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ORGANIZATION DESIGN AND CORPORATE GOVERNANCE OF BUSINESS GROUPS: A COMPARISON OF THE PUBLIC AND PRIVATE SECTOR

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Abstract

Business groups are large inter-organizational entities that significantly contribute to economic activities worldwide. While being a highly relevant form of business organization in many emerging nations (Hoskisson, Johnson, Tihanyi, & White, 2005), they are still well represented in some of the post-socialistic countries. For instance, private- and public-sector (state-owned) business groups in Croatia account for a one third of the GDP (Lider, 2011) and play a very important role in the development of the national economy. However, we know very little about the corporate strategy, governance processes and organizational structure applied within business groups, especially given the fact that business groups around the world vary considerably (Khanna & Yafeh, 2007). Therefore, the aim of the paper is to examine how business groups in Croatia are organized and managed. A comparative analysis of the largest business groups listed by the Croatian Chamber of Commerce offers useful insights about their level of diversification, group configuration and board structure, as well as regarding the organizational architecture of their holding company, the current level of the group internationalization, and the business group-level performance. The results clearly show similarities and differences present between private- and state-owned business groups of interest. Thus, the paper contributes to better understanding of organizing practices of the largest business systems in Croatia, and offers specific insights about the divide between the private- and public-sector business groups.

Keywords: *business groups, organization design, corporate governance, private vs. public*

1. INTRODUCTION

Business groups of varied types are still influential in the early twenty-first century in a considerable number of emerging and mature industrial nations (e.g. Colpan, Hikino, & Lincoln, 2010). Representing a set of legally independent but formally related companies they are dominant organizational form for managing large businesses outside North America (Yiu, Lu, Bruton, & Hoskisson, 2007). Business groups are intriguing and enduring phenomenon largely dependent on country's political, legal and institutional arrangements. They have flourished under all sorts of institutional and policy regimes (Schneider, 2010) and manage to wield considerable market power and influence (Khanna & Palepu, 1999; Khanna & Yafeh, 2010). Despite of their longevity, business groups have to change if they want to survive and be successful within the competitive and global business environment.

Research on business groups has commonly utilized a comparison research strategy (Delios & Ma, 2010). Comparison was made primarily between business group affiliated firms and non-business group affiliated firms (e.g., Khanna & Rivkin, 2001; Peng & Delios, 2006), although business groups were, most recently, also compared to multinational firms (e.g., Bucheli, 2010). In addition, other comparison approaches explore how the institutional environment and/or internationalization process influenced their strategy and performance (e.g., Beamish, Delios, & Lecraw, 1997; Lee, Peng, & Lee, 2008). However, still not enough emphasis has been put on the comparison of private- and state-owned business groups, especially within the Central and Eastern European business context.

Therefore, the aim of the paper is to examine how business groups in Croatia are organized and managed. A comparative quantitative analysis of the largest business groups was conducted to reveal similarities and differences in internal functioning of private- and state-owned business groups. T-test statistics provided useful insights about their strategic (e.g., level of diversification), governance (e.g., board structure), organizational (e.g., holding company structure) and financial performance characteristics (e.g., business group-level performance).

The paper contributes to better understanding of organizing practices of the largest business systems in Croatia by pinpointing the main differences between private- and public-sector business groups. We have focused on the organizational design issues and subsequent performance of business groups. By putting upfront this highly relevant applied research topic, we hope it will encourage and motivate scholars to delve with the understudied phenomenon of business group design.

2. THEORETICAL BACKGROUND AND RESEARCH HYPOTHESES

2.1. Definition of business groups

Business groups can be defined as network of legally independent firms, operating in diverse industries, with a common owner, and coordinated through multiple formal and informal ties (Khanna & Yafeh, 2007). They represent coalitions of firms, bound together by varying degrees of legal and social connection, that transact in several markets under control of a dominant or core firm (Granovetter, 1995). Although often understood as synonyms, business groups in emerging economies are different from conglomerates of the advanced countries as they did not grow out of search for financial diversification, but instead came out with the ability to set up new business ventures across variety of industries quickly and at low cost. Already Strachan (1976) explained that within business groups there are personal and operational ties among member firms (e.g., common ownership, directors, products, financial, or interpersonal; cf. Yiu et al., 2007), oppose to typical conglomerate where only few similar ties exist. As such, business groups are particular organizational forms with several defining characteristics: (1) all member firms are separate legal entities, (2) existence of stable and long-term ties between member firms, and (3) managerial coordination, administrative and financial control are provided by parent (holding) company (Locorotondo, Dewaelheyns, & Van Hulle, 2012).

