



**CENTRE FOR THE STUDY
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**FINANCIAL PERFORMANCE OF GROUPS OF COMPANIES IN POLAND
AGAINST THE BACKGROUND OF HISTORICAL DETERMINANTS AND
KNOWLEDGE MANAGEMENT PROCEDURES APPLIED**

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Abstract:

Polish businesses are passing the fifteen year mark of the free market experience. The important processes that could be observed during that time include the formation of groups of companies. What were the establishment paths of these multiple organisations and what was the impact of historical determinants on their operation and financial performance? What is the extent of contribution of subsidiaries to the financial performance of the groups? And finally what are the main drivers of their effectiveness in the context of group management system applied and knowledge management procedures?

This paper attempts to provide answers to these questions. It presents insights, observations and selected findings of research conducted over the period of the last five years. It is shown that the operation of these organisations is on the one hand strongly determined by historical factors, and on the other the strength of this impact diminishes with time. Groups of companies see positive operational changes, reflected mainly in improved financial performance, growing significance of subsidiaries and the enhanced effectiveness of the management systems applied which are broadly based on knowledge management procedures.

Keywords: group of companies, effectiveness, synergy, knowledge management

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Introduction

It has been over fifteen years since the commencement of the system transformations and the first economic changes in Central Europe. Some of the countries in the region are now members of the European Union. Businesses follow new operating paradigms which are eons apart from those governing centrally-planned economies. And yet, historical determinants can hardly be without any effect on the current operation of businesses in those countries. Groups of companies, going back to the period of system transformations, are a very significant and interesting development in the Polish economy. The aim of this paper is to present the findings of research focused on the financial performance of groups of companies in Poland. The issue is all the more significant, as the latest economic information indicates that as many as 307 groups of companies are among the top 2000 Polish companies. They account for nearly a third of the turnover of the entire category and in 2003 their total sales revenues amounted to some EUR 75.8 billion (EUR 1 = PLN 4) against EUR 246.3 billion generated by the entire category of businesses (*Rzeczpospolita*, November 2004). In 2003, the turnover of groups of companies was up on 2002 by 18.7 percent, compared to 12.7 percent for the category.

The financial performance of groups of companies presented in the paper is evaluated in terms of historical factors underlying the formation of those organisations and the management systems employed by them, including knowledge management procedures. The term *knowledge management* is understood as a process that enables identification, selection, organisation, dissemination and transfer of important information among the individual members of the group of companies. The process involves effective problem solving, dynamic learning as well as strategic planning and decision making (Gupta, Iyer & Aronson, 2000). As indicated by the findings of our research, these processes significantly affect the level of financial performance achieved by groups of companies.

The majority of Polish groups of companies developed in the process of restructuring of the former state-owned enterprises. Parent companies saw these processes as a way of trimming down their operations, mainly by reducing auxiliary functions not directly connected with the core business. Consequently, the emerging subsidiaries had no clear-cut development strategies (Chadam, 2002). Instead of the expected improvement in effectiveness, the groups often saw fixed costs increase as a result of additional overheads, infrastructure costs, overlapping of some positions and the unnecessary rivalry among the group's subsidiaries. Not at all infrequently, subsidiaries treated their mother company as the main provider of orders, at the same time expecting to secure higher prices on deals with the parent than the rates prevailing in the market. All that may suggest that the bulk of Polish

groups of companies were established as part of a fad, rather than as a result of genuine needs created by the market. Another important facet of those organisations was a relatively strong parent and weak subsidiaries, both in terms of their market offering and financial standing.

Our research is an attempt at an objective evaluation of the developments observed in the financial performance of groups of companies. As the first stage of research, financial results were assessed in terms of the two key paths of formation of groups of companies in Poland and the application by them of knowledge management systems. The purpose of the second stage of research was to indicate the direction of the development process of Polish groups of companies in terms of the participation of group members (parent companies and subsidiaries) in the reported financial performance. The need for a follow-up was evident from the conclusions drawn at the first stage of research and the belief that the ultimate economic performance of groups of companies will be driven by both the results of the parent company and all other members of the group. And given the current weakness of subsidiaries in Polish groups of companies one could even claim that positive changes in the operation of groups of companies will require the subsidiaries to improve their contribution to the financial performance of the entire group of companies.

1. Grounds and Paths of Formation of Groups of Companies in Poland

As we have already mentioned, historical determinants of the Polish economy relating to the long rule of the centrally-planned economy determined the formation of groups of companies following the transformation path. One could even go as far as to claim that this is a typically Polish way of establishment of groups of companies resulting from privatisation, breaking up monopolies and economic restructuring. In practice, a state-owned enterprise would be transformed into a commercial company (commercialisation) wholly-owned by the State Treasury and subsequently different parts of its assets would be hived off from it to set up commercial subsidiary companies.

