical stance may bias or limit the findings (Eisenhardt, 1989; Flinders, 1993; Layder 1995). The critics claimed that adopting a pre-determined theory in a research can be more robust because these theories have already been tested in previous research. However, supporters in favour of adopting a prior theoretical framework in research (for example Alam & Lawrence, 1994; Lodh & Gaffikin, 1997; Quattrone & Hopper, 2001; Baxter & Chua, 2003; Hoque, 2005; Gaffikin, 2007; Berry et al., 2009) argued that in conducting research on organizational practices, it is legitimate to use a wide range of theoretical approaches to explain such activities. In qualitative research, a useful theory helps to organize the data (Jorgensen, 1989; Lodh & Gaffikin, 1997; Llewelyn, 2003; Irvine & Gaffikin, 2006; Cooper, 2008; Maxwell, 2009; Jacobs, 2012). The view taken in the present research assumes that theory is a framework for viewing the social world in a way that is too general, too broad and too all-encompassing to be confirmed or refuted by empirical research (Cooper, 2008). It is also assumed in this research that when knowledge is gathered with the help of theory, there is a potential for data coherence and control, which prevent

the researchers from collecting an unsystematic pile of accounts (Kaplan & Manners, 1986; Bogdan & Biklen, 1982). Over the last two decades it was observed that a series of alternative approaches has been used in qualitative research. One of these approaches is motivated by interpretive sociology (Schutz, 1967). Interpretive perspective epistemologically believes that social meaning is created during interaction and people's interpretations of interactions (Hesse-Biber & Leavy, 2006; Cresswell, 2007; Gaffikin, 2008). Chua (1988) argued that interpretive sociology refers to an intellectual tradition which focuses on the constructive and interpretive action of people. The present study has adopted an interpretive approach and used Giddens's structuration theory to understand how management control systems are implicated in social setting. The epistemological and ontological belief also inspired the researchers to adopt Giddens' structuration theory in this study. The following Figure 1 shows Giddens's structuration framework.

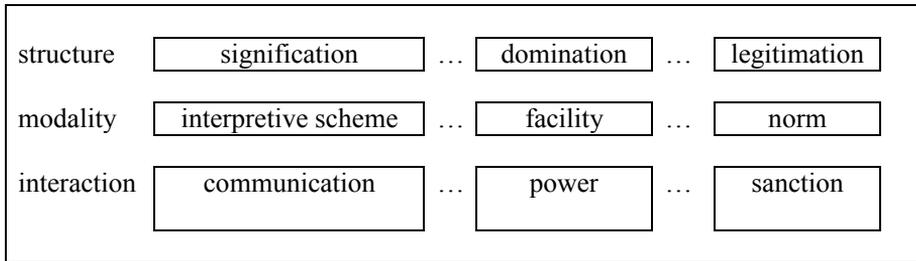


Figure 1. Structuration framework

Source: Giddens (1984)

The third line of the Figure refers to the elements of interaction: communication, power and sanction. The second line represents modalities which refer to the mediation of interaction and structure in processes of social reproduction (Giddens, 1984). Here modalities are interpretive scheme, facility and norm. Those on the first line are characterizations of structure, signification, domination and legitimation. Signification refers to the communication of meaning in interaction. It is the cognitive dimension of social life which has interpretative schemes. Interpretive schemes are 'standardized elements of stock of knowledge, applied by actors in the production of interaction' (Giddens, 1984). In the signification structure, agents draw upon interpretative schemes in order to communicate with each other and at the same time reproduce them. In the domination structure the use of power in interaction involves the application of facilities. The facilities are both drawn from an order of domination and at the same

time, as they are applied, reproduce that order of domination (Giddens, 1984). The final structure is that of legitimation which involves moral constitution of interaction, and the relevant modality here are the norms of a society or community which draw from a legitimate order, and yet by that very constitution reconstitute it (Giddens, 1976). These three structures constitute the shared set of values and ideals about what is important and should happen in social settings. Giddens (1976, 1979, and 1984) identified that actors are not simply social dupes governed by independent structures, but rather as existential beings that reflexively monitor their conduct and make choices in social settings.

FINDINGS AND DISCUSSION

It has already been mentioned that the research site of this study was a governmental department in the Australian Capital Territory (ACT). This department is involved in service delivery and was established in 2002. It has responsibility for a wide range of programs and policies which deliver essential services to individuals, families and the whole ACT community. The findings of the study indicate that the ACT Government has given the department wide responsibility to provide, or fund, human services for the Canberra community. In addition to these responsibilities, they have an obligation to implement formal agreements with other Australian governments and comply with laws passed by the ACT Legislative Assembly. The department works in partnership with community, private sector and government agencies in the delivery of the human services. Field study reveals that the department has three major wings. One of the wings is committed to increase the social, economic and cultural participation of all people in the ACT community. During the year 2010-2011 the major wing of the department administered \$74 million worth of services (Disability Housing and Community Services [DHCS], 2010-2011). The second wing has its principal objective to provide people affected by housing stress and social and financial disadvantage with safe, affordable and appropriate housing that responds to their individual circumstances and needs. In the financial year 2010-2011, 23,245 people received affordable accommodation in public housing through 11,483 tenancies. The third wing works in partnership with the community to provide family and community support and care and protection services to children, young people and their families in the ACT. In 2010-2011 this wing dealt with \$33 million (DHCS, 2010-2011).

Observation from the field indicates that the researched organization has implemented a wide range of management control tools. Some of these are considered as the innovations in the public sector. These innovative

management control techniques and tools are the results and action control mechanisms of the researched organization. For example; annual report reviews, performance measurement system, customer service standards, public interest disclosure, freedom of information, etc. Further, it has also been observed that there are some cultural control mechanisms in the researched organization, for example, communication and consultation, employee assistance program, work life balance, etc. These are considered as the innovative cultural control tools in the public sector.

The main objective of this research is to explore how the researched organization has adopted innovative management control tools within their organization and how these tools inspired the researched organization in their day to day administrative action. Observation from the field indicated that this reforms process shaped new organizational culture within the researched organization. A central element in the Australian public sector reform policy during the last thirty years is management for results. It has created a culture of clear and precise definition of program and organizational objectives for the Australian public sector financial managers. The objective to implement this control system in the researched organization is to inform the employees about the goals of the organization. The evidence from the field shows that the department has benefited enormously from adopting a results oriented approach to financial management. It has also helped probity and accountability for spending taxpayers' money and at the same time ensured parliamentary scrutiny of the financial details of its operation. The main result oriented approaches were annual report review and performance measurement system.

Annual report review

The findings of the research demonstrate that annual report reviews in the public sector differ from the private sector. In the private sector, the annual report review is done at the shareholder's annual general meeting, but in the public sector this review is open to public scrutiny. The researchers observed that every year after the publication of the annual report of the department, the Standing Committee on Community Services and Social Equity in the Legislative Assembly schedules annual report review hearings for the Department. It is one of the alternatives of market-based management control systems evaluation that take place in the private sector. It has created a new culture within the organization. It is also the formal accountability system that the department uses to inform the public about the management performance as a government agency in the implementation of government policy. This system helps the department in serving and contributing good

governance. Organizational documents support that, in these hearings, the Standing Committee seeks evidence by asking the relevant government ministers and departmental officers to explain the issues and activities related to the Output Classes in the annual report. This annual report review brought a challenge to the signification structure of the researched organization and required the implementation of new interpretive schemes (Giddens, 1979, 1984). A change to the structure of meaning and new signification was seen in the department. According to Giddens (1979, 1984) in the department a competing interpretive scheme of signification became apparent. New public management brought a challenge to the signification structure of the department and required the implementation of these new interpretive schemes. It is evident that to meet the demands of the NPM initiatives, the department implemented annual report review devices as interpretive schemes in their organization. In the department, this new interpretive scheme is the management control system which mediates between the signification structure and social interaction (Giddens, 1979, 1984) in the form of communication between managers and employees.

Performance measurement systems

Observation data reveals that the main objective of the reforms in the researched organization is to promote a culture of performance in the public sector. These are very important for them, as one of the senior executives commented:

If the public are not happy with our service they can go to a politician and take the issue up and there is also the media scrutiny because of the focus of the political process. So there is a form of scrutiny and I think we are much more exposed than the corporate world.

It is evident that the department uses the bottom-up approach in decision making. In the context of public policy, plans are informed by community expectations. These community expectations are an innovation in the public sector which is different from the private sector. This is integral to the domination system (Giddens, 1979, 1984) for the department's managers. In the researched organization, the managers are absolutely accountable for their performances.

Evidence from the field indicated that the researched organization uses financial and non-financial performance measures in their organization to develop individual and overall business improvement at the operational and strategic level. Financial performance evaluation and reporting have long been used to help evaluate the relative success of business activities (Alam, 2006). To obtain better results, the conventional language of accounting

(performance standards) became part of the frame of meaning used to make sense of activities at the researched organization. Though it is in the initial stage, the department uses the performance measurement system as one of a number of tools that direct and support organizational change and performance. As one senior executive of the organization put it:

We have a reporting system to the government around key financial performance indicators. I think there are some challenges and some work to do in getting around and making it right. We have the beginning but some of these things, particularly in the service organization, are difficult to quantify. But, increasingly, as we are connected into the debate nationally with other jurisdictions, we are getting more unified views about the things.