Business groups recently produced a substantial academic interest, due to their presence and importance for many less developed and emerging countries. However, business group-related insights are still fragmented with several blind spots in the literature. For instance, existing research do not provide comprehensive and integrated coverage of crucial business groups' governance issues. While it offers areas of consensus (for more details see Carney, Gedajlovic, Heugens, Van Essen, & Van Oosterhout, 2011), there are also certain areas of disagreements. Disagreements are related to generally positive or negative net economic and social effects of business groups, business groups' performance and performance implications, as well as institution-level variables and strategies of business groups' affiliates. Hence, Yiu et al. (2007) conclude that future research on business groups need to explore the relationship between structural configurations of business groups and various strategic choices, and how interactions between strategy and structure give rise to competitive advantage at both business group-level and affiliate-level. Namely, interrelatedness among business groups' corporate strategies, corporate governance and structural (including people) arrangements are to dominate future business groups' research efforts.

Along the same line, we lack knowledge about sector-specific characteristics of business groups. As public-sector organizations are more than ever before heavily criticized and under constant pressure to improve their productivity and reduce their costs, private-sector know-how is considered the only viable alternative in an attempt to achieve greater efficiencies (e.g., Brown, 2004; Desmarais, 2008). Thus, it seems both highly relevant and practically useful to examine and compare the most important strategic, governance, organizational and financial characteristics of private- and state-owned business groups.

2.2. Strategic characteristics of business groups

Strategic management of business groups is very challenging activity as holding (parent) company needs to orchestrate several legally independent (daughter, sister or subsidiary) companies. Similar to multinational or multidivisional companies, business groups should have a corporate (group) strategy that will address interconnections among various businesses and try to achieve synergistic effects at the group-level. According to Ramachandran et al. (2013), one of the most difficult challenges business groups are facing is the coordination of strategies across affiliates to avoid group being little more than portfolio of stocks, due to the affiliates' legal independence, industry specialization and autonomous allocation processes. Related to this, Kerr and Darroch (2005) emphasize the difficulty of mastering undeniable challenges of managing disparate operations, such as those in business groups, and state that corporate strategy in these circumstances is practiced along three dimensions: (1) influencing on structure and horizontal relationships, (2) sharing of common resources in a vertical relationships and (3) managing the changing contents of the portfolio forms. Evidently, the choices related to corporate strategy, at the business group-level and the affiliate firm-level, need to be made with respect to complex strategy-structure interactions at various levels of governance in business groups.

Despite mentioned crucial importance and difficulty of choosing group's corporate strategy and coordination of various sub-strategies, in literature there is still a lack of studies focused on strategy choices of business groups, and especially the dearth of research on the effects of affiliation itself on affiliates' chosen strategy. Carney et al. (2011) state that, for example, affiliates' strategies are likely to differ from those of standalone firms on at least three dimensions: (1) leverage (business groups' affiliates make greater use of debt financing than non-affiliates), (2) diversification (business groups' affiliates engage in more unrelated diversification than other firms), and (3) internalization (business groups' affiliates are less internationally oriented as oppose to non-affiliated firms).

The literature is largely silent on the important questions of whether business groups make distinctive strategic choices (Carney et al., 2011). However, bearing in mind that one of the main characteristics of business groups are their diversification efforts, most of the business group research has focused on analyzing their diversification strategy (Cuervo-Cazurra, 2006). We can recognize two main strategic options: related diversification and unrelated diversification. Business groups might diversify into several unrelated industries rather than focus on one specific industry, or enter into related businesses to get advantage of group-developed capabilities (Coplan & Hikino, 2010). Diversified business groups mostly relate to the issue of administrative arrangements and strategic choices, while pyramidal business groups are concerned with ownership arrangements and the control apparatus (Coplan & Hikino, 2010). As some authors argue for (e.g. Campa & Kedia, 2002; Laeven & Levine, 2007) and against (e.g., Khanna & Palepu, 1999; Ramachandran, Manikandan, & Pant, 2013) the "diversification discount", it seems interesting to explore how diversification strategy choice manifests across different ownership types.

