Business groups & Network industries

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contents

Business groups and network industries

Welcome to the Winter 2014 issue of the Network Industries Newsletter, which is dedicated to the topic of "Business Groups in Network Industries". Business groups are generally understood as collections of heterogeneous companies tied together by formal and informal links and are distinguished in the management literature as a unique organisational form differing from stand-alone companies. Business groups can be holdings, conglomerates or corporate groups and are particularly widespread in the network industries. The winter issue presents three articles discussing the functioning of business groups in the specific conductions of network industries. Its goal is to present the theoretical framework on business groups indicating the dimensions of their functioning as well as to confront the theory with some practical illustrations and cases. This issue also intends to open a wider discussion on the role, benefits and shortcoming of business groups operating in Europe and worldwide.

In the first article Maria Aluchna using the examples of four cases from Poland discusses the characteristics of business groups and indicates the potential benefits they offer to network industries. The second contribution is delivered by Jana Pieriegud who analyses the evolution and organizational forms of corporate groups in the rail freight sector in Poland focusing on the strategies of PKP Cargo Logistics Group and CTL Logistics Group are discussed. Finally Miroslav Stojsavljevic in the third article presents the example of Serbian water management companies acting as a specific business group addressing the functioning of public companies dealing with natural resources and showing the complexity of this form of economic activity.

We hope that you find the contribution interesting and inspiring for future studies both on business groups and on network industries.

Network Industries Quarterly | Published four times a year, contains information about postal, telecommunications, energy, water, transportation and network industries in general. It provides original analysis, information and opinions on current issues. The editor establishes caps, headings, sub-headings, introductory abstract and inserts in articles. He also edits the articles. Opinions are the sole responsibility of the author(s).

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dossier

Business Groups in Network Industries

Maria Aluchna*

This article discusses the characteristics of business groups and indicates the potential benefits they offer to network industries. Keywords: business groups, holdings, conglomerates

1. Intorduction

Business groups represent a specific form of economic activity placed between organizational hierarchy and contractual networks. Since they play an important role in economies in terms of their contribution to Gross Domestic Product (GDP), employment and investment (Avdasheva, 2007; Heugens/ Zyglidopoulos, 2008) they remain in the centre of management and finance research. Business groups are defined as a collection of companies tied with mutual formal links of economic, trade, ownership and credit character as well as informal links such as cultural, personal and religious relations (Yiu et al., 2007) and are distinguished in the management literature from stand-alone companies. Business groups such as holdings, conglomerates or financial-industrial groups emerged both in developed and developing countries and they are often seen as the successful strategy for economic and social policies. The analysis of origin and organizational form of corporate groups refers to the debate on the boundaries of the firm and the scope of 'make' or 'buy' activities. Corporate groups are perceived as a network of companies, but their characteristics distinguishes them from other types of network structures such as supplier or distribution (e.g. franchises) networks, strategic alliance, geographic associations.

Since this form of economic activity offers many potential benefits supporting the operation and development in the specific environment it is often found in the case of network industries. This article briefly introduces the specificity of business groups, their characteristics and functioning indicating the reasons for the widely adoption of the business group form in network industries focusing on the potential benefits business groups offer to the collections of companies.

2. Growing interests in business groups

Business groups are a separate form of economic activity and reveal their own specific characteristics (Zattoni, 1999). The literature delivers a wide range of different terms used, such as business groups, groups of companies, conglomerates, holdings, as well as a richness of definitions. A corporate group is usually defined as a set of legally separate and independent firms tied with stable relationships and operating in strategically unrelated activities and under common ownership control (Yiu et al., 2007). However, some definitions refer to a wider more general character of ties connecting the company including informal or social relationships such as family ties between CEOs or interlocking directories of independent firms or administrative or financial control, interpersonal trust or related to ethnic or commercial background (Khanna and Yafeh, 2005; Cuervo-Cazurra, 2006). This wider definition of business groups relates mostly to Indian business houses or Japanese keiretsu. On the other hand the narrower definitions, which derive from the economic aspects of business groups functioning, point at relationships between separate firms initiated by a family that remains the controlling shareholder. At the same time there are strong ownership ties as well as business and financial interlocks (Ghemawat and Khanna, 1998; Fisman and Khanna, 2004). Korean chaebol, Latin American grupos, Thai family groups or continental European pyramids serve as examples for this narrower perspective. American conglomerates usually fit the economic definition however reveal different, usually heavily dispersed ownership structure with no or very small family involvement.

A model of a corporate group is presented in Figure 1.

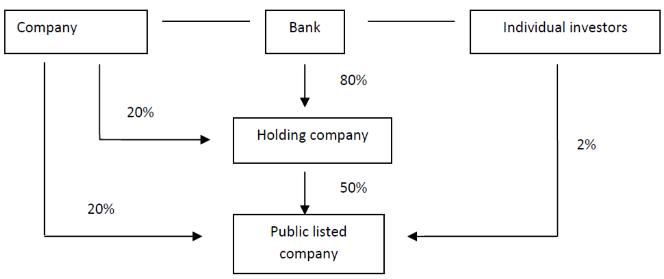

Figure 1: A model of a business group
Source: Becht/ Röell (1999:1052).

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Corporate groups, defined as a number of associated companies which enjoy ownership ties known as cross shareholdings, contractual (production, service, finance) relations as well as personal and informal links, often operate in network industries. The group companies are intended to operate while cooperating with their peers, need to follow group interests and goals as well as to undergo the group rules and investment policy. The affiliated companies also constitute a specific environment for the organisational control and corporate governance ranging from network based and stakeholder oriented to hierarchy based and shareholder oriented. The identity of the investors in the ownership structure and the degree of concentration may determine the corporate governance policies and frameworks.

Recent years brought increasing interest in business groups. The reasons behind the growing interest for research on corporate groups are rooted in three main areas. First, corporate groups constitute the dominant form of the economic activity in emerging markets and their powerful position and influence potential is often seen as a crucial element for the success of the economy of India, China or Mexico. Corporate groups in emerging markets are often perceived as a structure compensating for weak institutional order boosting trust and lowering transaction cost of economic activity (Khanna and Palepu, 1998, 1999). Therefore, with the growing international economic and political role of developing countries and regions, the interest in the functioning of business groups has emerged. Secondly, the comparative analysis on corporate groups reveals many positive aspects stressing benefits of synergy, better performance, higher effectiveness in the fields of internal market, human resource management (HRM), diversification strategies and market position. These advantages may become important elements in developing corporate groups under the condition of a global economy where flexibility of separate business units, efficient resource allocation as well as synergy effects of the use of intangible resources (reputational capital, know how, knowledge, logo, image) may provide essential solutions for current environmental challenges. And finally, the latest methodological developments allow to use advanced statistic and econometric tools controlling for the specificity of the sample companies (endogeneity, characteristics) which in turn delivered new findings on groups' efficiency neglecting already elaborated and widely recognized statements and opinions (Villalonga, 2000, 2004; Emms and Kale, 2006; Sanzhar, 2006).