In the public sector there has been a long tradition that public organizations provide utilities and services to the community and have been seen as the fabric of society. These organizations are funded by government budget allocation raised from taxation and provide supply services and utilities which is part of the infrastructure of society. No attempt has been taken to measure efficiency or effectiveness of government spending for a long time. This was the old structure of the traditional public organizations. To cope with the changing environment, and to meet the demands of the economic rationality of the new public management, the department implemented these performance measurement systems. The opinion expressed by another senior executive of the department confirmed this view:

In our department every single branch has financial performance indicators; they are published in the budget papers annually. There are targets and actual results and we have really adopted those things as an indicator. People in the department then have 12 months to try and reach the target.

Here, it can be argued that performance measurement systems provide bindings of social interactions in the organization across time and space and therefore, these control systems are considered as social practices. It acts as modalities of the structure. These modalities are the means by which structures are translated into actions. The modalities of performance measurement systems are interpretive schemes, and norms of the researched organization. These modalities explain how interaction is affected. According to Giddens (1979, 1984) these control systems are viewed as the modalities or procedures of structuration which mediates between the (virtual) structure and the (situated) interactions.

Modell (2004) argued that public sector organizations have come under increasing criticism for placing too much attention on financial control and suffering from excessive proliferation of performance indicators. Modell (2004) concluded that non-financial performance management indicators and goal-directed multidimensional models may gradually replace the myth

that public service provision may be improved by a heavy reliance on financial control. The selected researched government department is not an exception in this regard. The department's major priorities are: delivering the highest possible level of client services incorporating community, business and government as partners. It is evident from this research that the department has developed non-financial performance measures. These measures are related to accountability indicators for every output classification. These indicators show that the department uses targets, estimated outcomes and the subsequent year's targets. The non-financial performance measurement system of the department is described by one of the junior staff in the department, as follows:

We have a number of financial indicators that are linked to an output based budget. There are four outputs to the department that are further broken up to output classes and they all have strategic indicators placed against them which are mostly non-financial.

The department evaluates their non-financial performance through a client satisfaction survey. This is done independently and which is not done in the private sector. There are different ways that the department conducts surveys and the different indicators used to determine how or what the department are doing. This was evidenced in comments by one of the mid-level executives of the Department:

Each of our agreements within the community sector has a performance measure and there is a quality assurance system in there. There are also performance issues in meeting the outputs we have purchased. There definitely needs a lot more work on measuring the qualitative attributes. We do those processes to ensure that there is accountability through our agreements. We do satisfaction surveys on our client. So if the clients are satisfied we can readily say our performance is good. These measures are reported annually in the annual report and we are accountable to government as well.

According to Giddens (1979, 1984), the domination dimension of social life includes facilities through which actors draw upon the structure in the exercise of power. In a broad sense power is considered as the ability to get things done, and in a narrower sense it simply implies domination (Busco, 2009). Macintosh and Scapens (1990) argued that resources facilitate the transformative capacity of human action (power in the broad sense), while at the same time providing the medium for domination (power in the narrow sense). In this sense, performance measurement systems are conceptualized as socially constructed resources, which can be drawn upon in the exercise of power in both senses. In the department, performance measurement systems are facilities that management, at all levels, uses to coordinate and control other participants. Management is able to use their power to legitimate

the employment of the organization's allocative resources in the interests of employees. These are the material phenomena which the department provides to its members to exercise power. In the researched organization, this performance measurement system acts as a modality of the structure. Therefore, a new domination structure of performance appeared in response to new public management initiatives, to challenge the traditional view of public sector.

It is also evident that in the department a number of administrative control systems have been introduced to guide the employees and to ensure the best interests of the organization. These control devices are customer service standards, public interest disclosure and freedom of information.

Customer service standards

The department has adopted Australian Capital Territory Government's Customer Service Standards 1999 for its internal service delivery areas. These standards are different from the private sector. These standards focus on customer needs and have a link to organizational improvement mechanisms within the service delivery areas. These standards are adopted by the department to control the actions of its staff also. As a public organization, the department continuously concentrates on public needs and, in comparison to the private sector, it is difficult to follow the standards. These Customer Service Standards guide its staff in dealing with difficult customers. These customer service standards become integral to the signification systems (Giddens, 1979, 1984) for the department's manager. Field study revealed that managers of the relevant areas regularly review the standards that have been set and determine where improvements are needed. The department also adopted best practice complaints handling standards. The department provides resources for complaints handling and arranges sufficient training and support to ensure that complaints are dealt with efficiently. They also monitor and review customer satisfaction and this improves customer and organizational outcomes. It is evident that customer service standards are the new signification system which is the rules or aspects of rules (Giddens, 1979). Evidence from the field shows that in the department, the new interpretive scheme (Giddens, 1979, 1984) is the customer service standards which mediate between the signification structure and social interaction in the form of communication between employees and citizens. It appears that in the department these interpretive schemes are the direct outcome of the new public management ideals and was implemented to establish the principle - value for money. Managers in the department use these interpretive schemes to interpret past results, take actions and make plans.

Managers also use these control devices to communicate meaningfully with its employees and to influence the individual towards organizational goal achievement.

Public interest disclosure

The NPM approach forced public organizations to express the values and preferences of citizens, communities and societies (Bourgon, 2008). Public interest disclosure is an innovation in the accountability system of a public organization which is used in the public interest (Mulgan, 2000; Kinchin, 2007; Bourgon, 2008). Organizational documents suggests that the researched department implemented control mechanism for public interest and adapted the ACT government *Public Interest Disclosure Act 1994* (ACT, 1994). It ensures that all disclosures made in the public interest are investigated thoroughly. Public interest disclosure of the researched organization has created a new structure of legitimation (Giddens, 1979, 1984) and attributed to everyday activity at the researched organization. The department receives complaints about the actions of the department, its officers or other persons employed by the department. These complaints are referred to Public Interest Disclosures. It is evident that this disclosure is directly related to the researched organization's goals and objectives achievements. Drawing on the values, context and strategic themes, the department is accountable to the clients and provides opportunities for regular feedback on any aspect of their contact with their service. In this sense, public interest disclosure helps towards its outward accountability.

Freedom of information

In the public sector, citizens are entitled to access all information from the public organization. It is different from the private sector and acts as an outward accountability mechanism of the public sector. Freedom of Information (FOI) legislation may be used in this case (Mulgan, 2000). FOI laws have made inroads into the older conventions of secrecy in the governmental agencies (Corbett, 1996; Roberts, 2000; Piotrowski & Rosenbloom, 2002). At the Commonwealth level in Australia, the *Freedom of Information Act* was passed in 1981 and came into effect in December 1982. It was one of the reforms of the Federal government of that time. In the Australian Capital Territory this Act was passed in 1989. In the light of the economic rationality of the new public management the researched government department has adopted The *ACT Freedom of Information ACT 1989*. Roberts (2000) argued that the freedom of information law gives citizens the right of access to government information. The FOI Act provides the legal right to the public to

see the documents held by ACT ministers and the department. It strengthens accountability to clients and to the law which is derived from the new public management. Freedom of information is not seen in private sector practice and it is the innovation of the public sector.

The legitimation structure (Giddens, 1979, 1984) in the department is the new moral obligation of the public service. Here, public interest disclosure and freedom of information are important and the department is accountable for acting in the public interest. This new public accountability is not providing information or answering questions. It includes setting goals, providing and reporting on results and the visible consequences for getting things right or wrong. The department developed these innovative control tools, which are designed to help employees make informed choices about their behavior and to communicate the department's core values of honesty, respect, confidentiality, professionalism and fairness. Employees apply these new values in performing their duties. The department has adopted some innovative cultural and people control mechanisms. These are communication and consultation, employee assistance program and work life balance.

Communication and consultation

From the field it has been observed that the researched department has created a culture of effective consultation and employee participation in the decision process. Interviews and examination of the organizational documents supports that it has both communicative and constructive roles in the business. For example, every individual throughout the organization is given an opportunity to take part in the planning process. It helped to improve communication through a mutual exchange of ideas and experiences. This attitude is consistent with the findings of Maddock (2002), Farnham, Horton and White (2003) and Brown, Waterhouse and Flynn (2003), that public management and new forms of human resource management have produced involvement with individual elements in the decision-making process. Documentary evidence suggests that the researched organization provides relevant information to assist the employees and the unions to understand the reasons for the proposed changes, and the likely impact of these changes, so that the employees and the unions are able to contribute to the decision making process (DHCS, 2007). In the researched organization, communication and consultation is viewed as an authoritative resource in the hands of the senior executives, which facilitates the transformative capacity of action within the organization.

In the department, the communication and consultation system is involved in the relations of domination and power, and as power is the

ability to get things done, management of the department uses its cultural control systems to provide facilities in the form of communication and consultation. Management of the department uses their power to legitimate the employment of the organization's allocative resources in the interests of employees. These are the material phenomena which the department provides to its members to exercise power.

Employee assistance program

One of the reform initiatives in the Australian public sector is consistent with the requirement for industrial democracy in the workplace. In that provision a consultative structure is to be implemented in organizations. The major issue addressed under the new structure is that of stress in the workplace (Martin & Coventry, 1994). According to these initiatives, and in line with NPM, the researched organization has introduced the Employee Assistance Program. New public management introduced this new form of human resource management that operates as an early intervention program in the workplace. It provides independent, confidential and professional counseling services. In the researched organization, this program is designed to address and improve employees' personal life and work performance which is adversely affected by personal or work-related problems. This finding is consistent with the results observed by Arthur (2000) that employee assistance programs increasingly provide benefits to reduce the effects of 'stress' on individuals and organizations; provide a 'management tool' to improve workplace performance and productivity; and respond to critical incidents.