Another strategically-relevant issue is the number and geographical dispersion of member firms (i.e. daughter or dependent companies) within a business group. Very often such large business systems consist of numerous legally independent parts. Median size of group-affiliated firms ranges from 1.0 in Turkey up to 18.7 in Chile. However, the majority of business groups in other emerging countries have somewhat between 2.3 and 4.4 group-affiliated firms (Khanna & Yafeh, 2010). Business group size is closely related to the extent of horizontal diversification and vertical integration. Former addresses the economy of scale and scope, with a particular focus on the geographic diversification. Internationalization strategies have been recently emphasized as an important research topic (e.g., Castellacci & Mahmood, 2015).Thus, some business groups have affiliated firms across different countries (similar logic and role as subsidiaries of multinational corporations). The latter may be driven by transaction-costs considerations (such as within the banking and insurance industries; c.f. Khanna & Yafeh, 2010), or stimulated by advantages that come out of a low resource dependency, technological capabilities or improved coordination (e.g., Buzzel, 1983). As state-owned enterprises and public-sector business groups started to increasingly compete internationally with private-sector counterparts (e.g., Kowalski, Buge, Sztajerowska, & Egeland, 2013), it might be that ownership type is no longer a differentiator. Thus, we propose the following hypothesis:

H1: Private- and state-owned business groups have similar strategic characteristics.

2.3. Corporate governance in business groups

There is a pervasive need for governance mechanisms in the configuration and administration of a wide array of business group activities. Corporate governance, defined as a system by which companies are directed and controlled (Fama & Jensen, 1983), plays an important role in defining business group processes. The starting point in corporate governance is the issue of ownership. Business group's ownership structure, through relationships between majority and minority owners and relationships between owners and managers, along with the level of transaction costs, determines overall group's corporate governance (Yiu et al., 2007). According to Cuervo-Cazzura (2006), agency theory emphasizes that problems arise as a result of managers seeking to fulfill their own objectives rather than those of shareholders, unless shareholders control managers through corporate governance mechanisms (Fama & Jensen, 1983), where these mechanisms provide owners with only indirect control of managers.

Specifically, corporate governance mechanisms can be understood as: (1) internal – role and function of ownership structure, boards of directors, CEO duality, directors and executive compensation; and (2) effectiveness of the managerial labor market, the market for corporate control, and government regulations (Fan, Lau, & Wu, 2002). Additionally, Cuervo-Cazzura (2006) offers a brief overview of most important issues related to ownership-governance relationship across his ownership-related typology of business groups (see Table 1). Different ownership types provide different agency problems. For example, ownership-corporate governance relationship results in the largest agency problems in state-owned business groups, as opposed to those family-owned, where agency problems are the smallest ones. Consequently, the ownership structure of business groups is the key driver of organizational capacity that continuously sense and seize opportunities, proactively renew its resource base (Teece, 2007), determine organizational longevity and lead to sustained excellence (Ramachandran & Manikandan, 2012).

Lorsch and MacIver (1989) characterized governance as the board's duty to govern the firm, with its primary role exercising power over the top management team and employees. Thus, the structure and composition (number) of board members should also be a relevant corporate governance issue. Board of directors or corporate boards are critically important institutions to the success of business firms (Nadler, Behan, & Nadler, 2006). They are responsible for the governance of their companies (Tihanyi, Graffin, & George, 2014). The size of the board structure makes a difference. While smaller boards have definite advantages over large boards, according to Carter and Lorsch (2004), an individual board's circumstances should determine the appropriate number of directors. Same authors believe that six to eight board members are sufficient for smaller or less complex companies. Within the Croatian business context, these numbers might be even smaller proportionally to their size difference.

