Ownership and control strategies in Polish business groups*

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Business groups are distinguished in the management literature as the unique organisational form differing from stand-alone companies. Research shows that ownership and control pattern remains the most important feature of a business group which determines its strategy and development. The paper identifies characteristics of Polish business groups with respect to ownership structure and mechanisms for control leverage by dominant shareholders. The study is based on the hand collected data on the sample of 30 largest non-financial business groups listed on the Warsaw Stock Exchange and reveals which ownership and control strategies were adopted in the post-transition environment of the Polish economy.

Keywords: business groups, holdings, comparative analysis, Poland, post-socialist/ transition economy JEL codes: M2, P2

Introduction

A large body of literature addresses the term of business groups discussing their unique organisational form differing from stand-alone companies (Maman 2002) and benefits they can offer to companies at the micro level, to industries and economies at the macro level (Yiu et al. 2007). Business groups (groups of companies) such as holdings, conglomerates or corporate groups remain one of the most common forms of economic activity and exert significant impact in terms of their contribution to GDP, employment and investment both in developed and developing economies (Heugens/ Zyglidopoulos 2008). The existing literature identifies the emergence and efficiency of business groups in developed economies. Extensive research also addresses the development of business groups in Latin America, India, China and Korea, but still little is known about their emergence in post-socialist and transition economies of Central and Eastern Europe (CEE) (Buzády 2010; Zamborsky 2012). The paper intends to fill this gap and attempts to add to the understanding on the dynamics of business groups in the post-socialist environment.

The paper aim is to identify ownership structure and mechanisms of control leverage adopted in the largest Polish business groups after the unprecedented 1989 transition from centrally planned to market economy. The paper explores selected aspects of ownership and control such as ownership concentration,

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identity of the largest shareholder and the control mechanisms. The study is based on the hand collected data on 30 individual cases of the largest non-financial holdings listed on the Warsaw Stock Exchange. It examines groups formed within the privatisation of the former state owned enterprises still controlled by the government, group originating from the privatisation of former state owned enterprises by the case by case sale to industry investors and groups founded after 1989. As research shows the ownership and control pattern remains the most important characteristics of a business group which determines its strategy and development. The paper is organised as follows. The first section outlines the theoretical framework on business groups discussing rationales behind the groups emergence and development. In the second section the importance of ownership and control is addressed with a brief outline of the comparative analysis of business groups worldwide. The third section identifies ownership structure and control mechanisms adopted in Polish business groups which developed after the 1989 transition exploring three main types such as groups formed within the privatisation of the former state owned enterprises still controlled by the government, group originating from the privatisation of former state owned enterprises by the case by case sale to industry investor and groups founded after 1989. Final remarks are presented in conclusion.

1. The rationale for creating business groups

The term "business group" remains ubiquitous in the economics and management literature and is generally understood as a collection of heterogeneous companies tied with formal and informal links (Khanna/ Rivkin 2001; Zattoni 1999; Cuervo-Cazurra 2006). From the economic perspective business group is defined as a confederation of legally independent companies which do business in different markets under a common administrative or financial control (Guillen 2000) constituting commercial, financial, ownership and legal links. The informal relationships in the form of interpersonal trust, personal links, social ties, ethics and religious similarities as well as the commercial background reinforce financial and organisational linkages amongst affiliated companies (Mitra/ Pattanayak 2013). For the purpose of the paper the business group is understood as a set of legally separate and independent firms under common ownership control and tied with stable relationships of contractual, financial and personal links as suggested by Khanna (2000) and Cuervo-Cazzura (2006).

Fuelled with the comparative studies the extended conceptualisation of business groups depicts different rationales behind their emergence and development. The importance derived from the economy of scale, conditions for stability provided by diversification strategy and significant market share, substantial financial resources (deep pocket) accessible on the inter-group market and synergy effects of the use of brand, reputation, infrastructure and customer and contractor bases are believed to stimulate growth and development of business groups worldwide (Khanna/ Rivkin 2001). Business groups are identified also as vehicles which offer the potential for developing new capabilities and resources, assuring conditions for innovations and intra-group technology transfer and sustaining core competences (Guillen 2000; Singh 2011). Finally, groups are perceived as a device to achieve political and economic objectives (Ghemawat/ Khanna 1998) as they are given resources and incentives to develop certain industries or expand internationally (Kumar et al., 2012).

