Vahtra, Peeter; Lorentz, Harri

**Article**

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# Assessing the Rationale in Strategic Alliances – Gazprom's Expansion into the Finnish Natural Gas Market*

*Peeter Vahtra, Harri Lorentz***

*The paper presents a hybrid model for the consideration of organisational governance forms in industrial relationships, which is then utilised in the analysis of a specific case concerning Russian Gazprom's operations in Finland as the sole supplier of natural gas to the Finnish market. Such considerations regarding foreign involvement in strategic industries from a national point of view are of vital importance, as Russian energy companies expand their operations in Europe and other parts of the world. The paper elaborates on Finnish – Russian economic relations in general and provides an outlook on the operation of Gazprom in particular.*

*Der Aufsatz präsentiert ein Hybridmodell für die Einbeziehung verschiedener Formen von Organisationsführung in industriellen Beziehungen, anhand dessen die Operationen der russischen Gazprom, dem einzigen Erdgaslieferanten in Finnland, analysiert werden. Derartige Erwägungen das ausländische Engagement in strategischen Industrien betreffend, sind aus der nationalen Sicht immens wichtig, da russische Energiekonzerne ihre Operationen nicht nur in Europa ausweiten. Der Aufsatz befasst sich mit den russisch-finnischen Wirtschaftsbeziehungen im allgemeinen und bietet einen Ausblick auf die Operationen von Gazprom im speziellen.*

*Keywords: Strategic alliances / energy / Russia / FDI / organisational governance*

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** Peeter Vahtra, Researcher, Pan-European Institute, Turku School of Economics and Business Administration, Finland. Main Research areas: foreign direct investments to and from Eastern Europe, the internationalisation of Russian companies, the Russian energy sector.

Harri Lorentz, Researcher, Pan-European Institute, Turku School of Economics and Business Administration, Finland. Main research areas: distribution and supply chain management, industrial organisation, industrial networks. Corresponding address: harri.lorentz@tukkk.fi

## Introduction

The continuing positive economic development in the Russian Federation implicates the strengthening of economic ties and relations with western markets. Improving revenues encourage Russian companies to also seek opportunities outside their home country, even though the native arena cannot be described as one lacking business and investment opportunities for dynamic enterprises endowed with cash. Both sides of the conceptual classification of economic relations are relevant as we analyse the current phenomenon, namely foreign trade and foreign direct investment (FDI). The aspects are undisputedly connected to each other, in a successive or complementary manner. Russian companies are active in both, and importantly, with more elaborate operation methods, both in trade and investments.

The phenomenon under our focus is that of Russian outward foreign direct investment in Finland. There has been extensive media attention towards Russian involvement in Finnish markets, and scholars have forecasted the continuing strengthening process of economic relations between the two countries. According to several estimates, Russia is considered as becoming Finland's most important trading partner as soon as in the year 2005. To complement the picture, we consider it worthwhile to contribute to the discussion with an academic study on Russian companies' operations in Finland through a case study of the largest Russian investment in the Finnish energy sector.

The developments in the Finnish energy sector have shown interesting characteristics during recent years. Finland's increasing dependence on Russian energy supplies, including oil, natural gas, and electricity supplies, has raised heated debate on the current development, and sometimes on an unfortunate populist note. The fact that the Russians have a natural interest towards the Finnish energy sector opens avenues for discussion on the more salient involvement of Russian oil and gas majors in the developing energy scene. We attempt to contribute to this specific area of discussion with a constructive and academic line of thought.

The paper is structured as follows. Firstly, we briefly elaborate on the overall state of Finnish-Russian economic relations, with emphasis on the trade and FDI issues. Secondly, we provide short theoretical considerations about relevant strategic alliance issues and construct a framework for the purposes of the case study. We continue by providing an overview of the case companies involved, Russian Gazprom and Finnish Gasum with particular emphasis on Gazprom's foreign activities. This section is followed by a case study on Gazprom's involvement in Finnish Gasum, with a viewpoint based on a theoretical framework.

## Recent trends in Finnish – Russian economic relations

Russia's importance to Finland as a trading partner has grown steadily during the past few years. Most recent estimates place Russia at the first rank among Finland's trade partners during the next couple of years. In the first half of 2004, Russia nearly climbed to par with the traditionally most important trade partners of Finland, namely Germany and Sweden. Finnish exports to Russia amounted to nearly € 1.9 billion in the first half of 2004, whereas Finnish imports from Russia were valued at € 2.6 billion for the same period. For Finland, Russia is currently by far the fastest-growing export region; the growth of Finnish exports to Russia was 22%, when, simultaneously, the overall growth of Finnish exports remained at a modest rate of 1%. The latest monthly trade statistics suggest Russia is already the largest importer to Finland, due to the record-high value of oil imports. In exports, Russia advanced to second position, only marginally behind Germany.

The most important Finnish export articles to Russia include phone and radio appliances, the exports of which grew by an impressive 44.6% in the first half of 2004, compared to the previous year. The strongest growth of 248.1% was, however, witnessed in automobile exports through Finland to Russia. Finnish imports from Russia remain dominated by natural resources. The imports of energy-related products from Russia account for two-thirds of Finnish total imports from the country.

Of particular interest in the current study are the Russian energy exports to Finland, which have notably increased during recent years. The energy imports from Russia have shown impressive growth, and the country already accounted for two-thirds of Finnish oil imports at the end of 2003. Along with the high-profile updating of the Fortum oil refinery in Finland, exclusively designed to process high-sulphur Russian crude, the strategic dependence on Russian oil becomes even more highlighted.