Finally, the existence of certain guidelines or principles for corporate governance is recommendable and in some countries obligatory. By formalizing corporate governance reporting and good practices the level of transparency will increase. The OECD has published Principles for corporate governance in 1999, which have been updated in 2004 and revised in 2015. The OECD principles provide an

Table 1: Agency problems by ownership types of business groups

Structure		State-owned	Private	
			Family-owned	Widely-held
Ownership	Actor	Citizens	Dispersed shareholders	Dispersed shareholders
	Objective	Provision of goods and service objectives	Wealth, growth, interdependence objectives	Wealth objectives
Management	Actor	Politician or professional manager appointed by politicians	Family or professional manager appointed by family	Professional manager appointed by board, which is controlled by managers
	Objective	Power objectives	Wealth, growth objectives	Growth, influence objectives
Control	Actor	Politicians	Family	Manager or managers of other widely-held firms
	Objective	Power (votes/support), development, employment objectives	Wealth, growth, independence objectives	Growth, influence objectives
Owner-manager agency problems	Problem	Largest separation of ownership and control. Owners do not control managers through corporate governance mechanisms. Politicians, not owners, control managers.	No separation of ownership and control. Owners are managers or owners have large control over managers. Effective corporate governance, but potential expropriation of minority shareholders.	Separation of ownership and control. Owners imperfectly control managers through corporate governance mechanisms.
	Outcome	Multiple objectives, change of objectives with change of politicians, very difficult/costly access to equity	Alignment of objectives, easier/cheaper access to equity	Separation of objectives, imperfect alignment with incentives/governance, difficult/costly access to equity

Source: Cuervo-Cazzura, 2006, p. 426.

indispensable and globally recognized benchmark for assessing and improving corporate governance (OECD, 2016). Corporate governance principles in general facilitate companies' access to capital for long-term investment and helps ensure that shareholders and other stakeholders who contribute to the success of the corporation are treated fairly. As corporate governance rules and practices have improved in many countries and companies (OECD, 2016) such step forward might be made as a consequence of applying aforementioned governance standards.

Since 2011 Croatian Financial Services Supervisory Agency publishes the Annual Report on Corporate Governance, thus aggregately presenting the level of corporate governance reached by issuers whose securities are admitted to trading on the regulated market in the Republic of Croatia. Together with Zagreb Stock Exchange, the Agency had also developed the Corporate Governance Code that is obligatory for companies and business groups listed on the stock market. While both some private- and state-owned business groups are publicly listed, a lot of them are not. Nevertheless, we do not expect that differences in governance practices exist between (non-)listed private- and state-owned business groups. Therefore, we propose the following hypothesis:

H2: Private- and state-owned business groups have similar governance characteristics.

2.4. Structural configurations of business groups

The structure of business groups varies largely depending on the contexts in which they operate. Bearing in mind that diversification is the main characteristic of business groups, as they develop and grow by entering to various related and unrelated businesses, structural arrangement of these groups are tailor-made to promote their related and unrelated business expansion. As a result, the literature is highly focused on diversification strategy offering forms that best fit diversified firms, but still fails to deliver organizational form which will agreeably apply to the loosely coupled structures so characteristic of most business groups (Kock & Guillén, 2001).

Business groups' structural configurations are being arranged largely as a hybrid structure. In this regard, Keister (1998) states that structure of business groups varies widely among contexts, from vertical or horizontal organization and development across industries (Japan's *keiretsus* and *zaibatsu*), uniform vertical organization (Korean's *chaebol*), loose integration of small entities (Taiwan's *guanxi giye*), to large multi-industry entities with strong ties to the state (Chinese business groups). Being relatively close to multidivisional structure, business groups usually take G-form of structure where holding company, often unlisted, holds equity stakes in several independently-listed affiliates (Ramachandran et al., 2013). As such, they show seemingly similar, but in essence, different structural characteristics when compared to multidivisional organizations, mainly reflected in excessive unrelatedness.

According to Ramachandran et al. (2013), business groups are characterized by legal independence of affiliates and higher level of involvement between ownership and top management, which lead to: (1) greater autonomy in decision making of affiliates' top management, (2) greater latitude of every affiliate to tailor its performance measurement systems to its distinctive needs, and (3) independence of each affiliate in retaining and raising capital, all of which inspire greater entrepreneurship and exploiting opportunities in many unrelated business, back-upped by the access to highly diverse resources of daughter companies. On the other hand, Cuervo-Cazzura (2006) states that business groups are an organizational form that falls in between market and hierarchy extremes and can be considered as being type of firm network (widely-held, state-owned, family-owned), but not all types of firm network are business groups (e.g. supplier, distribution, strategic and geographic networks).