The old bureaucratic tradition of public management dealt with a collective form of employee assistance. However, new public management led to a shift from collective assistance to individual needs (Farnham, Horton & White, 2003). The researched organization established a consultative structure that solves individual needs and this program includes communication and interpersonal problems, emotional, marital or family and relationship difficulties, alcohol or substance abuse, career planning and stress management and financial and lifestyle worries. In such situations the staff member could benefit from this counseling. In the department, the role played by actors and their interaction with the structure and social processes have been identified. The department has adopted and provided allocative resources through employee assistance program for the domination of the employees.

Work life balance

The researched government department developed a culture of flexible working arrangements which is helping employees changing their hours of work suited to their situations, job sharing and home based work. Organizational documents suggest that the department uses this control mechanism to recognize the needs of its staff to balance work, family and other personal commitments. It provides a framework to assist managers and staff with the negotiation, implementation and review of flexible work options (DHCS, 2006). This attitude supports the findings observed by Perrons (2003) that flexible working patterns and home working are compatible with a work-life balance and neither of which affected the volume of work. It is the allocative resources (Giddens, 1984) which the managers of the researched organization provide to its employees in the form of command over objects and use as a domination modality. Most of the employees interviewed believed that the researched organization has established a work-life balance culture to ensure a supportive workplace, along with a healthy and resilient work team, which contributes significantly to a productive work environment.

In the department, communication and consultation, an employee assistance program and work life balance, act as a modality of structuration. The cultural control system identifies a new set of values and ideals about approve and disapprove behavior. These ideals are the new ethos derived from the public sector reforms. The cultural control system in the researched organization acts as a modality of structuration. The department has developed this morality through the sharing of common meanings, values, norms and rituals by implementing new public management ideals within the organization.

Giddens's Structuration Theory is used in this study to understand the innovative management control systems in the selected government department as part of their reform. This theory provided an understanding of the relationship between management control systems and the actions of the employees in the department. Public sector reforms brought a challenge to the signification structure of the department and required the implementation of new interpretive schemes. To meet the demands of the NPM initiatives, the department implemented control devices as interpretive schemes in their organization. In the department, the elements of the new interpretive schemes for significations are annual report review and customer services standards. According to Giddens (1979, 1984), the domination dimension of social life includes facilities through which actors draw upon the structure in the exercise of power. In a broad sense, power is considered as the ability to get things done and in a narrower sense, it simply implies domination. In the

department, management control systems are facilities that management at all levels uses to coordinate and control other participants.

In the department the elements of domination dimensions are performance measurement systems, communication and consultation, an employee assistance program and work life balance. In the department, a new legitimation structure appeared in response to the new public management initiatives to challenge the traditional view. The legitimation structure in the department is the new moral obligation of the public service. Here, new public accountability is important and the department is accountable for acting in the public interest. The legitimation structure in the department consists of the normative rules and moral obligations of the social system. These are public interest disclosure and freedom of information. These ideals are the new ethos derived from the public sector reforms. Field study data reveals that the department developed new values and ideals which are designed to help employees make informed choices about their behavior and to communicate the department’s core values of honesty, respect, confidentiality, professionalism and fairness. Employees of the department apply these values in performing their duties. This behavior became integral to the legitimation system of the department (Giddens, 1979, 1984).

In the department, it is evident that management control systems are modalities of structuration in the three dimensions of signification, domination and legitimation. It shows how managers and employees make sense of organizational events and activities.

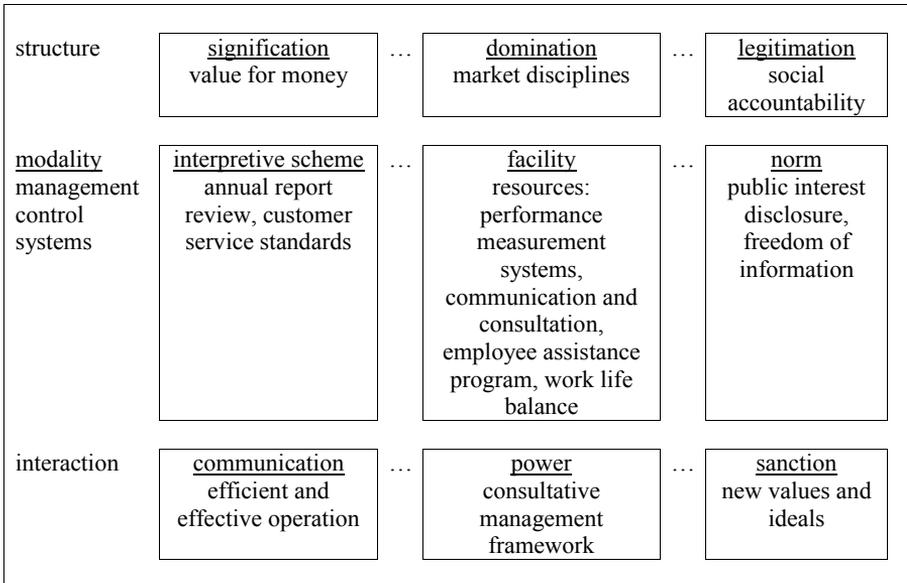


Figure 2. Structuration framework through control systems in the department

Giddens' structuration theory is concerned with the relationship between the actions of agents and the structuring of social systems in the production, reproduction and regulation of social order. In the department, the role played by actors and their interaction with the structure and social processes have been identified. In the department, it is evident that these innovative management control systems are modalities of structuration in the three dimensions of signification, domination and legitimation. It shows how managers and employees make sense of organizational events and activities. These control devices are both the medium and the outcome of interaction because, in the organizational setting, these control devices are constituted by human agency and, at the same time, are also guided by them. Therefore, duality of structure is evident in the department.

LIMITATIONS OF THE STUDY

The study is limited to the practice of management control systems in a government department in Australia. The characteristics of the government sector generally differ from the private sector in terms of profit motives, proprietary versus political interests, users and resource allocation process, external scrutiny, employee characteristics and legal constraints etc. However, it is evident from the study that the NPM initiatives forced the researched organization to promote innovative management control tools.

Another limitation of the present research is that it is a single case study and the findings cannot be generalized to a wider population. However, in this research, the single case study was the preferred method because the study was an attempt to understand, in-depth, how innovative management control systems were implicated in their wider organizational setting. It was not the objective to express a general overview of other organizations. As Stake (1995) argued, case study research is not a sampling research. He pointed out that a case study is expected to catch the complexity of a single case. Yin (2009) mentioned that the choice of designing single or multiple sites depends on the research question. In the present research, the researchers were interested to use a single site because it fits with the research questions. For another reason, multiple sites were not the option taken, as a multiple case study approach is used for a cross-site comparison (Eckstein, 1975; George, 1979; Hussain & Hoque, 2002) which was not the objective of this research.

Direction for future research

There are several implications of this study for future research. The financial and administrative reforms implemented in the public sector provide a key

opportunity to study several issues. The present research explored how innovative management control technologies were implicated in a new public management environment. The insight that was gained is that there are not enough in-depth studies that have addressed and focused on these issues. Hence, there are many research possibilities in this area which will strengthen our knowledge and understanding.

The major strength of the present study is that it is an in-depth case study. However, it has been argued that in a single case study, findings cannot be generalized to a wider population. An interpretive study could be done incorporating another three or four Government Departments. A comparison of experiences of reforms on those government departments who have responded to various new public management initiatives could prove useful for policy makers.

This study has argued that the researched organization adopted innovative management control systems and changed their structures and behaviors to implement managerial reforms. A comparative case study of the management control systems of a private company and a reformed government department could be an interesting area for future research. It could considerably extend the stock of knowledge in this area.

The present research adopted a particular theoretical framework to analyze and understand data. This framework was used to explore and gain understanding of the control process that evolved in the researched organization. Similar studies could be conducted adopting other social or political theories and would undoubtedly enhance our current understanding of the theoretical and methodological perspectives in the context of new public management.

The study was focused on a developed country. A similar study could be conducted adopting a single case in a developing country and would increase our understanding about the factors that play a vital role in designing management control systems in a developing world's public sector organization. In addition to that, a comparative study could also be done to explore the role of management control systems in the context of new public management initiatives in both developing and developed countries. It might also be fruitful to compare management control systems in changing public sector environments worldwide as this would provide an opportunity to disseminate information in this area.

CONCLUSION

Empirical evidence collected on the organization suggests that implementing these innovative control devices in the researched organization were a

response to pressures from NPM initiatives in Australia. This study also showed that the researched department implemented a wide range of management control mechanisms to attain the economic rationality of the NPM. In the researched organization the driving imperative for innovation is the need to respond effectively to new and changing government and community expectations. It has been observed that the innovations in the organizations involve consultation, negotiation, cooperation and agreement across and within Federal departments, territory departments and the private sector. These innovative control mechanisms have brought economic logic into the researched organization and established a new type of management within the organization. These control devices are both the medium and the outcome of interaction because in the organizational setting these control devices are constituted by human agency and at the same time are also guided by them. The findings from this study reveal that the researched organization has been operating within the context of a range of reformed government policies, strategies and laws, as well as Commonwealth-State/Territory Multilateral and Bilateral agreements. Therefore, the primary catalyst in implementing these control tools in the researched organization is a number of government regulatory policies. These policies forced the selected government department to adopt a new culture which has more managerial elements in its nature.