2. Ownership and control of business groups

Ownership structure remains the crucial company's characteristics, belongs to the most important governance mechanisms and delivers fundamental legacy for oversight and control (Fama/ Jensen 1983). Studies on ownership structure patterns, dynamics and characteristics help explain the directions of strategic development of companies (Demsetz/ Lehn 1985). Ownership structure appears to be amongst the crucial determinants having influence on management, the corporate strategy, leadership, compliance with corporate governance standards, investor relations and transparency. The understanding of relationships between ownership structure and the impact of different shareholders upon corporate governance reveals to be of crucial importance for the functioning of any company. Particularly, the understanding of these relationships proves to be important for transition and emerging markets where ownership and control reveals dynamic changes and significant challenges. Various ownership patterns may be perceived as stimulators or inhibitors for company and economy development.

Business group are studied from the perspective of their ownership structure due to the impact of the ownership and control characteristics upon their development, strategy, diversification scope, investment policy and profit distribution. Cuervo-Cazzura (2006) distinguishes three main types of business groups with respect to their ownership structure:

- Business groups characterised by the dispersed ownership
- Business groups controlled by families
- Business groups controlled by the state

The comparative analysis reveals that the dispersed ownership is mostly found in Anglo-Saxon economies and in the case of the largest companies worldwide. Continental European countries are characterised by significant ownership concentration (Morck 2005) which results in the limited number of shareholders and the dominance by powerful owners over the company. A similar pattern is also depicted in companies in Latin America and Asia (Morck 2005) where ownership concentration is connected to the importance of different specificity of shareholder identities. Families and non-financial institutions play a key role in ownership structure of business groups in Latin America and Asia.

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The effect of ownership concentration is strengthened by the phenomenon of separating control and cash flow rights via the adoption of dual class shares and/ or building multilayer pyramidal structures that allows the dominant shareholder (founder, family) to leverage control over the group and maintain lower capital involvement (Demsetz/ Lehn 1985). In the case of pyramids, there are no ownership barriers but control barriers. The pyramidal structure separates control and cash flow rights strengthening the former (Almeida/ Wolfenzon 2006). The deviation from one share one vote rule makes sense if private benefits of control are high which happens in countries with weak shareholder protection (Grossman/ Hart 1988). Grossman and Hart (1988) propose a model that shows that one share one vote and the simple majority rule are optimal only when the rival has no private benefits of control. When both candidates can have private benefits, the lack of the one share – one vote rule and the supermajority rules can be optimal. Both control mechanisms are used in continental Europe, Asia and Latin America, yet pyramids are adopted more frequently than dual class shares. The pyramidal structures depicted in line with the comparative analysis of emerging markets are revealed in India, South Korea, China and Thailand, Russia, Ukraine and Latin America. Interestingly, pyramidal structures are found in developed economies such as Canada, Belgium, Italy, France and Sweden (Morck 2005). Although the separation of control and cash flow rights motivates controlling shareholders to list publicly affiliated companies to diversify risk, it may also lead to the abuse of minority shareholders (investment policy and dividend payouts) and tunnelling (Zattoni 1999).

3. Polish business groups

3.1. Origin and development

The development of business groups in Poland results from the historical dynamics which include three main processes. The first process dates back to the creation of vertically integrated conglomerates of monopolistic market positions operating in line with the central planning regime. These conglomerates were restructured into holdings in 80 s of 20th century. The second process covers transition reforms directed at the shift from the command to market economy, the development of competition and the inflow of FDIs. The third process documents the development of entrepreneurship and the emergence of the new groups and industry clusters.