3. Reasons for adopting business group form in network industries

Business groups are built to achieve certain advantages related to the organizational form, specificity of the functioning and the synergy potential both in finance and management. These reasons become crucial at the beginning of 20th century in line with the processes of industry concentration and consolidation in various sectors led by the opportunity for additional profits generated from the economy of scale and constant cost reduction. Another approach refers to the mergers and acquisitions (M&A) transactions and strategies towards vertical integration and eliminating the unrelated diversification. Reasons for building corporate groups can be summarized as follows (Trocki, 2004):

- economies of scale and scope – business activity within a group allows both for standardization and differentiation of products/services. The opportunity for cooperation between affiliated firms provides the potential for synergy in production, marketing, sales, management, finance and HRM;

- focus on core competences and possibility to lower the risk – corporate group gives the unique opportunity for risk diversification via implementation of a related or unrelated diversification strategy allowing for the specialization in narrow areas represented by separate business units;

- possibility to overall economic activity optimization and encouraging local entrepreneurship – corporate activity adopts central management as well as it provides independence and autonomy for separate business units.

Comparative analysis of business groups and studies on their functioning identify a large number of arguments supporting the adoption of this form of economic activity in general and in network industries in particular. The reasons for adopting the form of business groups are rooted in a set of potential benefits it offers for the functioning of affiliated companies and refer to positive arguments for diversification strategy and market position, organizational and functional synergy, efficiency of internal market, coordinated corporate governance, potential of internal capital market and advantages of HRM. The outline of these reasons is presented in Table 1.

As shown in Table 1 the form of business groups may offer several potential benefits for economic activity, which appear to be particularly important for the specific environment of network industries. First, the diversification strategy, which remains one of the main reasons why companies adopt the form of business group, assures for a wider scope of operation on different market segments that lowers risks, may stimulate growth and in result lead

Table 1: Arguments supporting the use of business group form

Argument	Benefits	Benefits for network industries
Diversification strategy	It assures for a wider scope of group operation on different market segments that lowers risks, stimulates growth and in result leads to stronger market position.	It allows to lower risk of capital and infrastructure intensive enterprises; a stronger position helps to achieve stability on the market and to continue development.
Organizational and functional synergy	Operation on different market segments and cooperation between group companies encourage use of the group resources (capital, infrastructure, know how, reputation and brand, knowledge, customers/ suppliers base etc.).	Important for network industries due to high investment in infrastructure and the know-how specificity.
Internal market	Sets rules for cooperation, boosts coordination and provides development for suppliers and customers of certain goods/ services. It also improves the execution of contracts and delivers safety to mutual contractual relationships (Khanna and Palepu, 1998).	Important for network industries, which require patient long term financing.
Corporate governance	Better coordination in the case of dominant shareholder control (industry investor, family or founder), interlocking directories.	Control over substantial resources engaged in network industries, long term approach, patient financing, know how support.
Internal capital market	Investment policy conducted by business groups with respect to funds allocated between group members (Stein, 1997). It helps individual companies avoid financing constrains that single, independent companies without access to internal capital market cannot overcome (Deloof, 1998).	Important for network industries, which require patient long term financing.
HRM	The possibility for employees and executives rotation, exchange of experience, knowledge transfer.	Important for complex structures and specificity of network industries.

to a stronger market position. Interestingly, in the literature still two alternative approaches address the diversification strategy. The previously recognized conglomerate discount assuming the lower valuation for business groups as compared to stand alone firm (Lang and Stulz, 1994) appears to be replaced by the competing hypothesis of the diversification premium and positive impact of diversification on company value (Villalonga, 2000; Graham et al., 2002). The second argument presented in Table 1 refers to the organizational and functional synergy as the presence of affiliated companies in the group assumes their cooperation. This stimulates the use of the group resources such as capital, infrastructure, know how, reputation and brand, knowledge, customers/suppliers base (Khanna and Palepu, 1998). The specificity of business groups functioning includes formation of the so called internal market. The internal market offers rules for cooperation, boosts coordination and provides development for suppliers and customers of certain goods/services. In other words group members do not have to engage in cooperation with firms outside the group. The internal market also improves the execution of contracts and delivers safety to mutual contractual relationships (Khanna and Palepu, 1998). This hypothesis explains the popularity of business groups in emerging markets stating that the potential of an internal market compensates for the weak institutional order and weak legal protection and as a result increases trust between group members and lowers the transaction costs of economic activity. However, this hypothesis is neglected by some authors who did not find statistically significant relations between the existence of an internal market and quality of institutional order (Heugens and Zyglidopoulos, 2008). Business groups, particularly those controlled by the majority shareholder such as industry investors or the family of the founder enjoy better coordination in the case of dominant shareholder control. The group companies are tied not only by the ownership links but also through the interlocking directories which boost the information flow, experience exchange and the mitigation of information asymmetry. The next argument provided in Table 1 refers to the functioning of the internal capital market. The internal market stands for the investment policy conducted by business groups via the size and directions of funds allocated between group members (Stein, 1997). The internal capital market takes the form of intergroup loans and bond issuance and aims at helping individual companies to avoid financing constrains that single, independent companies without access to internal capital market cannot overcome (Deloof, 1998). The literature delivers again two alternative hypotheses assuming that the internal capital market is more efficient than the external market what translates into efficacy of the parent company's investment policy. Groups enjoy lower information asymmetry of the parent company, a relatively easy allocation process and high managerial motivation within the groups (Gertner et al., 1994). The competing hypothesis assumes that the internal capital market is less efficient than the external market which means that groups do not allocate funds optimally (Lamont and Polk, 2002). This stance points at higher costs of collecting information of affiliated firm investment plans and non-economic reasons for investment policy within groups (Choe and Yin, 2005). The last argument for the adoption of the business group form indicates the benefits for HRM. As research indicates business groups conduct an active personnel policy focusing on employees and executives rotation, exchange of experience and knowledge transfer. Business groups are comprised of several companies, which offers a perfect environment for the development of employees' and executives' careers and understanding of the business operation under various conditions.

Discussing the reasons for adopting the business group form in network industries requires taking into account some shortcomings related to its functioning. The activity within corporate groups is often criticized due to several possible shortcomings. First, the diversification strategy may cause problems referring to inefficient resource allocation and lack of adequate knowledge or managerial experience in selected sectors. Additionally, current complex and challenging environment may prefer a focused strategy based on core competences and targeted market segments (Kakani, 2001). Business groups consisting of many companies may result in a rigid and complicated structure which translates into a lack of flexibility and high management and organizational costs. Tracking the profitability of a wide portfolio, HRM requirements towards development and compensation policy and problems in balancing interests of all shareholders and stakeholders as well as SBU managers in company's corporate governance system (higher information asymmetry, increased moral hazard) may further lower the overall performance of the business group (Weiner, 2005).