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Abstract (in Polish)

Badania dotyczą analizy systemów kontroli zarządzania innowacjami w kontekście inicjatyw w obszarze Nowego Zarządzania Publicznego (New Public Management, NPM). Inicjatywy NPM wprowadziły zmiany w strukturze i procesach organizacji sektora publicznego, wspierając lepsze nimi zarządzanie. Do badań wybrano departament rządowy w Australijskim Terytorium Stołecznym. Badania opierają się na pojedynczej perspektywie teoretycznej - teorii strukturacji Giddensa, która pozwala zrozumieć systemy kontroli zarządczej w analizowanej organizacji. Metody badań jakościowych służą pogłębieniu zrozumienia analizowanych zjawisk. Analiza studium przypadku jest wykorzystywana w celu lepszego zrozumienia względnej roli kontroli w zarządzaniu działalnością organizacji. Badacze argumentują, że analizowana organizacja wdrożyła zróżnicowane narzędzia kontroli zarządczej w celu poprawy wyników, przejrzystości i odpowiedzialności. Niektóre z wdrożonych narzędzi kontrolnych stanowią innowacje w sektorze publicznym. Analiza studium przypadku pozwala wskazuje, że stosowane narzędzia kontroli menedżerskiej wpłynęły na poprawę funkcjonowania badanej organizacji, wspierając adopcję praktyk Nowego Zarządzania Publicznego.

Słowa kluczowe: *innowacje, systemy kontroli zarządzania, Nowe Zarządzanie Publiczne, organizacja sektora publicznego, teoria strukturacji.*

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Leveraging Economy through MSMEs: Recent Trends and Challenges of Women's Entrepreneurship in South India

Nisha K. M¹ and Mohd Asif Khan²

Abstract

The new millennium is seen as an epoch of entrepreneurship with entrepreneurs perceiving novel opportunities, organizing resources, undertaking risks to pursue their goals in establishing innovative ventures for scaling new horizons. Women entrepreneurs have the potency to confront numerous challenges, such as creating equity, equilibrium, ensuring sustainable and inclusive socio economic development in divergent economies, by seizing tremendous business opportunities in the contemporary commercial world. Kerala, the southern State of India, is experiencing an economic renovation through technological transformation and, in particular, through the growth of women oriented Micro, Small and Medium Enterprises (MSMEs). The study aims to; identify the growth trends of women's entrepreneurship in the micro enterprises of Kerala; examine whether women's entrepreneurial activities significantly vary across the form of women owned enterprises, type of organization and nature of activity; and also explore the prospects and challenges faced by women entrepreneurs through micro entrepreneurial activities. Research methodology involves the application of descriptive quantitative analysis on the secondary data primarily collected from the database of Directorate of Industries and District Industries Centre for a period of 7 years extending from 2007-08 to 2013-14. Findings reveal that MSMEs spawn better income distribution, by operating in heterogeneous areas of the economy with limited capital and creating more employment opportunities, thereby reducing poverty and inequalities. The trend analysis reflects an escalation in the number of enterprises, investments, profits and employment opportunities generated especially through micro enterprises of women. They play a crucial role in the economy in terms of creating self employment and generating employment opportunities for others. A paradigm shift is seen in the role of women's entrepreneurship in terms of innovation, attitudes, leadership qualities, competitiveness, entrepreneurial skill and absorbing new entrants to the job market, empowering marginalized women.

Keywords: *women's entrepreneurship, micro enterprises, micropreneurs, MSMEs.*

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INTRODUCTION

Entrepreneurial development is a panacea for socio economic setbacks, poverty anomalies and lopsided development of several economies worldwide. It facilitates holistic sustainable development through rapid industrialization, mass employment generation and value addition of products and services. Empirical studies at a global level manifest that the countries with lower levels of development, greater income inequality and considerable levels of unemployment, reflected a noteworthy increase in entrepreneurial activities. Entrepreneurship is more necessity-driven in backward and developing economies. On the contrary, in countries with relatively low income, inequality, and low unemployment i.e., the more developed nations, the rates of entrepreneurial activities are significantly lower. Their economies are characterized by opportunity and innovation driven entrepreneurs (Kelly, Brush, Greene & Litovsky, 2010; Reynolds, Camp, Bygrave, Autio & Hay, 2002). Infrastructural development, financial access, regional policies, and the availability of quality labour and technological resources are the predominant factors influencing the development of Small and Medium Enterprises (SMEs) universally (Luczka & Pzepiora, 2012). Gancarczyk and Zabala-Iturriagoitia (2015) inferred that the capacity to sense, comprehend, filter, shape and calibrate opportunities is a decider of SMEs growth. The investigation threw light on the facts that configuration, procedures, designs and incentives to seize opportunities, investment structure of the units, education and training of human resource, influence the growth process of SMEs.

India, basically an agrarian economy, has been on the slower side with regard to industrialization and economic growth. With the advent of new industrial and economic policies and its impacts, India is emerging as one of the fastest growing economies in the world, showing signs of growth particularly in entrepreneurial development. MSMEs are becoming the beacon for the development of new entrepreneurial talents and innovation which are heterogeneous and widely dispersed across the country. Revitalizing inclusive growth of small businesses is decisive for income generation, job creation and self-employment opportunities for millions of prevailing and potential entrepreneurs, and ensuring optimum utilization of available resources in the country. The unorganized sectors of MSMEs in India are more than those in the organized sectors. The enactment of the MSME Development Act of 2006, enthused more and more enterprises to become registered under this Act, gradually facilitating the units to be a part of the organized segment. The manufacturing enterprises of MSMEs are more than the service sector enterprises in the country. Micro enterprises alone have a substantially higher share (more than 85%) of the total MSME sector in India. They are producing and marketing multiple ranges of products and services to

meet the variant needs of the local, domestic and global markets or value chains (Micro Small and Medium Enterprises [MSME], 2015).

Over the past few decades there has been a change in the socio economic scenario with the burgeoning participation of women in entrepreneurial activities. In the business life cycle, women are progressively crossing socio cultural and economic barriers, integrating their knowledge, skills and competencies to bring resilience to their business and economy as a whole (Ascher, 2012). Women's entrepreneurship, especially in the MSMEs, can kindle the share of the overall manufacturing and service sector by providing adequate support and patronage to small scale industries in formal and informal segments. Such enterprises are indispensable in terms of inclusive, equitable and balanced development, through the creation of employment opportunities, technological upgradation, upholding the entrepreneurial spirit and innovation at regional, national and international levels. The MSME sectors are a gateway to global growth in India and Kerala, the southernmost State in the country, is making remarkable strides towards being one of the main hubs for stimulating women's entrepreneurial growth and development.

Kerala has been facing a lot of hardships in the industrial arena and its industrial policies of 2001 and 2007 have been the rationale for many structural changes in the region. Despite various impediments, the State has registered the highest growth rate in MSMEs among the South Indian States in recent years. The MSME sector in the State has been dynamically contributing towards domestic needs, export marketing and foreign exchange earnings, by manufacturing and marketing divergent products and services, ranging from traditional to modern ones. Kerala is also the leading state in India, with the largest number of women micropreneurs. Microenterprises, having a higher share among the MSMEs in the State, are the seedbeds for stimulating broader development throughout the economy by providing a strong base. They are an attractive alternative for providing wider access, easy start ups with lesser investment, use of traditional technology, lesser risk and, above all, the capability of establishing home based industries. The present study attempts to investigate the role of women's entrepreneurship in leveraging the economy through registered microenterprises of MSMEs in South India with special reference to Kerala.

BACKGROUND OF THE STUDY

Women's entrepreneurship

Women's entrepreneurship in the globalization eon, acts as a catalyst for economic development and aids in creating new business women with substance, strength, and better managerial and decision making skills.

Women's entrepreneurship comprises of a woman or a group of women who discover new ideas, establish innovative venture, organize the factors of production such as labor, material, money, information and other resources, exploit opportunities in the market, create jobs and undertake risks, all in return for making a profit. Although there has been an encouraging upsurge in the number of women entrepreneurs across the globe in recent years, they are still underrepresented when compared to male entrepreneurs. Besides, they generally choose a line of business or industry that is contributing less to economic performance, like retail distribution, education and other service sectors. On the contrary, men are generally focused on manufacturing and high technology oriented activities that are highly productive and growth oriented. Women in the modern business world have to go a long way ahead, focusing more on key industrial and service sectors that have a greater potential of fetching higher returns and better opportunities for rapid and unwavering growth. Recently, women have been liberating themselves from the clutches of their stereotypical role and exploring new vistas of economic involvement, with broader vision and perseverance in their stride towards superior business accomplishments.

LPG, economic crises, social problems, the need for economic self-reliance, etc., are stimulating brand new entrepreneurial styles among women entrepreneurs, with diverse areas of interest ranging from designers, interior decorators, exporters, publishers, garment manufacturers, catering service providers, fisheries, agriculture, etc. A new entrepreneurial culture is emerging in the field of women's entrepreneurship based on creativity, self reliance, cooperation and openness. It is gradually making them economically productive members of the country who can contribute significantly to the income and wealth of the family and nation as a whole. Women, via entrepreneurial talents, are venturing into multi faceted business activities to improve their livelihood and self-esteem, obtain freedom from oppression and enjoy greater choices, thereby improving their standard of living at familial, societal, national, as well as international, levels. Channelizing women into the mainstream is both morally and economically essential for removing the gender gap and establishing fairness and equity, the realization of individual aspirations, socio economic empowerment and ensuring a better standard of living for all.