The scarce studies on Polish business groups document their rapid development and dynamic restructuring in the reaction to market changes (Aggestam 2004). The statistical report identifies 1996 business groups which include 9823 nonfinancial companies making for 0.6% the overall population and 28% of employment while generating 52% of incomes and 39% of overall profits provided by the corporate sector (GUS 2010). Polish business groups operate either in the form of a holding with the headquarters based in Poland or as a part of the international group with the parent company located mostly in the EU or the US. A study on 100 business groups (Romanowska 2011) identifies the scope of diversification as relatively low with 36% of groups operating on the dominant market segment and 26% focused on one market, 15% pursuing focused diversification and 23% pursuing unrelated diversification. Further, the research reveals that 40% of Polish groups actively engage in mergers and acquisitions, while 35% prefer the organic growth.

3.2. Method

The research aim is to identify the characteristics of Polish groups with respect to ownership and control strategies adopted by their shareholders. This study helps understand differences in ownership and control strategies used in business group depending on their origin, size and industry of operation. For the purpose of the study the following characteristics of 30 largest non-financial business groups listed on the Warsaw Stock Exchange were depicted from the annual reports, consolidated financial statements and corporate websites as of 2010:

- The general characteristics the origin, size (number of affiliated firms), organisational form and the affiliation to Polish or international group,
- The structure of ownership the degree of concentration and the type of the majority shareholder
- The control strategy the adoption by the largest shareholder mechanisms which leverage control (pyramidal structure, dual class shares)

3.3. Polish business groups – research results

The general characteristics of sample groups is presented in Table 1.

Compa- ny	Туре	Market cap (m PLN market share)	Industry of op- eration (UN ISIC classifi- cation)	No of affiliat- ed companies ¹	Type of parent company
PGE	Priva- tised	40830 35%	Mining & quar- rying B05	90	Parent of Polish group, stra- tegic holding
PGNiG	Priva- tised	22479 70%	Mining & quar- rying B05	34 (26 con- trolled direct- ly, 8 controlled indirectly)	Parent of Polish group, oper- ational holding
TP SA	Priva- tised	21704 30%	Information & communication J61	18	Subsidiary of FT; Parent of Polish group, operational holding

Table 1: Business groups in the research sample

1 According to data disclosed in the consolidated financial statements.

Compa- ny	Туре	Market cap	Industry of op- eration	No of affiliat- ed companies ¹	Type of parent company
		(m PLN market share)	(UN ISIC classifi- cation)		
КСНМ	Priva- tised	19400 85%	Mining & quar- rying B07	50 (26 of dom- inant share of parent compa- ny)	Parent of Polish group, affili- ated, operational holding
PKN Orlen	Priva- tised	14435 60%	Manufacturing -petrochemicals C20	43 plus 45 companies controlled	Parent of Polish group, oper- ational holding
ENEA	Priva- tised	8330 20%	Electricity sup- ply D35	29	Parent of Polish group, oper- ational holding
GTC	Found- ed after 1989	5265 10%	Construction F41, real estate L68	120	Parent of Polish and inter- national group, strategic holding
Żywiec	Priva- tised	4941 35%	Manufacturing - beverages C11	7	Subsidiary of Heineken; Par- ent of Polish group, opera- tional holding
TVN	Found- ed after 1989	4766 30%	Information & communication J60	17 affiliated, 1 associated, 2 joint ventures	Parent of Polish and inter- national group, operational holding
Asseco Poland	Found- ed after 1989	4693 25%	Information & communication J62	50 affiliated, 7 associated, 3 co-owned	Parent of Polish and inter- national group, operational holding
Cyfrowy Polsat	Found- ed after 1989	4049 23%	Information & communication J60	1	Parent of Polish group, oper- ational holding
Świecie	Priva- tised	3700 24%	Manufacturing - pulp and paper C17	1 affiliated, 1 associated	Subsidiary of Mondi; Parent of Polish group
Lotos	Priva- tised	3643 15%	Manufacturing - petrochemicals C20	17 controlled directly, 8 con- trolled indi- rectly, 2 asso- ciated	Parent of Polish group, oper- ational holding
Stalpro- dukt	Priva- tised	3251 30%	Construction F43	11	Subsidiary of Arcelor Mittal; parent of Polish group, op- erational holding
LPP	Found- ed after 1989	3087 12%	Manufacturing - textile industry C13	15	Parent of Polish and inter- national group, operational holding
PBG	Found- ed after 1989	3061 8%	Construction F41	35 (15 con- trolled direct- ly, 20 con- trolled indi- rectly)	Parent of Polish group, oper- ational holding
Bogdan- ka	Priva- tised	2617 10%	Mining & quar- rying B05	1 affiliated, 2 associated	Parent of Polish group, oper- ational holding