4. Business groups in network industries – the Polish case

The development of business groups in network industries in Poland is heavily rooted in the transition reforms and the turnaround of the economic system in 1989. The conglomerates and holdings dominating the socialistic economy based on heavy and network industries were viewed as the most efficient structures to provide for the optimal use of resources and assure for constant economic growth assumed by the central plan. As these groups proved to be highly inefficient due to the politically appointed executives, poor control rights allocation, elimination of market competition and exaggerated unrelated diversification, their restructuring was placed in the centre of the transition agenda. Conducting spin offs, adopting more focused strategy and consolidating the units led to significant redevelopment of these business groups. Simultaneously the newly founded companies, mostly in network industries, adopted the form of business groups in the process of their growth and further expansion. The latest statistical report identified 1996 corporate groups in Poland which include 9823 non-financial companies (GUS, 2010). The Polish corporate groups operate either in the form of a complete group with the headquarters in Poland or as a part of the international business group with the parent company located mostly in other EU countries or the US.

The case studies of three large business groups operating in network industries have been analysed for the purpose of this article: Orange Polska is the company affiliated in the France Telecom group operating in the telecommunication and information sector; PGE is the largest company listed on the Warsaw Stock Exchange operating in the energy sector combining coal mining, energy generation and distribution contributing to over 20% of all energy supply in Poland; GTC is the construction giant with operation in the Central and South East Europe. These three business groups have been analysed with the reference to the use of the abovementioned arguments. The study was based on the analysis of materials included in each Group annual report and consolidated financial statements as well as combined with a series of interviews of business groups' experts and representatives.

As shown in Table 2 all three selected business groups appear to take advantage of the identified arguments supporting the use of this form of economic activity. The collected evidence indicates that the use of the internal market is important but remains limited in the case of dominance of the parent company representing 50-70% of the revenues. The use of the internal capital market appears to be important as well but is constrained by specific sectorial and banking regulation in the case of the construction industry. Business groups also adopt measures to coordinate corporate governance and enjoy significant organizational and functional synergy effects. The potential of HRM remains relatively unexplored.

Table 2: Practical use of the arguments supporting the use of business group form

Argument	Orange Polska	PGE	GTE
Diversification strategy	Related diversification, vertical integration , product and service development	Related diversification, vertical integration	Related diversification, vertical integration, internationalization strategy
Organizational and functional synergy	Use of resources, reputation, logo, customer base	Use of resources, reputation, logo, customer base	Use of resources, reputation, logo, customer base
Internal market	Providing services and raw materials, sales and distribution, infrastructure	Providing services and raw materials, sales and distribution	Providing services and raw materials, sales and distribution
Corporate governance	Coordinated, majority shareholder	Coordinated, majority shareholder	Coordinated, majority shareholder, interlocking directories
Internal capital market	Intergroup loans and bonds, tax group agreement	Intergroup loans and bonds	Very limited
HRM	Talent management program, executives rotation	Executives rotation	Talent management program

5. Conclusion

Business groups reveal their organisational and operational specificity as well as significant differences in the types, which emerged in various countries. The form of a business group offers a wide range of potential benefits that affiliated companies can enjoy. These advantages appear to be particularly important for companies operating in network industries which require capital intensive investments in infrastructure and rely on the cooperation of affiliated units and contractors. Therefore the potential of the internal market for products and services as well as the internal capital market which offers long term patient capital, play important roles for the development of business groups. A group of companies operating in network industries can also enjoy organizational and functional synergies based on the common use of logos, brands, infrastructure, customer and contractor base or reputation in relations with creditors. The advantages listed in the article were illustrated with the case studies of three Polish business groups operating in network industries which take advantage of the identified benefits although their use is constrained by the early stage of development and the significant role of the parent company and specific sectorial limitations.

6. References

1. Avdasheva, S. 2007. Russian holding groups: New empirical evidence, Problems of Economic Transition, 50 (5): 24-43
2. Becht, M.,Röell, A. 1999. Blockholdings in Europe: An international comparison, European Economic Review, 43: 1049-1056.
3. Choe C., Yin X. 2005. Diversification discount, information rents and internal capital markets,
4. http://ssrn.com/abstract=875574, Retrieved on October 8, 2014.
5. Cuervo-Cazzura, A. 2006. Business groups and their types, Asia Pacific Journal of Management, 23: 419-437.
6. Deloof, M. 1998. Corporate groups, liquidity and overinvestment by Belgian firms quoted in the Brussels Stock Exchange, Managerial and Decision Economics, 19: 31-41.
7. Emms, E., Kale, J. 2006. Efficiency implication for corporate diversification: Evidence from micro data, Center for Economic Studies, Discussion Paper, no. 26.
8. Fisman, R., Khanna, T. 2004. Facilitaling devlopment: the role of business groups, Word Development, 32 (4): 609-628.
9. Ghemawat, P., Khanna, T. 1998. The nature of diversified business groups: A research design and two case studies, Journal of Industrial Economics, 46: 35-61.
10. Graham, J., Lemmon, M., Wolf, J. 2002. Does corporate diversification destroy value?, Journal of Finance, 57: 695-720.
11. GUS. 2010. Grupy przedsiębiorstw, Warszawa.
12. Heugens, P., Zyglidopoulos, S. 2008. From social ties to embedded competencies: The case of business groups, Journal of Management and Governance, 12: 325-341.
13. Kakani, R. 2001. Explaining diversified business groups failure and focuses business groups success in India, XLRI Jamshedpur School of Business and Human Resources, Working Paper no. 2001-07, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=906455, Retrieved on October 8, 2014.
14. Khanna T., Yafeh Y. 2005. Business groups in emerging markets, European Corporate Governance Institute, Working Paper no 92.
15. Khanna, T., Palepu, K. (1999. Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups, Journal of Finance, 55 (2): 867-891.
16. Khanna, T., Palepu, K. 1998. The future of business groups in emerging markets: Long run evidence from Chile,

Academy of Management Journal, 43 (3): 268-285.

17. Lamont, O., Polk, C. 2002. Does diversification destroy value? Evidence from industry shocks, Journal of Financial Economics, 63: 51-77.

18. Lang, L., Stulz, R. 1994. Tobin's q, corporate diversification and firm performance, Journal of Political Economy, 102: 1248-1280.

19. Sanzhar, S. 2006. Discounted buy not diversified. Organisational structure and conglomerate

20. discount, http://ssrn.com/abstract=387800, Retrieved on October 8, 2014.

21. Stein, J. 1997. Internal capital markets and the competition for corporate resources, Journal of Finance, 52: 111-133.