Overview of micro small and medium enterprises in India

The Industries Development and Regulation Act (IDRA), 1951, laid the foundation for developing a conceptual and legal framework for small scale and ancillary industrial undertakings in India. The SMEs Development Bill,

2005 paved the way for the enactment of the MSMED Act, 2006 and it became operational throughout India from 2nd October, 2006, replacing the concept of 'Industry' with 'Enterprises'. In 2007 the Government of India merged the former Ministry of Small Scale Industries and the Ministry of Agro and Rural Industries to form the Ministry of MSMEs. The Ministry now designs, promotes, facilitates, implements and monitors various programmes, projects and schemes with the aim of assisting MSMEs and helping them to scale up. The MSMED Act was notified in 2006, to address policy issues and strategies affecting MSMEs, and the coverage and investment ceiling of the sector. Although the primary responsibility for the promotion and development of MSMEs is vested with the State Governments, the Centre supplements the efforts of the State Governments through various initiatives (MSME, 2014). MSMEs differ in size and scope in different countries and the parameters on which the SME sector is generally defined is based on capital investment in plant and machinery, on the number of workers employed, or on the volume of production or turnover of the business. In India, MSMEs are defined in terms of the size of investment they employ in the plant and machinery or in equipment.

Table 1. Definition of MSMEs according to MSMED Act 2006

| Enterprise | Manufacturing Sector | Service Sector |
|---------------|--|---|
| | (Investment in Plant and Machinery) | (Investment in Equipment) |
| Micro | Does not exceed Rs. 25 Lakhs | Does not exceed Rs. 10 Lakhs |
| Small | More than Rs. 25 Lakhs but does not exceed Rs. 5 Crores | More than Rs. 10 Lakhs but does not exceed Rs. 2 Crores |
| Medium | More than Rs. 5 Crores but does not exceed Rs. 10 Crores | More than Rs. 2 Crores but does not exceed Rs. 5 Crores |

Source: MSME (2016).

As per the reports of Inter-Ministerial Committee for Accelerating Manufacturing in the MSME Sector, Lal (2013), states that MSMEs contribute to nearly 8% of India's GDP, 45% of the manufacturing output and 40% of the nation's exports. MSMEs are the largest employment generators in the country after agriculture. Press Information Bureau, MSME estimated that the contribution of the manufacturing sector of MSME to GDP during 2012-13, was 7.04% and the services sector MSMEs contributed 30.50% to Indian GDP. During 2012-13, the share of the MSME sector in the GDP of the country in total accounted for 37.54% (Micro Small and Medium Enterprises, Press Information Bureau [MSME PIB], (2014).



Figure 1. Leading Industries of MSME Sector

Source: MSME (2014)

Figure 1, depicts the leading industries with their respective shares. In India, the MSME sector is highly active in the retail trade with a share of 39.85% of the total MSME products and services (excluding motor vehicles and motor cycles, repairs of personal and household goods). The contribution of wearing apparel; dressing and dyeing of fur is 8.75% and for manufacturing of food products and beverages the share is 6.94%. The percentage share for hotels and restaurants is 3.64% and it is 3.57% for sale, maintenance, repairs of motor vehicles and motor cycles. As per the recent statistics published in the annual report of MSME (2014), over 6000 products, ranging from traditional to high-tech items, are being manufactured by the MSME sector, besides providing a wide range of services.

Recent developments of women’s entrepreneurship in South India with emphasis on MSMEs in Kerala

Development will be disproportionate if women’s entrepreneurial activities are ignored. With women constituting more than half the population, given a better environment and more opportunities to flourish, they can bring a radical change to the economic development activities of the State. Women have vast potencies but they still linger as an untapped and underutilized human resource worldwide. In Kerala too, the scenario is not different, with women’s development not in parity with that of their male counterparts throughout various sectors of the economy. MSMEs can act as an imperative instrument for the development of women and realize the goals of economic

growth and development of any nation. The MSME spectrum includes highly innovative, fast growing enterprises using hi-technologies that are more capital intensive, while at the other end lie micro businesses carried on by entrepreneurs typically on traditional lines using conventional methods which are more home-based and labor intensive. It has been observed that most of the MSMEs in Kerala are concentrated in the informal sectors that are unregistered and unorganized. The State government needs to introduce extra initiatives to encourage these more informal sectors to become registered under the MSMEs Act, so that a more structured form of business will be evolved that can enhance the organized, planned and systematic development of entrepreneurship in the country.

MSMEs are displaying entrepreneurial fortitude by emerging as a vibrant income generating and employment providing sector, predominantly in the Kerala economy. Buoyancy in the entrepreneurial sector, particularly through women's entrepreneurship, can traverse the wave of industrial boom in south India, as the State of Kerala is already in the forefront with respect to literacy, health care, women welfare, infrastructural development, and with respect to highly educated human capital of the country. As per the latest statistics available Kerala has a growth rate of 8.24% in MSMEs, which is much higher than the National average of 5%, with a major contribution flowing from the service sectors. The State, in the post liberalization period, has been registering remarkable growth in secondary and tertiary sectors and is persistently in the forefront with respect to social development. It has made brisk progression in the field of Information Technology, Tourism and Hotel Industry, Research and Development, Agribusiness, Food Processing Industry, Entertainment, Internet and Mobile Services, Banking, Insurance and so on (Department of Industries and Commerce, 2015).

More than 50,000 registered micro enterprises are now functioning in the rural, semi urban, as well as in urban areas across the State. They are engaged in diverse manufacturing and service sectors like the manufacturing of dairy products, food processing, readymade garments, soap and paper bag making, catering services, courier services, preparation of ethnic delicacies, etc. Initiatives have been taken for the development of the MSME sector and protecting the traditional industries through Private Public Partnership (PPP) arrangements. Funds and allied resources have been allocated to the construction of more hi-tech incubators, industrial parks, to provide training for skilled man power, development of clusters and a focus on product diversification to cater for varied customer requirements. Measures have also been taken for the rejuvenation of traditional and ethnic sectors like Handloom Societies, Hantex, Handweave, Powerloom Societies and development of a Handloom Village. Endorsement of value added products,

providing margin money loans and grants to ensure financial inclusion, and the free flow of funds for smooth entrepreneurial operations, are also given due importance. Other priorities include the stimulation of Coir Industry, increasing the production in Khadi and Village Industrial sector, renovation of Cashew sector including its brand building programmes (State Planning Board, 2013). This paper examines the following research questions:

- 1) Does women's entrepreneurship show positive growth trends in micro enterprises of MSMEs in Kerala with respect to total investment, annual turnover, export value, and employment generation?
- 2) Are women's entrepreneurial activities significantly varied across the form of women enterprises, type of organization, and nature of activity?
- 3) What are the prospects and challenges faced by women entrepreneurs through micro entrepreneurial activities in Kerala?

The purposes of the study are as follows:

- 1) To analyze the growth trend of women's entrepreneurship in micro enterprises of MSMEs in Kerala with respect to total investment, annual turnover, export value and employment generation
- 2) To examine whether women's entrepreneurial activities significantly vary across the form of women enterprises, type of organization and nature of activity
- 3) To explore the prospects and challenges faced by women entrepreneurs through micro entrepreneurial activities in Kerala.

RESEARCH METHODOLOGY AND DESIGN

An exploratory design was adopted in the initial stages of the research i.e., while reviewing literature of empirical and conceptual in nature. Descriptive design of quantitative nature has also been used while analyzing the secondary data that was primarily collected from the database of Directorate of Industries (DIs), District Industries Centre for the period extending from 2007-08 to 2013-14. Although unorganized sectors of MSMEs are more than organized sectors, due to a lack of availability of authentic data related to the unorganized sectors in Kerala, only the MSMEs registered under MSMED Act of 2006 in the State have been considered for the study. In addition, various reports of International Organizations and data drawn from records and various publications of the central, state and local governments have been used. Online publications on websites of government and NGOs and data from financial and other records of enterprises established by women have been utilized in the research. It also included data and information gathered from various books, articles, journals, reports, magazines, newspapers, theses and dissertations of both Indian and foreign publications that are pertinent to the study.

RESULTS AND DISCUSSION

Trends in women owned micro enterprises of Kerala since MSMED Act, 2006

Over the last few decades there has been a phenomenal overhaul in the arena of women oriented business. The status of women in India, their working conditions and state of affairs, are gradually improving from being just home makers and job seekers to a higher echelon of job creators. MSMEs’ registered units in Kerala for a period of 7 years extending from 2005-06 to 2012-13 are the main area of focus in the present study. The MSME Development (MSMED) Act was enacted during 2006 and, in the initial periods of the enactment of the Act, MSMEs also includes registered SSI units, i.e., between the periods 2005-06 to 2007-08. As per the All India census reports, comparative trends within India shows that Tamil Nadu has the highest number of enterprises followed by Kerala and Karnataka, all these being southern States of India. However, women entrepreneurs in the organized sectors of MSMEs registered under MSMED Act of 2006 are lesser as compared to the unorganized sectors. All India statistics on MSMEs also depict that, out of all female enterprises, 98% are micro enterprises, 1.80% come under the category of small and only 0.05% are medium enterprises (Shah, 2013).