1 According to data disclosed in the consolidated financial statements.

Compa- ny	Туре	Market cap (m PLN	Industry of op- eration (UN ISIC classifi-	No of affiliat- ed companies ¹	Type of parent company
		market share)	cation)		
Eurocash	Found- ed after 1989	2323 10%	Retail trade G47	6	Parent of Polish group, oper- ational holding
ССС	Found- ed after 1989	2035 5%	Manufacturing - textile industry C13	5	Parent of Polish group, oper- ational holding
Cersanit	Found- ed after 1989	2031 28%	Manufacturing, petrochemicals C20	23 controlled directly, 6 con- trolled indi- rectly	Parent of Polish and inter- national group, operational holding
Polimex Mostost al	Priva- tised	1987 12%	Construction F41	29 affiliated, 4 associated	Parent of Polish and inter- national group, operational holding
Budimex	Priva- tised	1889 11%	Construction F41	14	Parent of Polish group, oper- ational holding
Корех	Priva- tised	1858 90%	Manufacturing – machinery C28	14 controlled directly, 17 controlled in- directly	Parent of Polish and inter- national group, operational holding
Netia	Found- ed after 1989	1791 10%	Information & communication J61	14	Parent of Polish group, oper- ational holding
Orbis	Priva- tised	1668 20%	Accommodation and food I55	5 controlled directly, 8 con- trolled indi- rectly, 1 associ- ated	Subsidiary of Accor; parent of Polish group, operational holding
Echo	Found- ed after 1989	1630 15%	Construction F41	104	Parent of Polish group, oper- ational holding
Emperia	Found- ed after 1989	1285 6%	Retail trade G47	12	Parent of Polish group, oper- ational holding
InterCars	Found- ed after 1989	1126 23%	Retail trade G47	16	Parent of Polish and inter- national group, operational holding
MMPPL	Found- ed after 1989	1103 25%	Information & communication J60	3	Parent of Polish group, oper- ational holding
AMREST	Found- ed after 1989	1092 20%	Accommodation and food I56	4	Parent of Polish and inter- national group, operational holding

Source: own compilation based on the Warsaw Stock Exchange statistics, the consolidated financial statements and the annual reports of analysed companies.

As shown in Table 1 the largest business groups in Poland whose parent companies are listed on the Warsaw Stock Exchange depict significant differences in

1 According to data disclosed in the consolidated financial statements.

terms of market capitalisation between nearly 41 billion PLN (ca. 10 billion euro) to slightly over 1 billion PLN (ca. 250 million euro) with 6.2 billion PLN (1.6 billion euro) on average. They also reveal significantly different picture as far as the number of affiliated companies is concerned ranging from as many as 90 to as few as 1 with 29 on average. Generally, the largest groups are those initially set up as state owned enterprises to support the centrally planned economy and privatised after 1989 mostly via IPO with the controlling stake retained by the state. The sample groups operate in various sectors categorised according to UN ISIC standards however the vast majority of them originate from sectors which often are viewed as network industries either known as heavy industries (gas extraction, petrochemicals, coal mining) or high tech infrastructure related sectors (telecommunication). 23 of analysed groups are the domestic entities with the headquarters located in Poland, while 7 groups are the subsidiaries of the international business groups which form their own business groups in Poland. As depicted in Table 1 the sample groups also differ in terms of their positions measured by market share - while some maintain the dominant position (e.g. KGHM with 85% in domestic market and ca. 4% in the world market), others operate on highly fragmented markets where 6% share is a good position (e.g. Emperia). At the moment of the research all groups were financially sound, however by 2012-2014 the construction companies GTC, Polimex Mostostal and PBG incurred substantial losses partially due to the economic slowdown, partially due to their participation in the government-sponsored programme for developing highway infrastructure.