22. Trocki, M. 2004. Grupy kapitałowe. Tworzenie i funkcjonowanie, Wydawnictwo Naukowe PWN, Warszawa.

23. Villalonga, B. 2000. Does diversification cause the diversification discount, Working Paper, UCLA

24. Villalonga, B. 2004. Diversification discount or premium? New evidence from BITS establishment-level data, Journal of Finance, 59: 479-506.

25. Weiner, C. 2005. The conglomerate discount in Germany and the relationship to corporate

26. governance, http://ssrn.com/abstract=871030, Retrieved on October 10, 2014.

27. Yiu D., Lu G., Bruton G., Hoskisson R. 2007. Business groups: An integrated model of focus future research, Journal of Management Studies, 44: 1551-1579.

28. Zattoni, A. 1999. The structure of corporate groups: The Italian case, Corporate Governance, 7 (1): 38-48.

Corporate Groups in Poland's Rail Freight Industry

Jana Pieriegud*

This article focuses on the evolution and organizational forms of corporate groups in the rail freight sector in Poland. The strategies of PKP Cargo Logistics Group and CTL Logistics Group are discussed.

1. Structural and ownership changes in the Polish rail freight market

The Polish railway market is among the largest in the European Union. Over the last decade, the institutional structure of Poland's rail sector has undergone a number of changes. In 2013, the country's 19,200-kilometer railway network was used by 54 rail freight undertakings and 12 passenger undertakings.

The liberalization of the Polish rail freight market was formally initiated by the Railway Transport Act of 1997. In 1998, the Minister for Transport and Maritime Economy awarded 22 concessions for freight transport services. It was not until April 1, 2002, however, that the first network statement and access charges were published by PKP Polskie Linie Kolejowe S.A. (PKP PLK); hence the date is commonly seen as marking the effective takeoff of the rail freight market opening process in Poland. The opening proceeded incrementally in the following years.

On establishing their presence in Poland, most privately-owned operators relied on bulk cargo, since their productive potential had developed at the beginning of the 1990s on the basis of the so-called "mining railways" (PTKiGK in Rybnik, PTKiGK in Zabrze, NZTK, Pol-Miedź-Trans) and "sand railways" (KP Szczakowa, KP Kotlarnia, KP Kuźnica Warężyńska, KP Maczki-Bór), which had operated for many years in Upper Silesia and the adjoining regions, serving the Upper Silesian Industrial Area (Paprocki, Pieriegud, 2008). The subsequent years saw a number of ownership changes (Table 1) that led to private freight operators capturing an increasing share of the market. In 2003-2013, the new entrants' market share (based on transport performance) rose from to 4% to 35%. Today the biggest players are CTL Logistics Group and Lotos Kolej, each with a 7% to 8% market share (Figure 1). Notably, private undertakings have gained a dominant position in the liquid fuels segment – more than 50% of fuels that were previously (i.e. prior to 2004) carried for the leading oil companies (PKN Orlen and Lotos) by PKP Cargo are now carried by specialized operators controlled by the oil companies themselves (Lotos Kolej and Orlen Koltrans). Petroleum products also represent a substantial proportion of freight carried by CTL Logistics Group.

Since 2009, Poland has also experienced the presence of operators owned by foreign incumbents that entered the Polish market by buying out private undertakings. In July 2009, Deutsche Bahn AG took over the PCC Logistics Group, and in September that year it acquired the PTK Holding Group. The operator is now known as DB Schenker Rail Polska. In another instance, the French national railways SNCF Fret acquired a stake in ITL International GmbH. The acquisition process started in 2008 and was finalized in 2012. On June 1, 2012, ITL Polska Sp. z o.o. officially started operations as Captrain Capital Group, being part of the French SNCF-Geodis Group. Its share of the Polish rail freight market remains below 0.5%.

2. The strategies of the largest corporate groups

The PKP Group (Grupa PKP S.A.) is the second largest

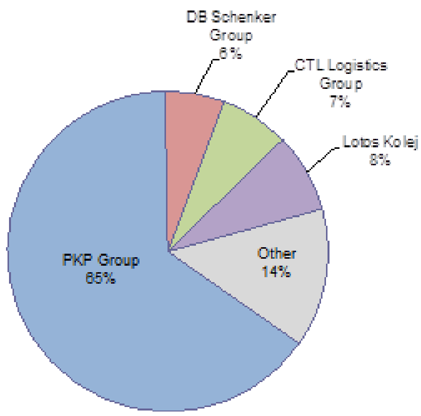

Figure 1. The Polish rail freight market structure in 2013 (percent breakdown based on tonne-km)

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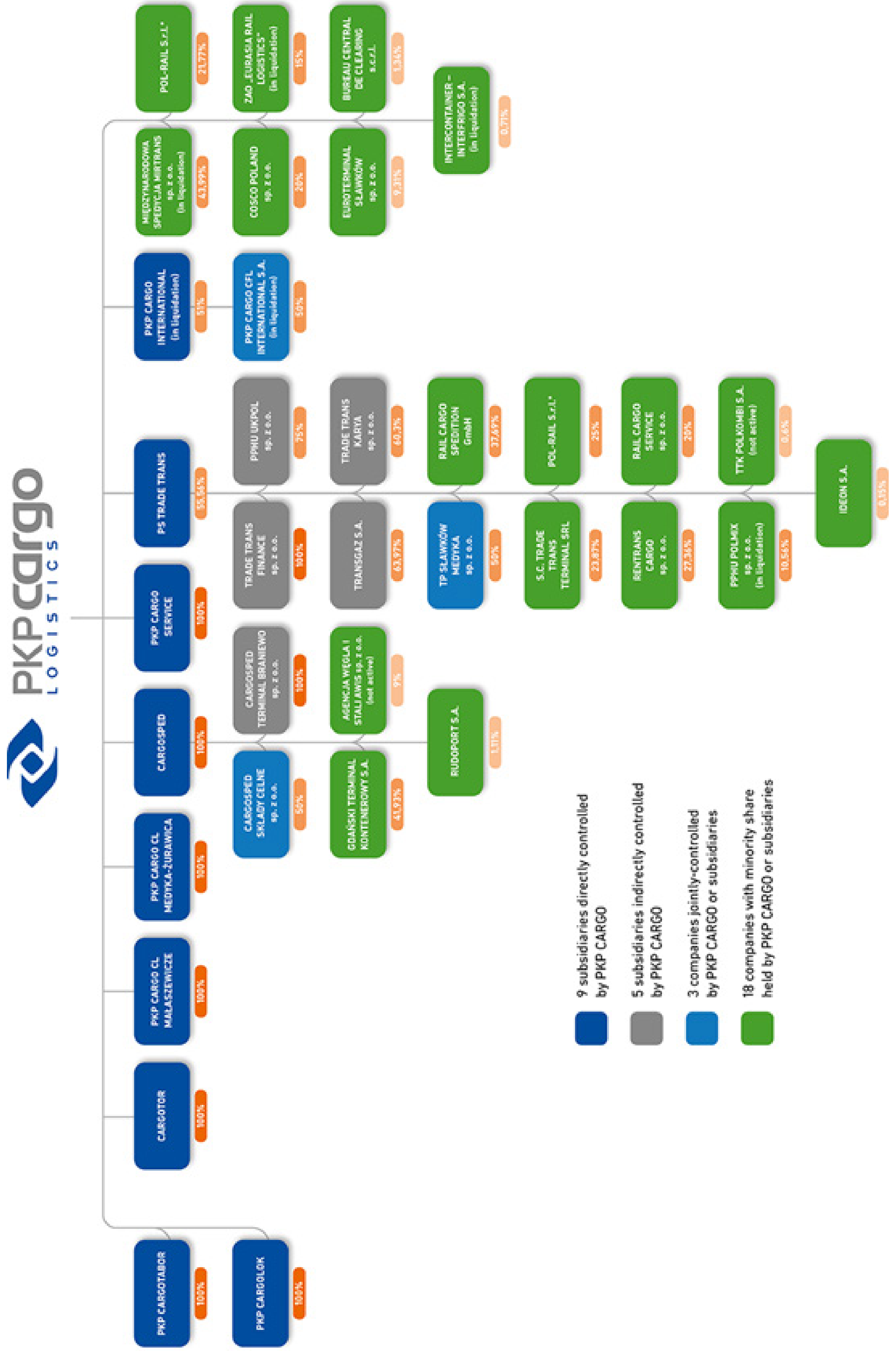
Table 1. Ownership changes in Poland's rail freight sector