Business group's parent (holding or headquarters) company plays a crucial role in setting the pace and direction, as well as providing the most important efforts and decisions related to group's functioning. It represents an important moderating and mediating effect of governance procedure among member firms (Boyd & Hoskisson, 2010). In this sense, Kerr and Darroch (2005) emphasize that top management of the business group needs to clearly establish, communicate and implement means by which the corporate level will add value to the underlying businesses. In doing so, managerial (strategic) choices need to be made with the aim of groups' and affiliates' adaptation to their external environment with appropriate group structures, all of which need to produce more or less desirable business performances. Two influential characteristics of potential headquarters' effectiveness are organizational structure and size. Business group size is widely viewed as important factor explaining group performance (Carney et al., 2011). Larger business groups in general might be over-complex thus being too big to manage (Hill, 2015). Similarly, although extensive holding companies might offer a wider spectrum of services, they can also represent the administrative burden and cost center.

On the other hand, in line with the contingency theory of organizations (e.g., Donaldson, 2001), structural choices and board members' responsibilities should follow the chosen strategy. Functional division of labor in which top management specializes in an executive role such as monitoring and administering the operating divisions is only one of the possible design options. Both divisional (product or geographic) and hybrid structures are applicable as well, depending on the strategy choice. If there is a misalignment between group strategy and holding company structure, the group performance will suffer. Led by the well-known structural rigidity of public organizations (e.g., Aucoin, 1997; Bozeman, 1981), and by the recent trend of the globally rising size of the public-sector employment (OECD, 2015), we expect to find differences in organizational characteristics between private- and state-owned business groups:

H3: Private- and state-owned business groups have different organizational characteristics.

2.5. Business group performance

Finally, we wanted to examine the performance implications of different business group ownership types. According to Khanna and Palepu (1999), business groups can add value in different ways. First, they use funds and management talent from existing operations to start new ventures. Second, business groups also substitute for labor market institutions. Large companies can create their own internal market for managers. Third, groups create value by developing a common group brand that stands for world-class quality and customer service. Not every group adds value in the same way, and no group can hope to fill every institutional void (Khanna & Palepu, 1997). For instance, diversified groups can add value by acting as intermediaries when their individual companies or foreign partners need to deal with the regulatory bureaucracy (Khanna & Palepu, 1997).

Scholars have found evidence that business groups offer positive performance outcomes (e.g., Almeida & Wolfenzon, 2006; Chang & Hong, 2000). For instance, Khanna and Rivkin (2001) reported that business groups and group affiliation indeed affect the broad patterns of economic performance. Specifically, they revealed that membership in a group raises the profitability of the average group member in various markets. A decade later Lintvedt (2012) confirmed their findings showing that the superior performance of group-affiliated firms vis-à-vis independent enterprises is related to their greater capabilities in terms of human capital, access to finance, as well as technology and innovation. However, the evidence concerning business group financial performance has primarily been drawn from studies at the affiliate rather than the group level (Carney et al., 2011). We still lack comparative studies about group-performance effects of private- and state-owned business groups. As private-sector organizations are in general much more effective than public-sector counterparts, we expect that similar is valid within the business group context. Therefore, we propose our fourth hypothesis:

H4: Private business groups have better performance results than state-owned business groups.

3. METHOD

A desk-research study targeted at the inter-organizational level was conducted on the sample of large business systems in Croatia. Top 40 business groups according to total revenue amount (listed by the *Lider* magazine) were thoroughly examined. Initial data were collected from the published magazine report. However, we have also conducted a multi-source content analysis of the official web sites of sampled organizations, the official documents published from the Zagreb Stock Exchange, and data extracted from the Business registry developed and provided by the Croatian Chamber of Commerce, respectively. Applied source triangulation technique resulted in minor data adjustments. Nevertheless, certain data inputs for some business groups were still not available, thus creating minor missing value problems in the data analysis process.

We analyzed strategic, governance, organizational and financial aspects of business groups. Specifically, after total sample analysis, we have clustered business groups according to their ownership type (i.e. private, state-owned, and hybrid). In addition, business groups have been differentiated according to the corporate strategy (i.e. related or unrelated diversification), organizational size (i.e. number of employees and number of member firms within a group), corporate governance practices, international orientation, and holding company structure. Finally, certain performance data have also been analyzed (i.e. total group revenue and revenue per employee).