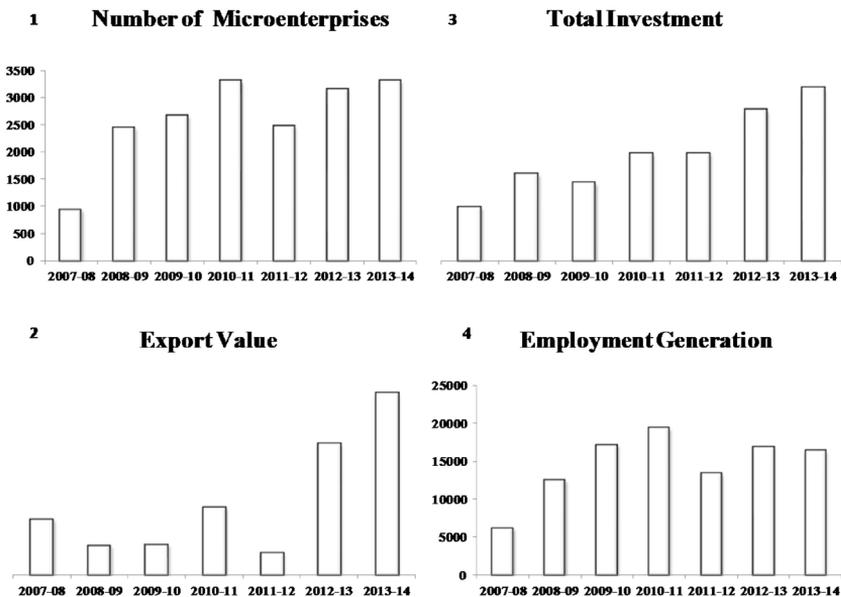


Figure 2. Trends in women owned enterprises from 2007 to 2014

Source: Directorate of Industries and Commerce (2014)

Figure 2, illustrates the particulars of various economic indicators related to women entrepreneurs in micro enterprises of Kerala in terms of the number of micro enterprises, total investment, employment generation and export value. It depicts the trends over a period of 7 years starting from 2007-08 to 2013-14. The figure related to the number of micro enterprises signifies that it increased steadily except from the year 2011-12 onwards. The export values of women micro enterprises in the initial years are lesser but towards the later stages it starts increasing noticeably. Total investment values also demonstrate that there has been a gradual mounting trend. The employment generated through women micro enterprises rises slowly and subsequently declines during 2011-12 then after it depicts stable growth in the years 2012-13 and 2013-14. During the financial year 2011-12 it is evident that there was a decline in the number of micro enterprises, total investment, employment generation and export value mainly due to the impacts of economic crises and depression in the domestic market.

Table 1. Details of Growth Rate of Various Economic Factors of Women's entrepreneurship in Micro Enterprises of Kerala from 2007-08 to 2013-14

| Year | Total Investment | * AGR (%) | Annual Turnover | AGR (%) | Export | AGR (%) |
|---------|------------------|-----------|-----------------|---------|-------------|---------|
| 2007-08 | 806 143 086 | | 1 384 458 641 | | 52 160 000 | |
| 2008-09 | 1 307 921 230 | 62.24 | 2 488 035 436 | 79.71 | 27 463 335 | -47.35 |
| 2009-10 | 1 174 719 209 | -10.18 | 3 309 588 091 | 33.02 | 28 321 199 | 3.12 |
| 2010-11 | 1 615 098 093 | 37.49 | 183 799 101 259 | 5453.53 | 63 412 441 | 123.90 |
| 2011-12 | 1 619 583 649 | 0.28 | 4 015 996 684 | -97.82 | 20 867 646 | -67.09 |
| 2012-13 | 2 265 900 582 | 39.91 | 4 625 686 837 | 15.18 | 123 150 000 | 490.15 |
| 2013-14 | 2 597 209 841 | 14.62 | 15 665 928 956 | 238.67 | 170 250 015 | 38.25 |

* Annual Growth Rate (AGR) = $((X2 - X1) / X1) * 100$, where, X1 = first value of variable X and X2 = second value of variable X.

Source: Directorate of Industries and Commerce, Kerala and compiled by the Author.

Table 1, shows the details of women entrepreneurs in micro enterprises in Kerala with respect to Total Investment, Annual Turnover and Export. On an overall basis it is evident that the figures for total investment, annual turnover and export value of MSMEs are more or less reflecting a rising trend. The table clearly depicts the Annual Growth Rates of MSMEs from 2007-08 to 2013-14. The annual growth rate of total investment of women entrepreneurs in micro enterprises is showing a fluctuating trend over the years as compared to the immediately preceding years. During 2008-09 the AGR of total investment was 62.24% and then fell to negative figures in the year 2009-10. Later it reflected a mixed trend with the growth rate rising and dipping alternatively. In the case of annual turnover, the growth percentage

gives evidence that it is highly fluctuating over the periods considered for study. It was highest during 2010-11 and lowest in the year 2011-12. The annual growth rate of export shows that it has a peak growth rate in the year 2012-13 and negative AGR during the periods 2008-09 and 2011-12.

Table 2, demonstrates the details of types of women's enterprises of MSMEs in Kerala during 2007-08 to 2013-14. It reveals that there are more women owned and managed micro enterprises in Kerala as compared to small and medium enterprises. The annual growth rate of micro enterprises was highest during 2008-09 and there is a negative annual growth rate of -25% in 2011-12. Small enterprises showed a growing trend from 2008-09 to 2010-11. However, it plunged to negative figures in 2011-12.

Table 2. Details of Growth Rate of Types of Women Enterprises of MSMEs in Kerala during 2007-08 to 2013-14

| Year | Micro | AGR (%) | Small | AGR (%) | Medium | AGR (%) | Total | AGR (%) |
|---------|-------|---------|-------|---------|--------|---------|-------|---------|
| 2007-08 | 942 | | 44 | | 0 | | 986 | |
| 2008-09 | 2 455 | 161 | 50 | 14 | 2 | 0 | 2 455 | 149 |
| 2009-10 | 2 667 | 9 | 63 | 26 | 1 | -50 | 2 667 | 9 |
| 2010-11 | 3 309 | 24 | 80 | 27 | 1 | 0 | 3 390 | 27 |
| 2011-12 | 2 475 | -25 | 73 | -9 | 1 | 0 | 2 549 | -25 |
| 2012-13 | 3 152 | 27 | 75 | 3 | 2 | 100 | 3 229 | 27 |
| 2013-14 | 3 313 | 5 | 81 | 8 | 0 | -100 | 3 394 | 5 |

Source: Directorates of Industries and Commerce, Kerala and compiled by the Author.

Table 2, also shows that in succeeding years it showed positive signs of recovery but with lower growth rates in comparison to early years. The contribution of medium enterprises to the total number of registered MSMEs is meager having only one enterprise on average over the period of seven years. The latest figures indicate that micro enterprises constitute about 98% of units in MSMEs. Only 2% of enterprises are small and there are no medium enterprises registered during the year 2013-14.

Figure 3, displays that the proportion of micro enterprises is much higher than the other forms of enterprises in MSMEs. It is followed by small enterprises and finally medium enterprises having limited number of units. It is also apparent from the figure that micro enterprises are showing an upward shift over the period of seven years, except in 2011-12. Micro enterprises are greater in number because the majority of the women entrepreneurs fall under the category of low or middle income groups. Above all, they can easily be operated as home based industries in urban or rural areas with lesser risk,

simpler technology, lesser capital, with locally available resources, and they can be run on traditional lines.

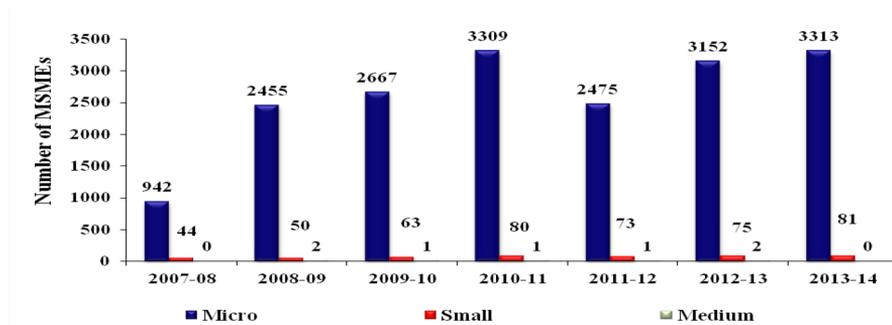


Figure 3. Trend of Growth of Women Entrepreneurs in MSMEs of Kerala from 2007-08 to 2013-14

Table 3. Details of types of organization owned by women in MSMEs in Kerala during 2007-08 to 2013-14

| Year | Sole Proprietorship | AGR (%) | Partnership | AGR (%) | SHGs | AGR (%) | Others | AGR (%) | Total Employment | AGR (%) |
|---------|---------------------|---------|-------------|---------|------|---------|--------|---------|------------------|---------|
| 2007-08 | 785 | | 42 | | 41 | | 74 | | 6 138 | |
| 2008-09 | 2 245 | 185.99 | 45 | 300 | 109 | 166 | 56 | -24 | 12 529 | 104 |
| 2009-10 | 2 405 | 7.13 | 74 | 2 900 | 129 | 18 | 59 | 5 | 17 136 | 37 |
| 2010-11 | 3 083 | 28.19 | 89 | 1 500 | 87 | -33 | 50 | -15 | 19 413 | 13 |
| 2011-12 | 2 288 | -25.79 | 62 | -2 700 | 78 | -10 | 47 | -6 | 13 424 | -31 |
| 2012-13 | 2 851 | 24.61 | 75 | 1 300 | 143 | 83 | 83 | 77 | 16 921 | 26 |
| 2013-14 | 3 141 | 10.17 | 80 | 500 | 60 | -58 | 32 | -61 | 16 381 | -3 |

Source: Directorates of Industries and Commerce, Kerala and compiled by the Author.