Railway undertaking	Year license awarded	Key changes
Operators owned by national railways of other EU states		
DB Schenker Group	2003	The Group emerged as a result of takeovers and acquisitions of several existing operators in the Polish market: 2005: Sand mine Szczakowa S.A. taken over by German company PCC A.G.; PCC Rail Szczakowa S.A. founded; the PCC Rail S.A. Group established. 2007: On 1 January, PTKiGK Zabrze and KP Kuźnica Warężyńska form PTK Holding S.A.; at the end of the year, PCC Rail acquires PTKiGK Rybnik. 2009: In July, Deutsche Bahn takes over PCC Logistics Group, and in September, PTK Holding Group. PCC Rail renamed DB Schenker Rail Polska S.A. 2011: On 3 January, DB Schenker Rail Polska S.A. Group finalizes several further acquisitions: DB Schenker Rail Rybnik S.A., DB Schenker Rail Zabrze S.A., Trawipol Sp. z o.o., NZTK Sp. z o.o., Energoport Sp. z o.o. and PUT Trans-PAK Sp. z o.o. In November, it also acquires DB Schenker Rail Coaltran.
ITL Polska Sp. z o.o. (SNCF-Geodis)	2007	2006: ITL Polska Sp. z o.o. founded as a daughter company of the German rail operator ITL International GmbH. 2008: The French national railways SNCF Fret acquire a 75% stake in the company. 2010: SNCF acquires the remaining 25% shares in ITL International GmbH, incorporating the German operator in the capital Group Captrain Deutschland owned by the French SNCF-Geodis Group. On 1 June 2012, ITL Polska Sp. z o.o. commences activity as part of the Captrain Group.
Private operators		
CTL Logistics Group	2003	2001: Maczki Bór sand mine incorporated into CTL Logistics SA Group (as CTL Maczki-Bór). 2004: CTL Rail commences operations. 2006: The Group's other specialized rail operators started up: CTL Train, CTL Express, X-Train, and CTL Reggio. 2007: The private equity fund Bridgepoint becomes CTL Logistics Group's strategic partner and shareholder.
Lotos Kolej	2003	Created in 2002 from Rafineria Gdańska's Rail Transport Company, the former manager of the oil company's railway sidings. The undertaking becomes part of the LOTOS Group.
Freightliner PL	2005	It is part of the UK's Freightliner Group.
Pol-Miedź Trans Sp. z o.o.	2003	Set up in 1997 as Pol-Miedź Trans Sp. z o.o. by separating transport services from the copper production process, the company forms part of the KGHM Polska Miedź S.A. Group, which includes 33 entities.
Rail Polska	2003	Wholly owned by Rail World Inc. – a rail operator and investment company headquartered in Chicago. 1999: The foundation of Rail Polska. 2003: The acquisition of the Wrocław based ZEC TRANS Sp. z o.o. and PPUH Kolex Sp. z o. o. from Włosienica, Poland.
ORLEN KolTrans Sp. z o.o.	2004	ORLEN KolTrans Sp. z o.o. is part of the business Group built around Poland's largest oil company – Polski Koncern Naftowy ORLEN S.A. [PKN Orlen]. 2006: PKN Orlen's Shipping Division incorporated into ORLEN KolTrans.

employer in Poland, with a workforce of nearly 85,000, and the fourth largest European railway group. It was formed in 2001 pursuant to the Act of September 8, 2000 on the Commercialization, Restructuring and Privatization of the State Enterprise Polskie Koleje Państwowe (Polish State Railways).

PKP S.A., the parent company, holds shares in all of the Group's constituent entities, while being itself owned by the state. Besides PKP S.A., the PKP Group is currently made up of 11 subsidiaries including providers of rail transport services (PKP Intercity S.A., PKP SKM w Trójmieście Sp. z o.o., PKP Cargo S.A., PKP LHS Sp. z o.o.), a railway infrastructure manager (PKP PLK S.A.), service providers to the energy and the telecommunications markets (PKP Energetyka Sp. z o.o., TK Telekom



* The shareholders of POL-RAIL s.r.l.: PS TRADE TRANS Sp.z o.o. – 25% of share capital; PKP CARGO SA – 21.77% of share capital (for a total shareholding of 46.77%). Further, KTF VIAFER SA in liquidation (a PKP SA Group company) holds a 3.23% stake in POL-RAIL s.r.l.

Figure 2. The structure of the PKP Cargo Logistics Group. Source: The PKP Cargo Logistics Group.

Sp. z o.o., PKP Informatyka Sp. z o.o.), and businesses operating outside the rail transport sector. Eight of the PKP Group companies and a PKP Cargo subsidiary called Przedsiębiorstwo Spedycyjne Trade Trans Sp. z o.o. are included in the Group's consolidated financial statements (PKP S.A., 2014). In its role as the parent company, PKP S.A. supervises and coordinates the activities of the PKP Group companies, establishing business objectives for each of them and ensuring that these objectives are met.