Sampled business groups are heterogeneous in nature covering different industries, being different in size, as well as in terms of financial performance. The majority of business groups is privately-owned (65.0%), having less than 10 member firms (62.5%) and encountering more than 10.000 employees (75.0%). However, only a half of the examined business groups have implemented the Corporate governance code (50.0%), and just a quarter of the sample pursues the unrelated diversification strategy (25.0%). Almost four out of five business groups have less than five board directors. Because the ownership structure of only three business groups is mixed, we decided to differentiate private- from non-private (public-sector) business groups (i.e. state-owned and hybrid ownership combined). A complete business group description for total sample and subsamples is provided in Table 2.

4. RESULTS

The relationships between business group characteristics of private- and public-sector organizations were initially examined on the total sample of organizations. Table 3 shows bivariate correlation coefficients among different strategic, governance, organizational and financial characteristics. Interestingly, intra-group characteristics were not significantly related, except in the case of strategic characteristics. However, certain positive and negative relationships have been recognized. For instance, number of member firms within the group were positively related with total number of employees ($r = .577$, $p < .01$, $N = 40$) and total group revenue ($r = .550$, $p < .01$, $N = 40$), but negatively related with diversification strategy ($r = -.446$, $p < .01$, $N = 40$) and size of the headquarters ($r = -.504$, $p < .01$, $N = 28$). Positive relationships have been also revealed between Corporate governance code and holding company structure ($r = .490$, $p < .01$, $N = 31$),

Table 2: Business group characteristics

Business group characteristic		Total sample (N=40)		Private sample (N=26)		Non-private sample (N=14)	
		M	SD	M	SD	M	SD
Strategic	Number of member firms	12.1	12.5	12.3	14.3	11.6	8.8
	International orientation (number of international members)	4.4	7.8	24.5	28.5	19.4	26.6
	Diversification strategy Related Unrelated	 77.5% 22.5%	-	 76.9% 23.1%	-	 78.6% 21.4%	-
Governance	Ownership type Private State-owned Hybrid	 65.0% 27.5% 7.5%	-	-	-	-	-
	Number of board members	3.3	1.9	3.4	2.1	3.2	.9
	Corporate governance code Yes No	 50% 50%	-	 50% 50%	-	 50% 50%	-
Organizational	Number of employees	4,794.6	6,124.3	3,357.7	6,142.1	7,463.2	5,307.8
	Headquarters' size	43.1%	-	43.7%	-	42.3%	-
	Holding structure Functional Product Hybrid	 67.7% 3.3% 29.0%	-	 68.4% 0.0% 31.6%	-	 66.7% 8.3% 25.0%	-
Financial	Total group revenue	4.354,50	5.910,43	3,803.6	5,199.4	5,377.6	7,146.8
	Revenue per employee	1.6	1.6	2.0	1.7	.7	.5

number of board members and total group revenue (r = .646, p < .01, N = 33), number of board members and holding company structure (r = .426, p < .05, N = 28), number of board members and total number of employees (r = .496, p < .01, N = 33), total number of employees and total group revenue (r = .818, p < .01, N = 33), and between total group revenue and holding company structure (r = .418, p < .05, N = 31). Statistically significant negative relationship was additionally present between total number of employees and revenue per employee (r = -.342, p < .01, N = 40).

Next, business group characteristics were compared across private- and non-private (state-owned) subsamples by using independent samples t-tests. Although we checked for four nominal grouping variables (Ownership type, Diversification strategy, Corporate governance code, and holding company structure), our hypotheses testing was based on the ownership type. As clearly seen from Table 4, strategic characteristics of private- and state-owned business groups were not statistically different. Therefore, our first hypothesis that private- and public-sector business groups have similar strategic characteristics is confirmed. The same conclusion was made for governance characteristics, as number of board members and practice of using Corporate governance code is commonly used within Croatian business groups despite of ownership structure differences (second hypothesis is accepted).

While public-sector business groups are larger in the number of total employees, their headquarters' size (share of employees employed at headquarters) is similar and not statistically significantly different. They also seem to use similar holding company structures (predominantly hybrid ones), so we had to reject our third hypothesis as we have not found differences in their organizational characteristics.

Finally, our data clearly show that private-sector business groups are much more efficient than their public-sector counterparts. While total group revenue does not differ significantly across sectors, revenue per employee is almost three times higher in the public business groups. Thus, we were only able to partially accept our fourth hypothesis.