The analysis of the ownership and control strategies adopted in Polish business groups is presented in Table 2.

Name	Degree of	Majority share-	Shareholder	Vertical ownership structure		
concentratic		holder	type	Dual class shares	Pyramidal structure	
PGE	Concentrated	State Treasury – 85%	state	No	No	
PGNiG	Concentrated	State Treasury – 73.5%	state	No	No	
TP SA	Concentrated	France Telecom – 49.7%	industrial	No	No	
KGHM	Concentrated	State Treasury – 42%	state	No	No	
PKN Orlen	Concentrated	State Treasury – 27%	state	No	No	
Enea	Concentrated	State Treasury – 60.4%	state	No	No	
GTC	Concentrated	GTC Real Estate Holding B.V. – 46%	industrial	No	At least 2 levels	

Table 2: The vertical linkages of sample companies

Name	Degree of	Majority share-	Shareholder	Vertical ownership structure		
	concentration	holder	type	Dual class shares	Pyramidal structure	
Żywiec	Concentrated	Brau Union AG – 62%	industrial	No	At least 4 levels	
TVN	Concentrated	Founder directly and indirectly ITI — 64%	family via fi- nancial	No	At least 4 levels	
Asseco Poland	Concentrated	Founder directly and indirectly As- seco Poland – 23%	individual	No	No	
Cyfrowy Polsat	Concentrated	Polaris Finance BV – 68.18%C, 78.53% V	family via fi- nancial	Yes	At least 2 levels	
Świecie	Concentrated	Framondi NV – 66%	industrial	No	At least 2 levels	
Lotos	Concentrated	State Treasury – 53.2%	state	No	Yes, 1 level	
Stalpro- dukt	Concentrated	Arcelor Mittal – 38%	industrial	Yes	At least 2 levels	
LPP	Concentrated	Founder directly – 62%	individual	Yes	No	
PBG	Concentrated	Founder directly – 45.7%	individual	Yes	No	
Bogdan- ka	Concentrated	State Treasury – 60.5%	state	No	No	
Eurocash	Concentrated	Founder directly and indirectly – 53%	individual	No	At least 2 levels	
CCC	Concentrated	Founder directly and indirectly – 50.5%	individual	Yes	At least 2 levels	
Cersanit	Concentrated	Founder directly and indirectly – 48.6%	individual via financial	No	At least 2 levels	
Polimex Mostosta I	Dispersed	ING Polska Open Pension Fund – 8.7%	financial	No	No	
Budimex	Concentrated	Ferrovial 59%	industrial	No	At least 2 levels	
Корех	Concentrated	Founder directly and indirectly – 60.4%	individual	No	Related parties control ca. 1%	
Netia	Dispersed	Third Avenue Management LLC 24%	financial	No	No	
Orbis	Concentrated	Accor – 50.01%	industrial	No	At least 2 levels	
Echo	Concentrated	Founder directly and indirectly – 40%	individual via financial	No	At least 3 levels	
Emperia	Dispersed	Aviva CU – 9.8%	financial	No	No	
InterCars	Concentrated	Founder directly and indirectly – 35%	individual via financial	No	No	

Name	Degree of	Majority share-	Shareholder	Vertical ownership structure		
	concentration	holder	type	Dual class shares	Pyramidal structure	
MMPPL	Concentrated	Coalition of relat- ed parties – 52.4%	individual	No	At least 2 levels	
AMREST	Concentrated	BZ WBK AIB Asset Management SA 22%	financial	No	No	

Source: own compilation based on the consolidated financial statements of analysed companies.