PKP Cargo is Poland's rail freight market leader and the second biggest (after the DB Schenker Group) rail freight operator in the EU. On October 30, 2013, PKP Cargo was floated on the Warsaw Stock Exchange, becoming the first stock-listed rail freight operator in the EU. Its stock market debut was at the same time the largest initial public offering on the Warsaw Stock Exchange in 2013. The offering, as a result of which PKP S.A. sold almost 50% of the shares in PKP Cargo, totaled in PLN 1.42 billion and made PKP Cargo stock a significant part of the mWIG40 index. PKP S.A. remains its major shareholder (with 33.01% of the shares). During the anniversary stock exchange session of October 30, the company's share price rose by 3.64% to PLN 79.70, which means that its market valuation had increased by PLN 524 million relative to the IPO price of PLN 68 (PKP Cargo, 2014).

PKP Cargo is part of the PKP Cargo Logistics Group. The Group comprises companies such as Cargosped, a subsidiary responsible for intermodal transport operations, PS Trade Trans, providing national and international rail freight forwarding services, and PKP CARGOTABOR – one of the world's largest freight car maintenance companies (Figure 2). The Group also owns and runs logistic centers and terminals situated at key locations across the country, including land and sea borders.

PKP Cargo operates its own freight cargo services in Poland, Slovakia, the Czech Republic, Germany, Austria, Belgium, the Netherlands, Hungary and Lithuania. Its strategy is aimed at becoming an integrated logistics operator with an international outreach. In 2013, PKP Cargo Group moved 114 million tonnes of freight and generated revenues of PLN 4.8 million and a net profit of PLN 65 million. As far as PKP Cargo's expansion plans are concerned, the company is engaged in talks on potential acquisitions in Poland and abroad. The targets include AWT, the largest private rail operator in the Czech Republic, CTL Logistics, and Pol-Miedź Trans in Poland. PKP Cargo is also considering a joint acquisition, with Węglokoks, of Port Gdański Eksploatacja (PKP Cargo, 2014).

Another example of a corporate group implementing a Europe-wide strategy is the CTL Logistics Group. The company started rail forwarding operations, chiefly involving chemicals, in the early 1990s. Its rapid growth over the following several years resulted in the formation of the CTL Group (Chem Trans Logistic Holding Polska S.A.). In mid-2004, the enterprise was renamed CTL Logistics to emphasize its goal of transforming into a comprehensive logistics platform providing rail transportation, forwarding and transshipment services alongside a complete range of services related to rolling stock maintenance and leasing, sidings management, and customs clearance. In 2004 CTL Logistics, together with the German company RAIL4CHEM, inaugurated the first private international rail freight service between Poland and Germany.

The CTL Logistics Group's business model has evolved from specialization in services targeted at specific industries toward diversification of activities and pan-European expansion (including areas beyond Poland's eastern border). As of the end of 2014, the Group is composed of eleven companies, whose subsidiaries are present in six countries: Poland, Germany, the Czech Republic, the Slovak Republic, Belarus, and Ukraine. In line with its motto, "Connecting Europe," CTL Logistics pursues a strategy that is at the same time regional and European. Its long-term strategic objective is to achieve a leadership position among private rail operators in the EU markets.

3. Conclusion

Groups of companies deliver more than 90% of transport performance in the rail freight market in Poland, which is what differentiates Poland's market from those of other European countries. Also, the Polish incumbent company's public stock offering remains unprecedented throughout Europe.

An analysis of the transformations that occurred in the Polish rail freight market in the last decade reveals that the evolution of corporate groups was driven by acquisitions, mergers, and ownership consolidations. Holding structures mostly emerged as a result of, or in connection with, the following processes: the EU-wide rail transport liberalization, the rail freight market opening in Poland, the restructuring of the PKP S.A. Group, Poland's accession into the EU, the robust growth of Poland's logistics services market, the consolidation processes in the transport and logistics market, and a number of recent staffing changes in rail companies' executive management.

4. References

1. Paprocki, W., Pieriegud, J. 2008: Benchmarking Analysis of the Rail Freight Market in Poland in: Marciszewska, E., Pieriegud, J. (eds). Benchmarking and Best Practices in Transport Sector. Warsaw School of Economics, Warsaw, 55-79.
2. PKP S.A. 2014: Annual Report of PKP Group 2013, 7-9.
3. PKP Cargo. 2014: A good first year on the stock market for PKP CARGO. Press release, October 31, 2014. Available online: http://www.pkp-cargo.pl/pl/media/downloads_doc/Press_release_-_A_good_first_year_on_the_stock_market_for_PKP_CARGO.docx.html. Retrieved on November 7, 2014.

Water Management Companies in Serbia: Business Group

Miroslav Stojsavljevic*

A Business Group is a form of cooperation among companies legally independent from each other but connected through constant mutual interest or technological process, operating in more or less coordinated way. Network industries and public companies dealing with natural resources such as water are the logical choice for this kind of organization, but various forms of ownership structure and other constrains present in transition economies make their functionality uncertain. The example of Serbian water management companies acting as a specific Business Group shows the complexity of this issue.

1. Introduction

The process of transition to a market economy in former socialist economies has been executed in different models and time frames. Even when transition models were similar, each Central- and East European country had its own way and pace of reforming its national economy, including the ownership structure. Corporate governance in all transition economies faces the problem that internal control mechanisms in companies are often stronger than external (stock market, reputation) (Aluchna, 2013). Together with insufficient investor protection and ineffective legal system this prevents investors to enter more willingly to emerging markets. Countries originating from the former Socialist Federal Republic Yugoslavia were in this specific position, since the ownership and economic model practiced in federal Yugoslavia were not based exclusively on the soviet-modelled state-owned planned economy, but as a semi-market economy with unique "public ownership" over the majority of enterprises and some institutions. Natural resources and infrastructure were state owned, but their exploitation and management has been assigned to purpose formed enterprises. Since "public ownership" is not recognized anymore as a legal ownership form in Serbia, overall water management in the country is assigned to public companies founded - and owned - by government bodies, but in daily operations they must cooperate with a number of other partner companies. This paper presents a brief overview on whether various companies involved in water management in the Republic of Serbia form Business Group or not.

2. What are Business Groups

Theoretical views on Business Groups and their definition vary among researches. A Business Group may be characterized and defined from institutional economics, sociological or resource based views. Leff (1978) defines Business Group as "a group of companies that does business in different markets under common administrative or financial control", which is in fact the definition of a multinational corporation. Powell and Smith-Doerr (2003) consider Business Groups as a "network of firms that regularly collaborate" during longer periods of time. Khanna and Yishay (2007) in their research about Business Groups in emerging markets are pointing to the circumstances under which those groups emerge, and emphasize that they are the answer to specific economic conditions. The reasons for their formation and for the directions of their evolution are various, depending on local circumstances. Because of this, Business Groups in underdeveloped economies may play a positive role and serve as a motor for development, or they can be ballast, as described by Khanna and Yishay as "parasites". According to Granovetter (1994), the term Business Groups should be used for the intermediate level of binding among companies, excluding short term alliances as well as legally consolidated corporates.