Table 3: Correlation matrix

		1	2	3	4	5	6	7	8	9	10	11
1	Number of member firms	1										
2	International orientation	.320*	1									
3	Diversification strategy	-.446**	-.001	1								
4	Ownership type	.051	.016	-.017	1							
5	Number of board members	.360*	.078	.131	.036	1						
6	Corporate Governance Code	.265	.266	-.180	.119	.314	1					
7	Total number of employees	.577**	-.126	-.258	.313*	.496**	.173	1				
8	Headquarters' size	-.504**	.054	.428*	-.058	-.006	-.220	-.264	1			
9	Holding company structure	.404*	.183	-.218	.118	.426*	.490**	.249	-.134	1		
10	Total group revenue	.550**	-.019	-.132	.248	.646**	.292	.818**	-.195	.418*	1	
11	Revenue per employee	-.254	-.108	.022	-.345*	-.140	-.033	-.342**	.299	.225	-.107	1

*Note: * p < .05; ** p < .01*

Table 4: Mean values and differences across business groups

	Ownership type			Diversification strategy			Corporate Governance Code			Holding company structure		
	Private	State-owned	p-value	Related	Unrelated	p-value	Yes	No	p-value	Functional	Hybrid	p-value
Number of member firms	12.35	11.57	.855	9.10	22.33	.004**	15.35	8.80	.099	8.25	22.89	.004**
International orientation	24.5%	19.4%	.582	22.7%	22.8%	.996	30.0%	15.5%	.097	16.5%	33.1%	.136
Related diversification Unrelated diversification	76.9% 23.1%	78.6% 21.4%	.908	77.5%	22.5%	-	70.0% 30.0%	85.0% 15.0%	.268	85.0% 15.0%	67.0% 33.0%	.343
Private business groups State-owned business groups	65.0%	35.0%	-	64.5% 35.5%	66.7% 33.3%	.908	65% 35%	65% 35%	1.000	60% 40%	67% 33%	.743
Number of board members	3.38	3.17	.758	3.44	2.88	.468	3.83	2.67	.075	3.06	4.67	.038*
Corporate governance code	Yes 50.0% No 50.0%	Yes 50.0% No 50.0%	1.000	Yes 45.2% No 54.8%	Yes 66.7% No 33.3%	.267	50%	50%	-	Yes 40% No 60%	Yes 88.9% No 11.1%	.013*
Total number of employees	3,357.69	7,463.2	.042*	3,954.97	7,686.78	.108	5,843.75	3,745,50	.284	4,829.70	8,160.78	.367
Headquarters' size	43.7%	42.3%	.915	49.4%	14.3%	.023*	36.7%	50.5%	.765	44.3%	36.8%	.605
Holding functional structure Holding hybrid structure	63.2% 31.6%	66.7% 25.0%	.990	68.0% 24.0%	50.0% 50.0%	.239	47.1% 47.1%	92.9% 7.1%	.004**	69.0%	31.0%	-
Total group revenue	3,803.58	5,377.64	.429	3,939.94	5,782.44	.417	6.058,00	2.651,00	.072	3,491,00	9,407.33	.025*
Revenue per employee	2.04	.70	.001**	1.59	1.51	.894	1.52	1.62	.840	1.20	1.70	.208

*Note: * p < .05; ** p < .01*

5. DISCUSSION AND CONCLUSION

This study is focused on large business systems in Croatia. Similarities and differences among business groups of different ownership type have been revealed. Private- and public-sector business groups were quantitatively compared along their strategic, governance, organizational and financial aspects, where t-test statistics clearly showed that they are more similar than expected. The research topic is highly relevant for the Croatian environment, as its national economy has been going through transition to open market economy for the last two decades. During this transition period, the challenge of defining the rules of the market game was one of the most important for this young, newly formed country and its institutions.

Bearing in mind a very fruitful context of Croatian economy for business groups, such networks of legally-independent firms emerged, evolved, and some of them declined, due to the ever changing legal, political and intuitional conditions in the country. An important accelerator for the emergence of business groups was several privatization rushes. In these periods multitude of large socialistic dinosaur-like systems and firms were broke-down to smaller parts and privatized, often resulting with emerging and growing business groups. Such transformation of Croatian economy has been done while trying to get closer to business role models from the Western economies, with the ultimate goal of achieving greater efficacy and effectiveness. On the other hand, certain portion of mentioned large-scale business systems and firms resisted privatization rushes and remained under the state ownership, often in a form of a business group. Finally, a new force in the form of new, privately-owned business groups emerged in the economy and has taken the central market role both in terms of size and various power levers.