According to numerous studies, the main reasons for the establishment of groups of companies by transformation included:

- slump in the demand for the core product of the enterprise as the markets of the Comecon countries or the domestic market collapse,
- mounting debt and problems with financial liquidity,
- ineffective organisational structure and management system,
- increasing fixed costs, mainly as a result of the extensive auxiliary processes,

- no leader in the management capable of facing up to the challenge of taking the enterprise through the crisis.

Groups of companies established as a result of equity/assets restructuring (spinning off subsidiaries) were to set the stage for improved effectiveness mainly by improving the entrepreneurship of the smaller units and by creating a transparent business structure (Figure 1). The gradual privatisation of the individual subsidiaries was also an important factor, e.g. by merger with a strategic investors.

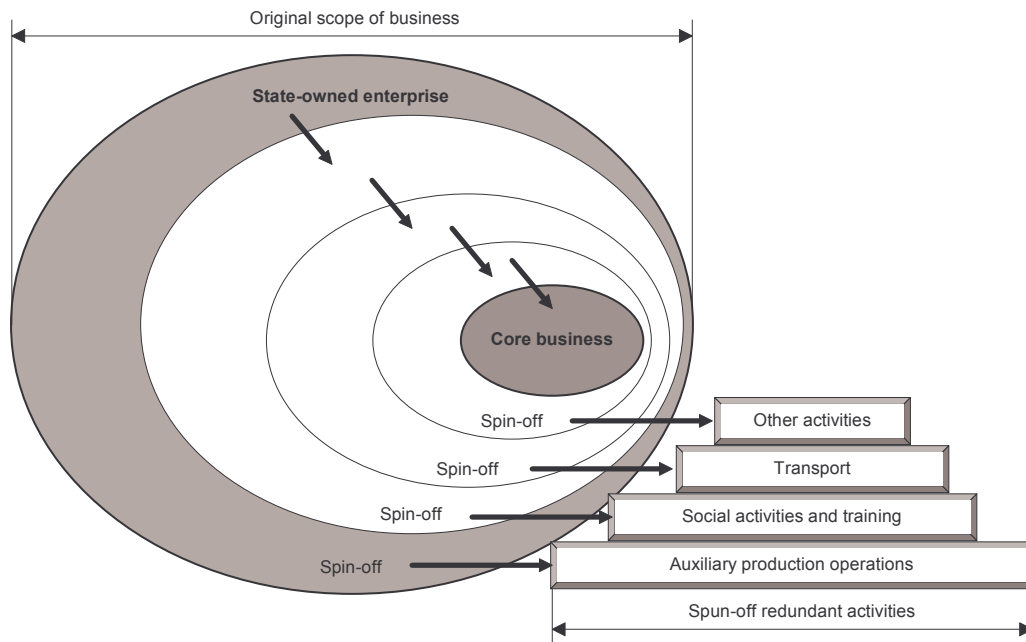


Figure 1. Establishment of groups of companies by state-owned enterprise (SOE) restructuring

Source: Author's analysis

The political and economic changes taking place after 1990 resulted also in the formation of many mainly smaller groups of companies evolving from enterprises set up already in the market economy which – by a natural process of investing profits – expanded the scope of their business and market presence. Encouraged by market success, those companies invested their profits into new activities often jointly with newfound strategic or financial partners. As at that stage the market economy had not been around for too long in Poland, the size of those equity projects was smaller than the ones set up on the basis of large former State-owned enterprises.

The above cases of group of company establishment were founded on the same legal basis, while the reasons and grounds for the processes varied. Summing up, it needs stressing that groups of companies established as a result of transformation of former state-owned enterprises involved a contraction of the scope of operations of the business being restructured. Successively – depending on the size of the enterprise and the scope of its operations – certain activities were hived off to set up new subsidiary companies. Auxiliary processes, outside of the core business of the parent com-

pany, were almost always spun off. In this way new companies emerged engaging in transport, overhaul and maintenance, social activities, construction, machine and equipment maintenance, tools production, etc.

The other path involves the process of capital concentration resulting from the growth of the business. Business start-ups, business acquisitions or take-overs were a reflection of a coherent business development strategy. They usually complemented the core business of the parent company and were set up by investing profits in new areas of business, albeit by no means unrelated to the core business of the group. One of the analysed cases (ELDORADO – Figure 2) shows how a parent company operating in wholesale distribution of food products developed a groups of companies supplementing its core business by setting up new entities with a view to developing a retail chain and integrating buyers in a system of electronic data interchange (EDI). As a result, specialised subsidiaries (organised as limited liability companies) were set up, pursuing the objectives of the group.