3. Water Management and Business Group

In almost all countries today water is considered as a state owned natural resource, and the Republic of Serbia is no exception (Law on Waters, 2010). Serbian water is managed by three Public Companies (PC): "Vode Vojvodine" is responsible for waters in the northern Autonomous Province Vojvodina, "Beogradvode" for those in the Belgrade region and "Srbijavode" for the rest of water resources in the country. Although it may look like all three PCs are state owned institutions, they have different origins and different owners: "Vode Vojvodine" is founded and owned by the Vojvodina provincial government, "Srbijavode" by the Serbian Government and

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“Beogradvode” by the municipality of Belgrade. Due to the basic nature of water as a natural resource and interaction of all flows in the country, these three PCs form the core of a specific Business Group, although their jurisdictions are territorially divided. According to Bajcetic (2012), water, similarly to any other natural resource, can be defined either as a pure public good, impure public good, mixed good, merit good or private good. Since they do not produce, distribute or sell drinking water, in the case of Serbian PCs water has characteristics of all abovementioned goods, except the last (private good). Although, some authors argue that in certain situations water managed by a PC may have characteristics of a privately owned good: the consumer may be excluded from the usage of the resource, competition exists, profit can be made and the decision whether to provide or use the resource is based on market elements (price, supply and demand, etc) (Bajcetic, 2012).

“Vode Vojvodine” is authorized to manage all water related issues in the Province, including the general use of water (cooperation with drinking water suppliers and waste water processing companies, irrigation, drainage), environmental and flood protection, waterways regulation, etc. This PC owns various equipment and hydrological objects such as dams, slices, locks, pump stations and other, but not the water per se. The most specific resource under “Vode Vojvodine” management is the Danube-Tisa-Danube (DTD) hydro system made of a 929 km long canal network out of which 603 km are navigable. There are 26 gates, 17 locks and 6 pumping stations, which are managed directly by the PC, but DTD canal network serves also 30 loading and unloading locations, including 14 cargo ports, and 180 bridges that are not owned or operated by “Vode Vojvodine” but other companies, both public and private, which should also be considered a part of the water management Business Group. Since Business Groups are understood as “collections of heterogeneous companies tied together by formal and informal links” (Aluchna, 2014), Serbian water management, construction and maintenance companies are a good example for this. “Vode Vojvodine” directly cooperates with a number of companies responsible for maintenance of local hydro systems, part of DTD canal or those located on the rivers Danube, Tisa, Sava and more than ten smaller rivers in the Province. Having in mind that DTD hydro system drains more than 1 million hectares in Vojvodina, almost 160,000 ha from Hungarian and 285,000 ha from Romanian territory, the number of companies that can be considered part of the specific Business Group is huge, but in this paper only companies domiciled in Serbia are taken into account.

The members of the Business Group formed around three main Serbian water management public companies are 23 smaller local water management companies (18 of them located in Vojvodina province) that are still today (2014) registered as “publicly owned” enterprises, although this form of ownership has been excluded in course of the constitutional changes in 2006. The main reason for this is the fact that minor water management companies are not attractive to investors due to the high operating costs, the surplus of employees, the long turnover period and the relatively low profit that can be expected. On the other hand, there are a number of engineering companies that are able to act as partners and sub-contractors to main public water management companies, and, since it is the legal obligation of PCs to contract all works using open public procurement procedures, private contractors are often in the position to offer lower prices and better conditions compared to over-employed and technologically outdated “publicly owned” enterprises. According to Granovetter (1994), the term Business Groups should be used for the intermediate level of binding among companies, excluding short term alliances as well as legally consolidated corporates. This is exactly the case of “Vode Vojvodine” PC and other hydro management and construction companies in Serbia, which are connected on the basis of technological processes and mutual interests, but without any legal ties or incorporating mechanisms.

4. Conclusion

Mr. Ratan Tata of India’s Tata Group stated that the “conglomerate kind of model has existed to some extent in Japan and […] in Korea and it works well there […] in the Indian context it will probably continue to work reasonably well” (Khanna, 2012). The example of Tata Business Group that consists of 31 companies active in various areas, from automotive to electronics, chemical and hotel industry, is very different compared to the Serbian water management example, but this shows in how many different environments this form of cooperation may be practiced. It is doubtful whether quality corporate governance is present in group of water management companies in Serbia today, although it is clear that they form specific Business Group on the country’s market. There is a great variety of ownership structure among them: private companies, “publicly owned” enterprises and, as main stakeholders, three public companies founded and owned by provincial, state and municipality governments. Coordination between group members is very complicated; however water has the characteristics of a natural resource: i.e. mutual interaction of all surface flows in the country (and regions) and the necessity for constant coordinated maintenance of infrastructure such as the canal network, dams, slices, pumps, as well as flood protection activities. For this reason all entities included in the national water management must act as a Business Group.

5. References

1. Aluchna, M. 2013. Corporate governance in founders' controlled companies, Intellectual Economics Vol. 7 No. 2 (16): 195-205,
2. Bajcetic, M. 2012. Integrativnost ekonomije u vodnom (javnom) sektoru, Prometej, Novi Sad
3. Granovetter, M. 1994: Business groups in: The Handbook of Economic Sociology Smelser J.N., Swedberg R. (eds.) 453–475, Princeton University Press, Princeton.
4. Khanna, T., Palepu, G.K. 2000. Emerging Market Business Groups, Foreign Investors, and Corporate Governance in Concentrated Corporate Ownership (ed.) Morck R.: 265–294, National Bureau of Economic Research Conference Report, University of Chicago Press.
5. Khanna, T., Yishay, Y. 2007. Business groups in emerging markets: Paragons or parasites?, Journal of Economic Literature, 45(2): 331-372.
6. Leff, N.H. 1978. Industrial organization and entre-preneurship in the developing countries: The economic groups, Economic Development and Cultural Change, 26(4): 661-676.
7. Smith-Doerr, L., Powell, W.W., 2005.Networks and Economic Life in The Handbook of Economic Sociology, Princeton University Press.
8. Zakon o vodama, Sluzbeni glasnik Republike Srbije nr. 30/2010.

2nd Conference on Corporate Governance in Network Industries

October 28/29 2015, Vienna Austria

CALL FOR PAPERS

DEADLINE FOR SUBMISSIONS: 31st May 2015

Overview

Network industries offer a highly interesting research area, as business operations generally need to account for both competition and regulation. Adequate performance is only reached by balancing economic efficiency and reasonable profits with public interests and investment needs. Especially the relationship between liberalization and regulation of monopolies or monopolistic bottlenecks dealing with public needs creates multi-disciplinary research questions related to corporate governance. In particular, market-oriented corporate governance mechanisms might not perfectly work in a partly monopolistic environment.