Table 3, displays the type of organization owned and managed by women in MSMEs in Kerala during the 7 years period. As compared to the base year 2007-08 there has been a significant increase in the number of women entrepreneurs in MSMEs during 2013-14 and also the total employment opportunities created by these units. The proportion of sole proprietorship type of units in the MSMEs' structure is much higher than in partnership, Self Help Groups (SHGs) or other forms of enterprises. Results of annual growth rate over the previous year periods indicate that sole proprietorship

units have the highest growth rate of 185.99% in 2008-09 and the lowest and negative rate during 2011-12. Partnership and SHG type of units register erratic growth rates with a higher rate of growth in the initial years and a diminishing trend towards later stages. The table also throws light on the employment opportunities created by women run micro enterprises. It generates employment of 6,138 in the year 2007-08 and the statistics reflect that employment generation has increased to a level of 16,381 employees during the year 2013-14. Employment growth is at its maximum in women based micro enterprises during 2008-09 and later in 2011-12 it falls to a negative figure of -31%. The AGR improves slightly in subsequent years but again dips to negative figures in 2013-14. In general it has been inferred that over the period of 7 years considered, the number of women oriented enterprises in different sectors and employment generation through these enterprises, are demonstrating an intensifying trend. However, while considering their annual growth rates over the immediate previous years, it shows that the percentage of growth keeps fluctuating.

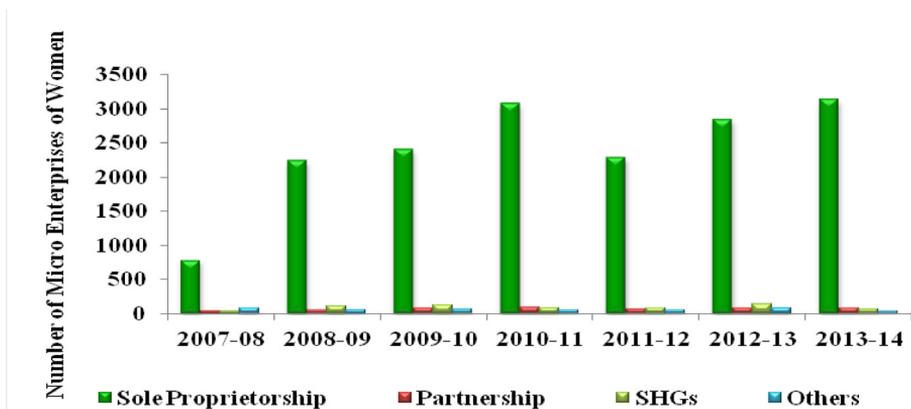


Figure 4. Trend of women entrepreneurs in micro enterprises based on type of organization from 2007-08 to 2013-14

Figure 4, indicates the trend of women entrepreneurs in micro enterprises, based on type of organization from the period 2007-08 to 2013-14. Among the various organization types, sole proprietorship has the highest proportion of units followed by SHGs and partnership form of business and others including cooperative societies, private and public limited companies and Hindu Undivided Families. Over the period of 7 years the different forms of micro business owned and managed by women entrepreneurs show a growing pattern. However, there is a slight decrease in the growth during 2011-

12. In the following years i.e., 2013 to 2014, the growth again demonstrates an escalating trend. During the year 2013-14 the sole proprietorship form of business has the highest majority as it constitutes 95% units in MSMEs. Partnership and SHGs accounts for only 2% each and the other categories, comprising of cooperative societies, private and public limited companies and Hindu Undivided Families, has a meager share of 1%.

Table 4. Details of women oriented micro enterprises based on nature of activity during 2007-08 to 2013-14

| Year | Manufacturing Sector | AGR (%) | Service Sector | AGR (%) |
|---------|----------------------|---------|----------------|---------|
| 2007-08 | 869 | ---- | 73 | ---- |
| 2008-09 | 2 094 | 140.97 | 361 | 394.52 |
| 2009-10 | 2 332 | 11.37 | 335 | -7.20 |
| 2010-11 | 2 927 | 25.51 | 382 | 14.03 |
| 2011-12 | 2 070 | -29.28 | 405 | 6.02 |
| 2012-13 | 2 531 | 22.27 | 621 | 53.33 |
| 2013-14 | 2 518 | -0.51 | 795 | 28.02 |

Source: Directorates of Industries and Commerce, Kerala and compiled by the Author

Table 4, indicates the particulars of women oriented micro enterprises in Kerala based on their nature of activities for the period extending from 2007-08 to 2013-14. The AGR of manufacturing and service sector over their previous years shows fluctuating growth. The AGR is highest in the manufacturing sector during the year 2008-09 with 140.97% growth over the immediately preceding year. It is lowest and negative with a rate of -29.28% in the year 2011-12. In the case of the service sector the AGR is highest in 2008-09 with a rate of 394.52% and lowest at -7.20% in 2009-10. In the year 2013-14, 76% of the working units that are women oriented come under the manufacturing sector and only the rest (24%) are related to the service sector.

The major manufacturing activities undertaken by women entrepreneurs in the study area include garment making, preparation of handloom clothes, producing and processing of food items like pickles, bakery products, running flour and oil mills, manufacture of tiles and hollow bricks, soap and washing powers, bags, umbrella and candle making, preparation of bamboo products, book binding and printing press etc. Among these categories garment making and food processing were in the forefront. Service based activities include running hotels, catering services, operating day care centres, beauty clinics, textile shops, computer centres, interior decoration services, construction services etc. Service sector enterprises of women entrepreneurs in Kerala are dominated by textile shops, beauty clinics, IT and catering services.

The study also found that the majority of women entrepreneurs in the organized sectors of MSMEs started their enterprises with the aim of earning a livelihood or supporting their family, and that they were more necessity driven entrepreneurs rather than opportunity or innovation driven (Nisha, 2015).

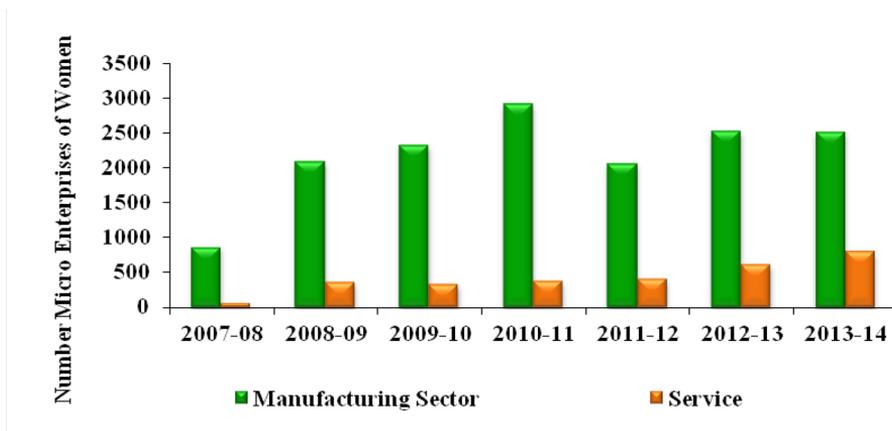


Figure 5. Distribution of women entrepreneurs in manufacturing and service sectors of micro enterprises of Kerala from 2007-08 to 2013-14

The trend of growth in the number of manufacturing and service sectors of women owned micro enterprises are reflected in Figure 5. It points to evidence which indicates that the number of manufacturing enterprises is more than the number of service sector enterprises. The manufacturing sector MSMEs are showing rising trends as growth proceeds from 2007-08 to 2010-11. In 2011-12 it drops and later starts rising in 2012-13 to 2013-14. The service sector enterprises are showing a more or less steady increase in the growth of number of enterprises. However, a review of annual reports of MSMEs provides the evidence that the income generated by service sector MSMEs is much higher than the service sector MSMEs in the country, thereby contributing significantly to GDP in India.

Prospects and challenges of women's entrepreneurship

Prospects

Attracting more investments: In order to attract more investments in MSMEs, importance is given to the Private Public Partnership (PPP) model

of development. Other policy measures of the Government include increasing land pooling facilities, promotion of industrial estates or parks and entrepreneurial development through industrial clusters. Ample steps are also taken for accelerating developmental activities through the promotion of Special Economic Zones in tune with National Manufacturing Policy. Creation of a MSME Equity Participation Fund through KSIDC and KFC to encourage startups is also underway (Department of Industries and Commerce, 2015).