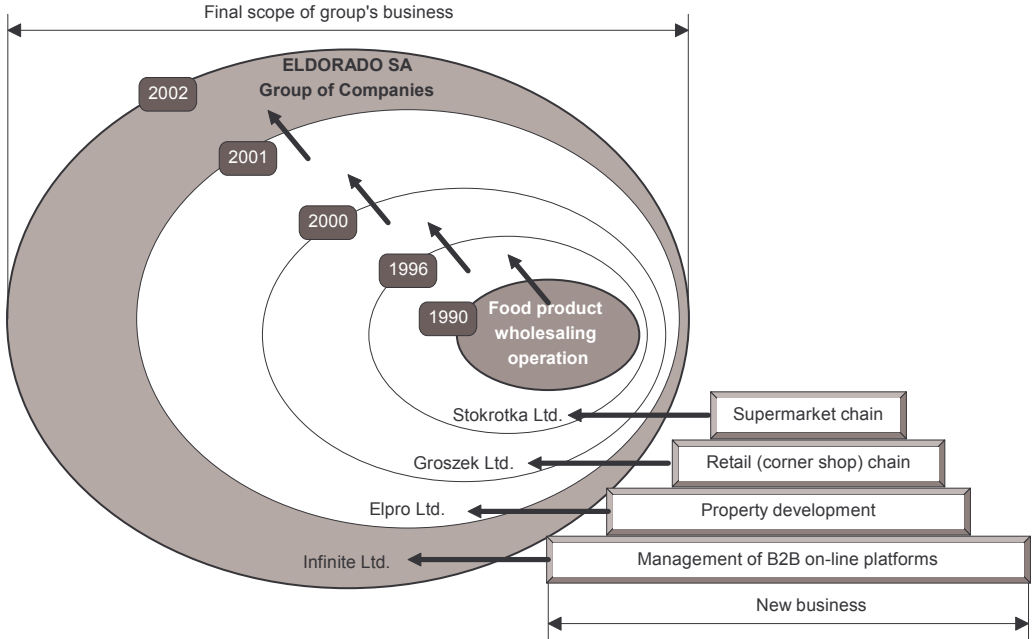


Figure 2. Establishment of Eldorado S.A. Groups of Companies
 Source: Author's analysis

2. Knowledge Management and Effectiveness of Groups of Companies

Management is a process of planning, empowering and evaluating performance of teams of people working towards a common goal (Stanton, Etzel & Walker, 1994). These efforts are undertaken in various areas in which the business operates (such as logistics, production, marketing and sales,

maintenance, R&D, HRM, infrastructure), described in detail by M.E. Porter (Porter, 1985). The aim of these activities is to achieve the intended market outcomes, translating directly into the economic and financial performance of the business. Improving financial performance and competitiveness were also the key objective underlying the establishment of groups of companies. The operation of groups of companies in their market environment, similarly to individual businesses, is subject to various forces reflecting constant changes in both the external environment and in the company (group of companies) itself. Those organisations had to learn to be flexible in responding to the emerging changes and develop strong features of a learning organisation.

The main resource of a learning organisation is its knowledge and the effective use of knowledge to serve the purposes of the organisation is determined by the existence of an effective system of knowledge management at the level of the entire organisation. Referring to the observation of A. Tiwana, regardless of the internal organisation of a group of companies and the type of products offered, the knowledge management system demonstrates processes of creating value and developing a competitive edge by collecting, transmitting and applying knowledge acquired during interactions with the customer (Tiwana, 2001). Certain processes have also been observed, I. Nonaka and H. Takeuchi refer to them as externalization and combination (Nonaka & Takeuchi, 1995), that contribute towards improving the flow of information inside the group and consequently enhance the performance of its basic business functions. In addition, effective knowledge management in multiple organisations requires paying special attention to strategy, organisational culture and technology, constituting the principal constituents of the knowledge management system (Heck & Rogger, 2004; Hussain, Lucas & Asif Ali, 2004). The process has been shown to be based on four basic functions (Frappaolo, 1998): identification of internal sources of knowledge (*cognition*), internal processing of knowledge (*internalization*), transfer outside (*externalization*) and acting as an intermediary in exchanging it with the environment (*intermediation*). Only a knowledge management strategy that is coherent throughout the entire groups of companies and supported by the appropriate technology and organisational culture facilitates generation of the relevant knowledge by each member of the group, offering it in the right form to other members of the group and identification among members of the group of the best sources of procuring knowledge in a specific area of operation, resulting in the attainment of specific economic goals.