The conference intends to bring together academics, professionals and representatives of governments and operators. The aim is to address key issues in network industries arising from the intersection of regulation and competition on the one hand and corporate governance on the other hand.

Conference Structure

The conference on corporate governance in network industries will be held at the new campus of the **WU Vienna** University of Economics and Business in Austria on October 28 and 29, 2015. The conference is jointly organized by the Institute for Corporate Governance (WU), the Chair Management of Network Industries (NI, EPFL), and the Florence School of Regulation (EUI) supported by the WU Research Institute of Regulatory Economics. Accepted conference papers can be submitted to a **Special Issue** of the Journal Utilities Policy. Each day of the conference will open with a **Keynote Speech** on new issues on corporate governance in network industries.

We would like to invite you to submit an **extended abstract** or a **full paper** dealing with research topics, including but not restricted to:

- The specifics of corporate governance mechanisms in infrastructure and network industries
- Economic regulation of infrastructure industries (including electricity, telecoms, gas, water and other infrastructure industries such as airports, postal services, etc.) and its relation to corporate governance
- Boundaries and overlaps between regulation and corporate governance for utilities and networks
- The processes of de- and re-regulation, as well as privatization, and their implications on the corporate governance of the involved firms
- Corporate governance of state-owned infrastructure firms

We would welcome both theoretical and empirical papers, including case study work. If you want to be considered for publication in the special issue, a full paper needs to be submitted. Each presenter will have 20 minutes to present followed by comments from an assigned discussant, plus general discussion. If you are not willing to act as an assigned discussant, please let us know prior to the conference.

Extended abstracts/Papers and all other queries should be sent to CGNI@wu.ac.at.

More information will be provided at www.wu.ac.at/icg/cgni.

Important dates

Submission deadline: 31st May 2015

Notification of acceptance: 30th August 2015

Provisional program/start of registration: 2nd September 2015

Final program and end of registration: 16th October 2015

Organizing committee and editors

Anne d'Arcy (WU)

Francisca Bremberger (WU)

Matthias Finger (EPFL NI & EUI)

Klaus Gugler (WU)

The de- and re-regulation of the different network industries is an ongoing process at the global level. As this process unfolds, ever new phenomena emerge, which generally call for more, rather than less regulatory intervention. Yet, the question about the right mixture between market, economic, technical and social regulation remains wide open in all the network industries.

The question becomes even more challenging when **looking at infrastructure development in different regions** as, at least in some of the network industries, the gap between regulatory assets in different countries is very wide. Most of the European countries have a long lasting story of national regulation and have then started to put considerable effort in harmonising their regulation at the EU level. Outside the EU, regulation of network industries has followed its own path, according to the necessities of the country or the macro-region. Despite the different stages of network industries regulation, mutual learning processes might be possible and actually welcome, in the light of an ever more connected world.

This 4th Florence Conference on the Regulation of Infrastructures aims at taking stock of the major challenges infrastructure regulation is currently facing, paying attention to the mutual understanding effort that the regulators have to undertake. It does so by:

- looking at the main infrastructure sectors, notably **telecommunications, postal services, electricity, gas, railways, air transport, urban public transport**, as well as **water distribution and sanitation; intermodal approaches** in infrastructure regulation (e.g., rail and air, road and rail, electricity and gas, post and telecommunications) are particularly encouraged;
- looking at infrastructure regulation from various disciplinary approaches, notably engineering, economics, law and political science; interdisciplinary approaches are particularly encouraged;
- linking an academic approach to practical relevance; policy relevant research papers are again particularly encouraged.

Finally, we especially welcome papers that link technology and institutions in developing and emerging countries. Interested junior academics – advanced PhD students, PostDocs and Assistant Professors – along with academically minded practitioners are particularly encouraged to participate.

Outstanding papers will have the chance to be published in the special issue of the Network Industries Quarterly that will be published in 2015. Furthermore, the best paper will be submitted for streamlined publication in the Journal Competition and Regulation in Network Industries.

Unique Conference Format

Following the successful experience of the 3rd edition, the format of the Florence Conference on the Regulation of Infrastructures is unique:

-each presenter has 45', which includes 20' of presentation, 10' of qualified feedback and 15' of discussion with the audience (there are only 2 papers per session, guaranteeing high quality);

-feedback will be given by senior professors associated with the Florence School of Regulation, who are specifically knowledgeable about the topic at hand;

-papers which will be retained for publication will receive additional feedback beyond the conference.

Guidelines for submission: 600-1000 words structured as follows:

-title of the paper

-name of the author(s) and full address of the corresponding author (postal, phone, fax and email)

-the aim and methodology of the paper

-results obtained or expected

-a few keywords

Please find a template at this link.

Timeline

- submission of the abstract until February 13th 2015 (word format) by email to fsr.transport@eui.eu
- notification of acceptance by February 27th 2015
- submission of the full paper by May 29th 2015; participants who fail to comply with this deadline will be automatically removed from the programme

Scientific Committee

- Prof. Matthias Finger (EPFL and EUI, Director of the Transport Area of FSR)
- Prof. Jean-Michel Glachant (Director of the Energy Area of FSR)
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The Transport Area of the Florence School of Regulation

The Florence School of Regulation (FSR) has been created in 2004 as a partnership between the European University Institute (EUI) and the Council of the European Energy Regulators (CEER). Since then, the Florence School of Regulation has expanded from Energy regulation to Telecommunications and Media (2009), Transport (2010) and Water (2014).

The Transport Area of the Florence School of Regulation (FSR Transport) is concerned with the regulation of all the transport modes and transport markets (including the relationship among them). It currently focuses on regulation and regulatory policies in railways, air transport, urban public transport, intermodal transport, as well as postal and delivery services.

The aim of FSR Transport is:

- to freely discuss topics of concern to regulated firms, regulators and the European Commission by way of stakeholder workshops;
- to involve all the relevant stakeholders in such discussions; and
- to actively contribute to the evolution of European regulatory policy by way of research.

The core activity of FSR Transport is the organization of policy events, where representatives of the European Commission, regulatory authorities, operators, other stakeholders, as well as academics in the field meet to shape regulatory policy in matters of European transport.

The results of FSR Transport's activities are disseminated by way of policy briefs, working papers and academic publications. All FSR Transport materials are open source and available on the FSR Transport webpage, as they aim to involve professors, young academics and practitioners to become part of a unique open platform for applied research.

To learn more visit our website: www.florence-school.eu or contact us at FSR.Transport@eui.eu.

FSR-Transport: Events 2014

Date	Title
5-6 February 2015	FSR Conference: Smart Cities, Smart Regulation?
23 February 2015	Executive Seminar on Aviation Safety (by invitation only)
9 March 2015	3rd Florence Intermodal Forum
20 April 2015	7th Florence Air Forum
18 May 2015	10th Florence Rail Forum
12 June 2015	4th Florence Conference on the Regulation of Infrastructures

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