As shown in Table 2 the analysed business groups reveal significant ownership concentration with the largest shareholder controlling on average 44% of shares. More precisely, 28 business groups reveal ownership concentration as measured by the stake of votes controlled by the dominant shareholder at the threshold of 20%, while in 16 business groups the dominant stake by the largest shareholder exceeds the threshold of 50% of shares. With respect to the identity of the largest shareholder for privatised groups, the majority shareholder is most likely to be the foreign industry investor which participated in the privatisation process or the state in the case of the largest companies. In the case of companies founded after 1989 domestic individual investors and families appear to be the most frequently noted majority shareholder. Financial investors are revealed in companies of dispersed ownership. In addition, the analysed business groups reveal the moderate use of mechanisms leveraging control – 5 companies use dual class shares, while the pyramidal structure was adopted by 13 companies controlled mostly by industry investors or individual/ family owners.

3.3. Discussion

The analysis of 30 largest business groups in Poland shed some lights on the development and current characteristics of these structures revealing that:

- The groups differ significantly in terms of size they usually encompass 30 companies, operating as national groups or being a part of a larger international holdings
- The groups originate from the privatisation process of the former state owned enterprises via IPO with retained state control or via the case by case sale to the strategic investors where they function as subsidiaries of the international groups
- The third path of group emergence relates to the growth and expansion of the companies which were founded after 1989 and developed organically or via M&A and consolidation process
- The groups reveal the significant ownership concentration exerted mostly by foreign industry (strategic) investors, the state or domestic founders and are characterised by strong vertical ownership linkages. 13 of them adopt pyrami-

dal structures. Additionally, while 7 are controlled by a headquarter within a holding company, in 23 the headquarter role is played by the strategic firm involved in the ownership of affiliates which are organised according to the strategic objective of the parent company

The study shows that from the perspective of the comparative analysis Polish business groups with respect to ownership structure resemble the characteristics of their peers from emerging markets (groups controlled by founders/ families and state) and developed economies (groups controlled by industry shareholders within international groups) (Khanna/ Rivkin 2001; Heugens/ Zyglidopoulos 2008). The findings reveal the potential weaknesses and strengths of the identified ownership structure from the perspective of the further development of Polish business groups. Ownership concentration suggests that the development of affiliated companies will be synergistically integrated within the whole group. In the case of business groups controlled the industry shareholders Polish entities may enjoy the benefits of direct control as well as know-how transfer and competences support. On the other hand as noticed by Almeida and Wolfenzon (2006) the structure of a pyramid adopted by families and founders supports the establishment of the new firms within the group. Interestingly, this ownership pattern may add to the development of business groups with the investment policy based on the use of the internal capital market (Yiu et al. 2007). Thus, from the perspective of the future development business groups controlled by the state face the most severe ownership and control challenges.

Conclusions

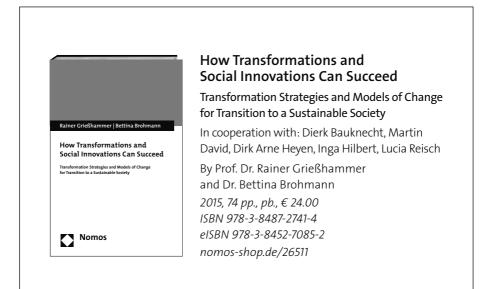
This article attempts to fill the gap in the literature tracing the pattern of ownership and control of Polish business groups after the unprecedented 1989 transition from centrally planned to market economy. The article explores three main types of business groups which emerged in the Polish context. The groups originate from the privatisation process of the former state owned enterprises via IPO with the retained state control or via the case by case sale to the industry investors where they function as a subsidiary of the international group. The third path of origin relates to the growth and expansion of the companies which were founded after 1989 and developed organically or via M&A and consolidation process. The hand collected data indicates that Polish business groups differ significantly in terms of size operating as national groups or being a part of a larger international holding. The analysis of 30 case studies allowed to reveal significant ownership concentration exerted mostly by foreign industry (strategic) investors, the state or domestic founders. The strong ownership and control linkages identified in all analysed groups are visible in the ownership ties and the adoption of pyramidal structures.