It is highly likely that historical determinants underlying the establishment of groups of companies have a significant role to play in the development and operation of a knowledge management system within a group and in consequence affect its economic performance. Once established, multiple organisations had to reinvent common goals, scope and manner of operation. As a result they re-

quired an effective group knowledge management system (*know-why, know-what, know-how*), based on coherent procedures and applications, facilitating effective knowledge management at various levels of the organisational structure and in the different areas of business (Yim, Kim, Kim & Kwahk, 2004). The knowledge management system had to include all levels of management decision-making, i.e. strategic, operational and tactical (Biloslavo, 2004) and in effect had to determine the quality of economic relations of the group of companies with its external environment. As indicated by earlier Polish research (Bałtowski, 2003; Wawrzyniak, 2003), the establishment of a group of companies with a strong parent company as a rule resulted in the unification of the internal processes. It had the form of an intensive flow of knowledge among members of the group to even out the level of internal organisation, technical solutions and market procedures employed. The process however was not limited to a passive acceptance of all solutions of the parent company but involved a multi-directional flow of best solutions among all subsidiaries of the group of companies, as well as between the group as such and its business environment. Thanks to that a sequence of events typical of the Knowledge Life Cycle Model (Leitch & Rosen, 2001) involving (Wielinga, Sandberg & Schreiber, 1997) knowledge selection, development, distribution, retention and consolidation was observed, which consequently becomes decisive in multiple organisations demonstrating strong features of learning organisations.

A learning organisation constantly develops its knowledge, with time improving its value (Schein). The idea of constant development of knowledge clearly confirms that the development occurs as a result of changes in the company's environment as well as internal changes (Schein; Slater & Narver, 1995). And so knowledge is built in a continuous process of learning on the part of the organisation and its workforce, it is collected in human minds and IT systems, appropriately stored and updated. Knowledge is created in the organisation in response to the needs and expectations relating to its use as the internal organisational processes listed above are implemented. The knowledge resource evolves with staff meetings, R&D efforts, marketing research, innovation, improvement of market offering, engagement of experts, innovation transfer etc. (Wiig, 1995) as well as during structural changes occurring within the group of companies, as the number of its corporate members is increased or reduced.

The features observed in networked organisations as they cooperate in broad regional, national, European and global markets (Ching, Holsapple & Whinston, 1996) may be also extended to a group of companies operating in a selected market as a multiple organisation. In this case, as a rule, the parent company is usually the integrating factor for the network (group of companies), acting as the core of the organisation and contributing most to the appreciation of the group's value and the

development of synergy (Hargadon & Sutton, 2000). A factor that directly affects the achievement of synergy, and as a result the financial performance of the group, is an intensive transfer of knowledge among members of the group of companies, as they actively cooperate implementing all the internal processes and responding to changes in the tumultuous environment (Figure 3).

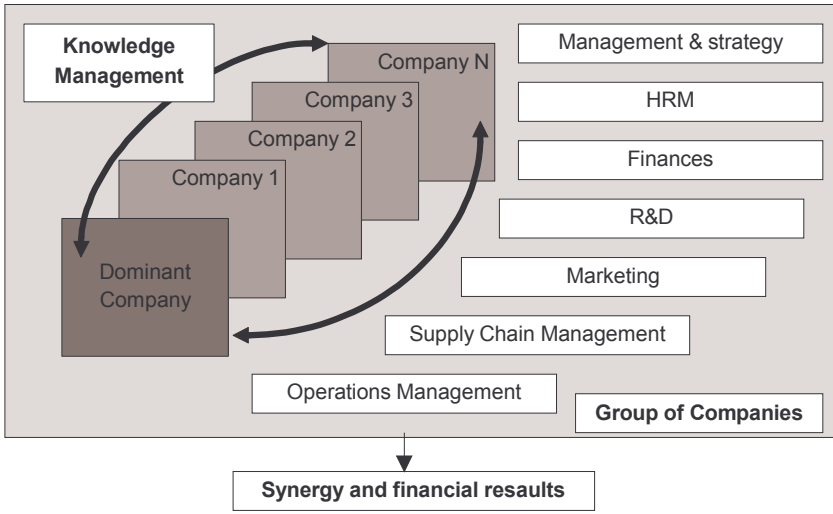


Figure 3. Knowledge Management and Synergy
 Source: Author.

In effect, multiple organisations represent a specific business structure which is capable of achieving synergies thanks to the cooperation of its constituent parts in the individual areas of operations. The sources of potential synergies refer also to a definition formulated by I. Nonaka who offers that knowledge management involves discovery and management of a varied – in terms of level – knowledge of individuals, teams and organisations, in a way that helps improve their effectiveness (Nonaka, 1994). The synergies therefore have their specific economic dimension translating into the financial performance of the entire group of companies. The findings of research addressing this issues with reference to the historical determinants of the development of groups of companies in Poland are presented in the following sections of this paper.

3. Impact of Historical Determinants on Knowledge Management Procedures and Financial Performance of Groups of Companies under Review

3.1. Research Methodology

As already mentioned, the first stage of research focused on the historical determinants of development and operation of groups of companies in Poland. These historical factors strongly affected the management of groups of companies, knowledge transfer system applied and in effect the financial performance of the organisations. The research was conducted in 2001 and covered smaller groups

of companies. The sample included 17 groups of companies which were made up in total of 61 companies (parent and subsidiary) and comprised the full population of groups of companies operating in one region of Poland. Figure 4 presents the research methodology employed at that stage of research.