Industrial Development Zones (IDZ): Measures are underway in building up IDZ for the promotion of manufacturing industries, agro based industries, textiles, commercial ventures, gems and jewellery products and social infrastructure. As a part of encouraging women's entrepreneurship in the State, the government considers treating women based industries under the category of thrust industry and authorizes them to avail of 30% investment subsidies. The thrust sector industries in the State are eligible for a higher rate of investment subsidies. They include rubber based industries, agribusiness covering food processing, marine products, ayurvedic medicines, readymade garments, light engineering, bio and nano technology and 100% export oriented units.

Boosting self employment opportunities: The Kerala State Entrepreneurs Development Mission was an initiative launched by the Government, which endeavored to provide self employment to 1lakh youths of the State through establishing 10,000 new ventures, over a period of 5 years (Micro Small and Medium Enterprises Development Institute [MSME-DI], 2012). 'WE-Mission' (Women Entrepreneurs Mission) was launched in the State to spread the spirit of entrepreneurship among women and scale up entrepreneurial activities. (Express News Service, 2015, May 08). It is proposed that a Job Bank is setup, using the name 'She Bank', employing skilled and trained women who can offer advice and financial support. An interest subvention scheme for Rs.10 Crores has been announced to cater to the needs of existing women entrepreneurs. The scheme is expected to cover industrial units run by women employing not less than 50% of women in its workforce (Express News Service, 2015, March 16).

New gen entrepreneurial development: India, having the highest youth population in the world, is targeting the young entrepreneurial talents for faster growth and better results. Having the benefit of a high Human Development Index, Kerala is budding fresh entrepreneurs to their entrepreneurial development clubs, which facilitate an evolution of new entrepreneurial culture in the State. It is the first Indian State to have earmarked 1% of the budget provision of each department for the entrepreneurship development programmes for students and youth. As part of bringing up a new generation of entrepreneurs, all Universities in Kerala have resolved to give 5 percentage

grace marks and 20 percentage attendances to student startups, which have at least one woman as a co-founder.

Magnetizing more enterprises into the organized sector: New policy measures of the State include a simplification of regulatory procedures for the establishment and running of enterprises. Procedures for registration and licensing systems are simplified to make it more transparent and enhance easy inception and operation of women entrepreneurial units. Online filing procedures for registration are available to facilitate the easy and quick registration of MSMEs. Interest free loans, subsidies and other financial assistance, tax benefits, free training and technological aid for women entrepreneurs etc., have also been implemented by the government to support and enrich entrepreneurial activities in the registered sector.

Protection and promotion of traditional and ethnic industries: Traditional and ethnic industries of Kerala, comprising of handloom, cashew, coir, handicrafts, bamboo, khadi etc., have also been promoted through a variety of new schemes and by allocating a substantial amount of funds. Several traditional industries have been registered with the Geographical Indications Registry of India to promote them globally.

Export orientation: At international level the electronics manufacturing industry is the largest and fastest growing manufacturing segment and India's growing strength in semi-conductor chip design, Electronics Systems Design & Manufacturing (ESDM), offers exceptional opportunities for growth and employment. The government is envisioning and giving its proactive support to the State of Kerala to become the most preferred destination for ESDM investments, and develop into a major hub for Electronics design and embedded software in India by the year 2020. The government has also decided to provide a 20% capital subsidy for innovative manufacturing units in the ESDM sector of Kerala.

Challenges

There is a dearth of financial assistance available to support women's entrepreneurship and besides this they are always the victims of exploitation by money lenders and other financial institutions who charge exorbitant rates of interest for credit. The repayment capacity of women is lower, either due to the low profits of their businesses, or a lack of financial support in the form of ownership of assets or other properties.

Women are also facing social taboos and other cultural barriers that thwart the growth and sustenance of their enterprises. Restrictions for women coming into business in certain communities and conventional social

roles assigned to women often prove to be a handicap for women's free mobility and freedom to work (Behara & Niranjana, 2012).

Various hurdles faced by women entrepreneurs in the current scenario include a lack of social support, the negative attitude of society towards women oriented businesses, marketing problems, a lack of availability of easy finance, paucity of raw materials, a lack of technical know-how, poor managerial skills, twofold responsibility for home and business, low risk bearing capacities and family conflicts, All these factors and more, are hampering women from coming into the business world or thwarting their performances (Vijayakumar & Naresh, 2013).

Women entrepreneurs have to face a series of problems right from the stage of establishing an enterprise and then all through the operational stages. The critical problems faced by women entrepreneurs include socio-cultural barriers, market-oriented risks, a lack of knowledge in business administration, and limited awareness about financial assistance, all blocking the way of women's entrepreneurial development (Gupta & Kumari, 2014).

According to a United Nations Industrial Development Organization (UNIDO), (2003), report, women suffer from various constraints, and cultural values and social norms hinder the equal participation of women in society. Women entrepreneurs face problems of unequal access to productive resources and services, including finance and skill upgrading opportunities. Certain legal provisions and legislative systems make it complicated for women entrepreneurs to take business development initiatives. Their dual role of maintaining family responsibilities and being business women is another major challenge.

The challenges identified through various empirical studies and review of literature mentioned earlier is also prevalent among women entrepreneurs in MSMEs in the southern State of India. Women entrepreneurs' needs for becoming economically productive and enthusiastic can be materialized through devising pertinent measures to integrate women as decision makers, participants and beneficiaries, thereby improving their opportunities for better performance and scope for attaining higher living standards. A wide continuum of elements affects the equitable participation of women in development so it is necessary to address the totality of problems women face as entrepreneurs.

CONCLUSIONS

Women entrepreneurs, despite facing various hurdles, are spreading their wings and exploring new avenues of economic participation. The growth of women's entrepreneurship in the State has a potent multiplier effect that can

result in healthier, better educated families and eventually greater economic augmentation. MSME sectors in Kerala have been contributing significantly towards domestic needs, export marketing and foreign exchange earnings, producing divergent products ranging from traditional to modern, with lower energy consumption and minimal damage to environment. Results, based on secondary data related to the 7 year period considered in the study, show that women's entrepreneurial activities in the registered MSMEs indicate a dominance of micro enterprises, and that the number of sole proprietorship type of units in the MSMEs' structure is much higher than in partnership, SHGs or other forms of enterprises. It can also be seen that the number of manufacturing enterprises is more than service sector enterprises. The trend analysis result portrays a rising trend in the number of enterprises, investment, profit and employment opportunities, all revealing the future prospects for women's entrepreneurship in the State. Women play a foremost role in the prosperity of a society, and with Kerala being the only State in India having a female population that outnumbers the males, it means that development is not feasible without the socio economic participation of women. Promotion of women's entrepreneurship in MSMEs upholds novel entrepreneurial spirit, inclusive development and innovative resilience in the State for exploiting innovative economic opportunities and bringing new business to the region.

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Abstract (in Polish)

Nowe tysiąclecie jest postrzegane jako epoka przedsiębiorczości z przedsiębiorcami dostrzegającymi nowe możliwości, organizującymi zasoby, podejmującymi ryzyka, aby realizować swoje cele w tworzeniu innowacyjnych przedsięwzięć i docieraniu do nowych horyzontów. Kobiety przedsiębiorcze mają siłę, aby stawić czoła licznym wyzwaniom, takich jak tworzenie kapitału, równowaga, zapewniająca zrównoważony i sprzyjający włączeniu społecznemu rozwój społeczno-gospodarczy w zróżnicowanych

gospodarkach, poprzez wykorzystanie ogromnych możliwości biznesowych we współczesnym świecie. Kerala, południowy stan Indii, przeżywa odnowienie gospodarcze dzięki transformacji technologicznej, a w szczególności poprzez wzrost liczby kobiet zorientowanych na mikro, małe i średnie przedsiębiorstwa (MMŚP). Badanie ma na celu: określenie tendencji wzrostowej przedsiębiorczości kobiet w mikroprzedsiębiorstwach w stanie Kerala; zbadanie, czy działania przedsiębiorczych kobiet znacząco różnią się w przedsiębiorstwach należących do kobiet, w zależności od rodzaju organizacji i charakteru działalności; a także zbadanie perspektyw i wyzwań, przed którymi stoją kobiety przedsiębiorcze poprzez działania w zakresie mikroprzedsiębiorczości. Metoda badawcza polega na zastosowaniu opisowej analizy ilościowej danych wtórnych zebranych głównie z bazy danych Dyrekcji Przemysłu i Powiatowego Centrum Przemysłu w okresie 7 lat, rozciągającym się od 2007-08 do lat 2013-14. Wyniki pokazują, że MMŚP uzyskały lepszą dystrybucję dochodów, działając w różnorodnych dziedzinach gospodarki z ograniczonym kapitałem, stworzenie większych możliwości zatrudnienia, a tym samym zmniejszenia ubóstwa i nierówności. Analiza tendencji odzwierciedla wzrost liczby przedsiębiorstw, inwestycji, zysków i możliwości zatrudnienia generowanych w szczególności poprzez mikroprzedsiębiorstwa kobiet. Odgrywają one kluczową rolę w gospodarce pod względem tworzenia miejsc pracy i generowania możliwości zatrudnienia dla innych. Zmiana paradygmatu jest postrzegana w roli przedsiębiorczości kobiet w zakresie innowacji, postaw, cech przywódczych, konkurencyjności, przedsiębiorczości i umiejętności absorbowania nowych podmiotów na rynku pracy, aktywizując marginalizowane kobiety.

Słowa kluczowe: przedsiębiorczość kobiet, mikroprzedsiębiorstwa, mikroprzedsiębiorca, MMSP.

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