The study reveals some limitations related to the size of the sample and the scope of the analysis. Yet, addressing the questions on the origin patterns of Polish business groups and their characteristics it opens a possibility for comparative dynamic analysis of these complex structures developing in post-socialist economies of Central and Eastern Europe as well as transition countries in Asia and Latin America.

References

- Aggestam, M. (2004): Corporate governance and capital groups in Poland, in: Journal for East European Management Studies, 9, 4, 367-390.
- Almeida, H./ Wolfenzon, D. (2006): A theory of pyramidal ownership and family business groups, in: Journal of Finance, 61, 6, 2637-2680.
- Buzády, Z. (2010): The emergence of a CEE-regional multinational A narrative of the MOL Group plc., in: Journal for East European Management Studies, 15, 1, 59-76.
- Cuervo-Cazzura, A. (2006): Business groups and their types, in: Asia Pacific Journal of Management, 23, 4, 419-437.
- Demsetz, H./ Kehn, K. (1985): The structure of corporate ownership: causes and consequences, in: Journal of Political Economy, 93, 6, 1155-1177.
- Fama, E./ Jensen, M. (1983): Separation of ownership and control, in: Journal of Law and Economics, 26, 2, 301-325.
- Ghemawat, P./ Khanna, T. (1998): The nature of diversified groups: a research design and two case studies, in: Journal of Industrial Economics, 46, 1, 35-62.
- Grossman, S./ Hart, O. (1988). One share-one vote and the market for corporate control, in: Journal of Financial Economics, 20, 1/2, 175-202.
- Guillen, M (2000): Business groups in emerging economies: A resourced based view, in: Academy of Management Journal, 43, 3, 362-380.
- GUS (2010): Grupy przedsiębiorstw [Groups of companies], Warsaw.
- Heugens, P. / Zyglidopoulos, S. (2008): From social ties to embedded competencies: The case of business groups, in: Journal of Management and Governance, 12, 4, 325-341.
- Khanna, T. (2000): Business groups and social welfare in emerging markets: Existing evidence and unanswered questions, in: European Economic Review, 44, 4-6, 748-761.
- Khanna, T./ Rivkin, J. (2001): Estimating the performance effects on business groups in emerging markets, in: Strategic Management Journal, 22, 1, 45-74.
- Kumar, V./Gaur, A./ Pattnaik, Ch. (2012): Product diversification and international expansion of business groups, in: Management International Review, 52, 2, 175-192.
- Maman, D. (2002): The emergence of business groups: Israel and South Korea compared, in: Organization Studies, 23, 5, 737-758.
- Mitra, A./ Pattanayak, M (2013): Business groups, block holdings and firm value, in: International Journal of Disclosure and Governance, 10, 1, 39-57.
- Morck, R. (2005): Corporate governance around the world, Chicago: The University of Chicago Press.
- Romanowska, M. (2011): Grupy kapitałowe [Business groups], PWN: Warszawa.

- Singh, N. (2011): Emerging economy multinationals: The role of business groups, Economics, in: Management and Financial Markets, 61, 1, 142-181.
- Yiu, D./ Lu G./ Bruton G./ Hoskisson R. (2007): Business groups: An integrated model of focus future research, in: Journal of Management Studies, 44, 8, 1555-1579.
- Zamborsky, P. (2012): Emergence of transnational clusters: Evidence form the Slovak automotive industry, in: Journal for East European Management Studies, 17, 4, 464-479.
- Zattoni, A. (1999): The structure of corporate groups: The Italian case, in: Corporate Governance, 7, 1, 38-48.



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