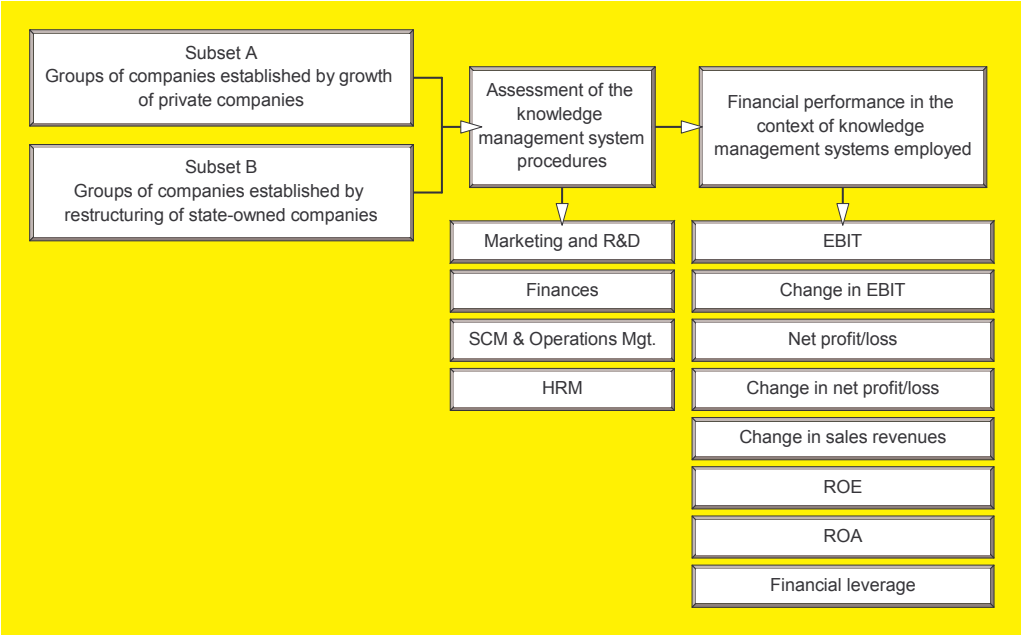


Figure 4. Research Methodology

Source: Author's analysis

The groups of companies under review were divided into two subsets: Subset A including groups of companies set up after 1990 as a result of capital concentration and growth of private businesses and Subset B including groups of companies established on the basis of restructured former state-owned enterprises. In each subset, the management of the multiple organisation was evaluated along the lines of knowledge management procedures employed. The key evaluation criterion was the application of shared knowledge management procedures among all members of the group of companies. An assumption was made that this should lead to such an organisation of management processes that would allow benefiting from the available strengths relating to the presence of specific companies in the group. The opposite extreme would be a set of “random” businesses for which the capital relations developed do not affect or affect only marginally the operation of the holding organisation. A coherent system of knowledge management built for all members of the group creates good grounds for attainment of the objectives of the multiple organisation and for gradual improvement of its financial performance.

3.2. Summary of Research Findings

Figure 5 presents a summary of research findings in terms of the integration of knowledge management procedures in the individual functional areas of the groups of companies under review. The ratio indicates the proportion of groups of companies implementing knowledge management procedures in an organised manner throughout the group for all its members (Chadam, 2003).

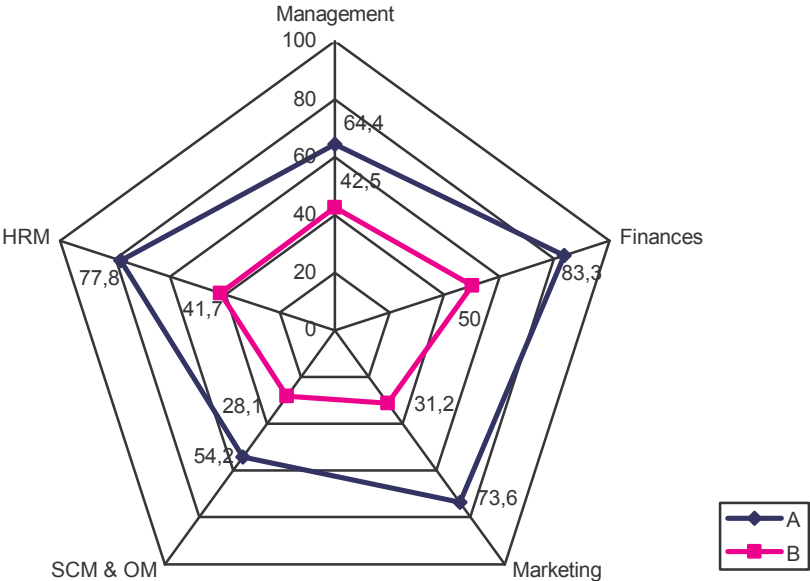


Figure 5. Common efforts in the individual group management areas (% in Subset A and B)
 Source: own analysis based on research findings