As Croatian institutional, political and economic conditions are still largely in favor of business groups, we decided to thoroughly examine the current state of business group affairs. While private-sector groups cover almost two thirds of the top 40 examined national business groups, state-owned business groups have a decent one third share on the ranking list. Interestingly, strategic characteristics of business groups do not differ much between the sectors. Although private business groups have somewhat larger number of member firms that are located abroad, less than a quarter of them apply unrelated diversification strategy, similar to their state-owned counterparts. Governance practices of examined business groups also do not differ much. It seems that private- and public-sector business groups have almost equal boardroom size and a half of each subsample manage the affiliated companies by following the Corporate governance code.

We expected that ownership type would make a difference related to organizational and financial characteristics of business groups. However, we have found differences only regarding their financial indicators. Our data confirmed that private business groups use their workforce more efficiently than state-owned ones. Yet, neither holding company structure nor headquarters' size contributes to such distinctive performance results. Although it is widely believed that larger business groups enjoy performance enhancements that smaller groups do not enjoy (Guillen, 2000; Khanna & Yafeh, 2007), over-scaled Croatian business groups (predominantly state-owned) seem to achieve lower level of revenue per employee.

Other grouping variables such as diversification strategy, corporate governance code, and holding company structure also did not show significant differences among business groups, which mean that these large business systems in Croatia are similar enough. However, conclusions made should be carefully approached having in mind the context of the research and its limitations. First of all, the analyzed sample of business groups is small and biased. We have examined the top 40 business groups in Croatia. However, it would be interesting to see whether same results could be found within less successful and/or smaller business systems. Second, due to small sample size, we have an issue of not completely satisfying the requirements for conducting t-test statistics. We would need at least 30 cases per sampling group. Third, there were some missing value problems that could possibly distort our findings. Fourth, while we reported about the nature of relationship (positive, neutral or negative) among different business group characteristics, we have not checked for causality. Therefore, longitudinal research designs should be implemented to get a better understanding of this complex phenomenon. Finally, although we have examined different business group characteristics, some additional should be observed in the future work such as the extent of vertical/horizontal integration, organizational structure of affiliated firms, group coordination and control efforts, resource allocation systems, reward systems, or additional financial and non-financial performance indicators.

EXTENDED SUMMARY / IZVLEČEK

Poslovne skupine so večje entitete, ki se razprostirajo izven meja združb in značilno prispevajo k ekonomski aktivnosti po svetu. Predstavljajo pomembno obliko poslovne organiziranosti v številnih razvijajočih se državah (Hoskisson, Johnson, Tihanyi, & White, 2005) in so dobro zastopane tudi v nekaterih post-socialističnih gospodarstvih. Na Hrvaškem, denimo, privatne in javne poslovne skupine predstavljajo kar tretjino bruto domačega proizvoda in imajo pomembno vlogo pri razvoju državnega gospodarstva. Vendar pa vemo zelo malo o korporacijski strategiji, procesih upravljanja in zastavljanja organizacijske strukture znotraj poslovnih skupin, saj le-te nimajo enakih značilnosti v različnih kontekstih (Khanna & Yafeh, 2007). Tako je cilj članka raziskati procese managementa in organizacije v poslovnih skupinah na Hrvaškem. Primerjalna analiza največjih poslovnih skupin, ki jih našteva Hrvaška gospodarska zbornica omogoča vpogled v ravni diverzifikacije, konfiguracijo skupine in strukturo upravnih odborov, ter v organizacijsko arhitekturo krovne združbe, trenutno raven internacionalizacije skupine in uspešnost poslovnih skupin. Rezultati kažejo podobnosti in razlike med privatnimi in javnimi poslovnimi skupinami. Tako pričujoči članek prispeva k boljšem razumevanju praks organiziranja večjih poslovnih sistemov na Hrvaškem in ponuja specifične vpoglede v razmejitev med privatnimi in javnimi poslovnimi skupinami.

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