It needs stressing that the level of integration of the management function in those groups of companies that were established through the restructuring of the former state-owned enterprises is much more limited. The groups of companies developed by concentration of capital and growth of private businesses demonstrate a much higher ratio of the application of knowledge management procedures and internal integration of the group’s members. Therefore, it is the latter organisations that can expect to reap additional benefits from the operation as part of groups of companies. The summary picture of the information and decision-making area is based on the shared knowledge management efforts in strategic planning, quality management, group’s activity monitoring, implementation and application of IT systems and other activities supporting management processes. The superior performance in financial activities of the group stems from a better organisation of loan procedures, guarantees, mutual settlements and debt and financial surplus management throughout the group of companies. Very clear disparities are also visible in the common marketing policy and group development. This in particular applies to the standardisation of offers and the overall presentation of the group, common price and promotional policies, common trade network, use of market research shared throughout the group, common product development and R&D efforts. As far as operations management and SCM go, the research has demonstrated the propensity towards build-

ing a common network of suppliers, cooperation inside the group and utilisation of the group's production capacity, technology development and environment protection efforts. The situation is similar in the area of a common personnel policy for the entire group, reflected in a common pay and incentive policy, common skills development activities and transfer of staff among members of the group.

Table 1 presents the impact of historical determinants and group management procedures resulting from them on selected financial performance measures in the two subsets of multiple organisations. An analysis of performance as reflected by EBIT and net profit, pattern of change of these indicators over time and changes in sales revenues provides some interesting insights into the differences in the operation of groups of companies in both subsets.

Table 1. Analysis of financial performance in companies

	Description	Number of Companies			Structure		
		Total	Set A	Set B	Total	Set A	Set B
1	Total number of companies	61	28	33	100%	45,90%	54,10%
2	EBIT						
	Number of companies with positive result on sales	45	24	21	73,77%	85,71%	63,64%
3	Net profit/loss						
	Number of companies with net profit	43	23	20	70,49%	82,14%	60,61%
4	Change in EBIT						
	Number of companies with positive change in result on sales	37	18	19	60,66%	64,29%	57,58%
5	Change in net profit/loss						
	Number of companies with positive change in net profit/loss	33	18	15	54,10%	64,29%	45,45%
6	Change in sales revenues						
	Number of companies with positive change in sales revenues	36	22	14	59,02%	78,57%	42,42%
7	Financial leverage						
	Number of companies with positive financial leverage	43	23	20	70,49%	82,14%	60,61%

Source: own analysis based on research findings

In the set of businesses under review, nearly 74 percent of companies reported positive EBIT and 70 percent net profit. In terms of EBIT, 86 percent of companies from Set A generated a profit, and only 14 percent sustained a loss. In Set B, positive EBIT was reported by 64 percent of companies, while 36 percent incurred a loss. And so in terms of the basic activity, the performance of the Set A companies is superior, as in this set companies with positive EBIT account for a much higher percentage of total than in Set B including companies established in the process of restructuring. The pattern is similar for net profit/loss. Among the Set A companies, 64 percent reported a positive change in EBIT (profit up or loss down), with 58 percent of Set B companies reporting an improvement in this area. A positive change in net profit/loss was reported by the same percentage of

Set A companies as in the case of EBIT change, whereas in Set B, a positive change was reported by 46 percent of companies. These findings mean that while in Set A changes in result on other operations and financial operations had no adverse effect on net profit/loss change, in the Set B companies the situation is the opposite, as the percentage of companies with a positive change in net profit/loss significantly declined.

A positive change in sales revenues (sales revenues up) was reported by 79 percent of Set A companies and 42 percent of Set B businesses. The findings indicate that the Set A companies develop more vigorously than their Set B counterparts among which nearly 60 percent companies saw revenues drop compared to the previous year. Groups of companies established in the process of restructuring have a lower percentage of businesses with a positive financial leverage. Negative financial leverage means that while relying on external sources of funds, the debt service costs are higher to a business than the actual benefits achieved by using such an external debt. The research into financial performance and profitability indicates that the groups of companies which developed as successors of restructured state-owned enterprises achieve better performance both in terms of revenues and the increase of revenues, EBIT and net profit/loss, return on assets and equity and make a superior use of external sources of funds. The findings described above are closely related to the analysis focusing on the use of the human factor, with a much higher level of workforce productivity among the Set A companies. This is demonstrated by a positive ratio between personnel costs and income, and a much higher work output and profitability of human resources (Chadam, 2003a). It should also be added that while the Subset A groups of companies are mainly engaged in trade and services, Subset B groups are active in production. The feature is a reflection of underdeveloped services and trade in centrally-planned economies, with the new groups of companies filling in a gap in the market that the new economic realities have created.

4. Operation of Groups of Companies and Contribution of Group Members to Group's Financial Performance

4.1. Research Methodology

The research outlined above fully confirmed that the protracted rule of the centrally-planned economy had a major impact on the operation of Polish groups of companies and their financial performance. It should be also noted that among the groups of companies under review, in 1991 subsidiaries accounted for 19 percent of the total sales revenues and for a meagre 16 percent of EBIT. This validated our observation that the overall picture of the group was created by a relatively large and strong parent company and the weak subsidiaries. In the case of groups of companies which

developed through restructuring, the decisive factor was the process of establishment outlined earlier. Here subsidiaries were set up on the basis of the parent’s assets. Under the market economy, such assets were either redundant or their utility for conducting a core business was significantly limited. Once hived off from the integrated organisational structure, the new entities found themselves in a quite competitive market. In the case of groups of companies set up by concentration of capital and growth of new private businesses, the subsidiaries established were start-ups. And this meant that they were weaker from the parent companies establishing them. While observing these organisations in the late 1990s, one could have an impression that some of the parent companies would be better off without subsidiaries simply providing an additional burden to them. All these findings encouraged us to undertake research focusing on the current situation of Polish groups of companies, with special emphasis on the assessment of the contribution of the individual members of the group (parent company, subsidiaries) to the performance of the entire organisation. The research (second stage) was conducted in 2004 and it covered groups of companies whose parents are quoted on the Warsaw Stock Exchange. The principal aim of research was to determine the development direction of Polish groups of companies in terms of the participation of the group’s members in the overall financial performance. An objective assessment of this sort, based on official financial data, could help address the claim that was sometimes voiced, according to which Polish groups of companies were part of a fad of developing multiple organisations, rather than a response to genuine market needs. Figure 6 presents the scope of Stage Two of research.

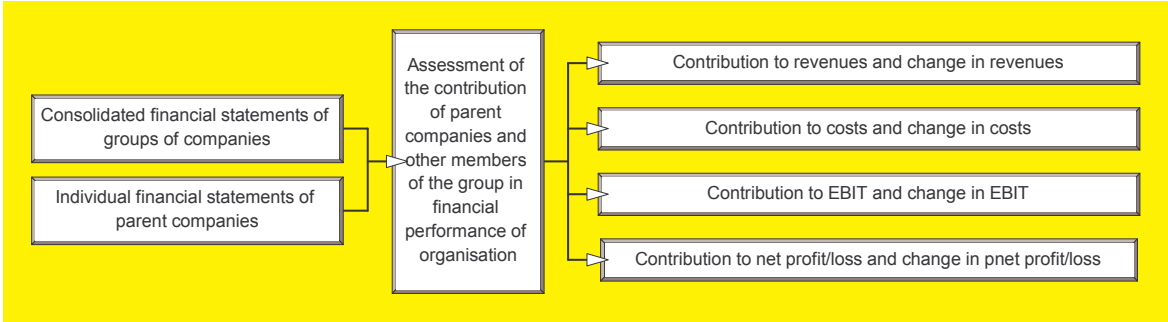


Figure 6. Scope of Stage Two of Research

Source: Author's analysis

The research relied on consolidated financial statements of groups of companies and financial statements of parent companies. The analysis covered 108 financial statements of groups of companies for 2001 and 2002 and 104 financial statements of groups of companies for 2003 (banks and investment funds were excluded from the analysis).

4.2. Research Findings

The analysis of sales revenues generated by groups of companies in 2001-2003 (Table 2) demonstrates that parent companies of Polish multiple organisations continue to be the main driving force of their respective groups (parents account for nearly 70% of revenues). Yet, the value of sales revenues of the other group members is on the rise. In the period under review, sales revenues of other group members as a percentage of group's revenues went up from 28 percent to over 33 percent. In 2002, out of 108 groups of companies under review, 48 (44%) reported improvement in sales revenues, including 45 (42%) parent companies ("PC") and 60 (56%) other (affiliated) companies ("AC"). In 2003, when the research covered 104 groups, sales revenues went up in 61 groups (65%), including 61 PCs (59%) and 61 ACs (59%). So, sales revenues were up in the majority of groups of companies under review, to a significant extent thanks to the improved standing of the subsidiaries.

Table 2. Subsidiaries as Percentage of Revenues and Expenditures of Groups of Companies in 2001-2003

	Year	# GC	Sales revenues in EUR m			AC as %		
			PC	AC	Total GC	Revenues	Costs	Difference
1	2001	108	13 239	5 242	18 480	28,36	28,52	(0,16)
2	2002	108	13 255	4 975	18 230	27,29	26,75	0,54
3	2003	104	13 664	6 876	20 539	33,48	32,66	0,82

Source: own analysis based on research findings

A comparison of the costs of operations (sum of costs of products, goods and materials sold, selling expense and overheads) of ACs as a proportion of the group costs with the contribution of ACs to sales revenue generation demonstrates that in 2001 ACs accounted for a larger proportion of costs than sales revenues. This means that the business of affiliated companies was less effective than that of their parents. Starting from 2002, the difference between the revenue percentage contribution and the cost percentage contribution is positive which means that the subsidiaries of groups of companies under review improved their financial performance. The EBIT analysis for 2001-2003 shows an increasing contribution of ACs to EBIT generation in the groups of companies under review. In 2001-2003, subsidiary contribution to group EBIT was up from 18 percent to 34 percent. This means that year after year subsidiary EBIT improved as did their contribution to group EBIT.

Table 3. Financial Performance of Groups of Companies under Review in 2001-2003

	Year	# GC	EBIT in EUR m			As %		EBIT > 0		Net profit/loss > 0	
			PC	AC	Total GC	PC	AC	# AC	As %	# AC	As %
1	2001	108	274	58	332	82	18	57	53	44	41
2	2002	108	386	177	563	69	31	74	69	50	46
3	2003	104	531	273	804	66	34	79	76	57	55

The growing contribution of ACs to EBIT is demonstrated by the number of groups of companies in which ACs generate profit on sales (Table 3). The number of such groups in 2001-2003 increased from 53 percent to 76 percent. And so there is a growing number of groups of companies in which affiliated companies report EBIT improvement. In 2001-2003, while subsidiaries generated a net loss, the value of such loss gradually fell. The percentage of groups of companies in which subsidiaries generated a net profit improved from 41 percent in 2001 to 55 percent in 2003. The improved net profit of subsidiaries proved a valuable contribution to the groups' net result both in 2002 and 2003. In that period, the subsidiaries under review reported a significant improvement of financial performance, as reflected in both better net result in the groups and improved contribution of these groups to the positive change of the group net result.

Discussion and conclusions

Groups of companies, which were set up in Poland after 1990, are a very interesting and significant facet of the system transformation. Our research shows both the process of formation and performance of these organisations against the background of the historical determinants of the Polish economy, as well as their current standing. Our earlier research (2001) demonstrated that in the majority of management areas, groups of companies established as a result of restructuring of former state-owned enterprises lack satisfactory integration of activities covering all members of the group. By the same token, processes of identification, selection, organisation, dissemination and transfer of important information and expertise among the individual members of a multiple organisation do not rely on procedures that could ensure their highest effectiveness. In contrast, groups of companies which evolved by natural growth and concentration of capital demonstrate a much better integration of knowledge management processes. It is these groups that can expect to reap additional benefits accruing to multiple organisations. This conclusion is confirmed by the financial performance of these groups. Their results are much better in the category of groups of companies applying knowledge management procedures. These organisations developed by growth of existing new private businesses in the period of market economy. As they started without troublesome historical burden, they operate in more attractive industries, their management is more effective, including knowledge management inside the group of companies, and they set up new subsidiaries with a view to pursuing the overall strategy of the group.

The next stage of research (2004) helped formulate a number of interesting conclusions on the contribution of subsidiaries to the operation of Polish groups of companies:

1. The number of groups of companies whose subsidiaries are improving their contribution to the group's sales revenues was found to grow.
2. The value of revenues generated by affiliates as a percentage of total revenues of groups of companies under review is on the increase.
3. The difference between the contribution of affiliates to the group sales revenues and to its operating costs was found to be contracting.
4. The contribution of subsidiaries to the generation of the group EBIT is improving. In addition, the high rate of positive EBIT changes in subsidiaries, much higher than in parent companies, and the growing number of groups of companies in which subsidiaries generate positive EBIT changes all demonstrate a positive impact of subsidiaries on EBIT reported by the groups.
5. The pattern is similar for net profit/loss with a positive impact of subsidiaries demonstrated by the growing number of groups of companies in which subsidiaries generate a net profit. In addition, year after year the percentage of groups in which subsidiaries report an improvement of net profit/loss is higher and higher, thus enhancing the effectiveness of the groups themselves.

The findings of the research conducted are positive, particularly as far as the historical determinants of the Polish economy are concerned. It has been demonstrated that the viability and growth of the groups of companies under review is no longer driven solely by parent companies, but that the other members become more and more of a factor. This is indicated by both the growing contribution of subsidiaries to sales revenues of the groups as well as the improving positive impact affiliates have on the individual items of the profit and loss account, including EBIT and net profit/loss of these organisations.

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