Russia remains the only natural gas supplier to Finland, and through its 25% ownership in Finnish gas distributor, Gasum, Russian Gazprom retains strategic interests in the country. Both the consumption and imports of natural gas in Finland increased considerably during 2003-2004. The year 2003 also saw an almost 50%-increase in electricity imports from Russia, amounting to an impressive € 250 million. The Russian electricity monopoly, RAO UES, carries out electricity sales in Scandinavia through its fully-owned Finnish subsidiary, RAO Nordic.

The overview of the Finnish-Russian trade structure, thus, suggests foremost the high dependence of Finland on the Russian markets, both in exports and imports. The dependency on Russian primary energy supplies is indisputable, along with the rapidly growing importance of Russia as a target market for Finnish technology-intensive exports. It is further to be noted that whereas

Russia accounts for well over 10% of Finnish foreign trade, the corresponding share of Finland in the Russian foreign trade structure remains around 3%. However, Finland's share in Russia's total trade has grown notably during recent years and it is expected to increase further, due to mutual strategic interests and dependencies in several sectors of economy.

Despite the growing trade volumes between the countries, the investment flows between Finland and Russia have remained comparatively modest. The Bank of Finland (2004) suggests that Russia's FDI stock in Finland stood at € 330 million at the end of 2003. With this figure, Russian firms possess mere 1% of Finland's inward FDI stock.

Despite the relatively modest share of Russia in FDI in Finland, Russian companies possess a significant influence on the Finnish energy sector, as anticipated above. The current paper includes a case study on the largest Russian investment in Finland (Gazprom - Gasum Oyj). All the largest Finnish companies with a Russian equity involvement operate in the energy sector and, thus, largely mirror the overall patterns of the internationalisation of Russian companies, driven by the country's energy majors. The Russian gas giant, Gazprom, holds a 25%-stake in Gasum and a 50%-share in North Transgas. Correspondingly, the largest Russian oil company, Lukoil, recently acquired sole control of Teboil and Suomen Petrooli. The sister companies were already operating in Finland during the Soviet era. Their combined turnover exceeded € 1.5 billion in 2004, ensuring these companies a combined 20%-share of Finland's petroleum retail market.

## Organisational arrangement of industrial relationships

In the analysis of the exchange relationship, we begin with a basic theoretical construct. The organisation of economic activity ranges in the continuum between the market-based spot transactions and the hierarchy, where technologically separated activities are placed under the same authority and ownership, i.e. the firm (Williamson 1975; Richardson 1972). Clearly these are alternative methods of co-ordinating production (Coase 1937).

Obviously a range of alternative ways of production lies in the continuum between the polar outcomes. Williamson (1996: 378) speaks of *hybrids* as the alternative form of organisation, referring to *long-term contractual relations that preserve autonomy but provide added transaction-specific safeguards, compared with the market*. The definition of a strategic alliance (SA) is quite close to that of a hybrid, indicating strong similarity in concepts: (global) strategic alliances *are the relatively enduring inter-firm co-operative arrangements, involving cross-border flows and linkages that utilize resources and/or governance structures from autonomous organizations, for the joint accomplishment of individual goals linked to the corporate mission of each*

*sponsoring firm* (Parkhe 1991: 581). The broad definition of strategic alliances thus embodies the wide variety of co-operational arrangements between market-based transactions and mergers and acquisition, i.e. vertical integration (Inkpen 2001). In general we can conclude on the definition of *organizational arrangement of industrial relationships* as follows: the form of economic exchange activity between two economic entities that can be organised along the continuum of *governance structures* ranging from spot market transactions via strategic alliances or hybrids, to the hierarchy that can be exerted in a firm.

Firms enter into strategic alliances in order to reach certain predetermined objectives. Wide ranging research on these hybrid forms of organisation identifies several of these objectives that include, for example, the following: risk sharing, knowledge gains, market access, resource exchange, achievement of economies of scale, and synergy and competitive advantage attainment (e.g. Chen/Chen 2002; Inkpen 2001; Dacin/Hitt/Levitas 1997). Kogut (1988) elaborates on the three main motivations of alliance formation, namely (1) transaction cost minimising, (2) strategic behaviour aimed at position and power improvement, and (3) organisational learning desire. Chen and Chen (2002) take the industrial network approach on alliance formation considerations, and elaborate on alliances as follows: *SA is seen as a formal agreement between partners to invest in a relationship for the purpose of exchanging resources on a sustained basis*; *SA represents a commitment to investing in certain relation-specific assets*; appropriation of relational rent motivates the investment into relation-specific assets; and strategic alliances *build a foundation for recurrent exchanges whereby the partners cooperate in utilizing committed resources*.

In order to take into consideration the complex nature of strategic alliances, a number of authors have acknowledged the importance of simultaneously employing specific theories for the study of the phenomenon. Yasuda (2005) underlines the importance of the resource-based view of the firm and the transaction cost economic theory in explaining and comparing the ‘two different angles’ of the alliance formation. Ahuja (2000) on the other hand utilises the resource-based view and the social network theory in discussing the creation of firm linkages through collaboration. Ireland, Hitt, and Vaidyanath (2002) provide a comprehensive review of prominent theories in SA research, highlight the strategic alliances as an important source of competitive advantage for a firm, and consider the theories of transaction costs, social networks, and resource-based view for the study of the subject.

Drawing on the previously presented research, we argue for a three fold, and integrated theoretical consideration on the organisational arrangement of industrial relationships, and utilise the theories of transaction costs, a resource-based view of the firm, and industrial networks in the framework development. Our aim is to create a tool for the practical analysis of the governance structure, with a focus on influence and control, which would take into consideration the

costs, benefits and the general business context of the economic exchange respectively, thus bringing new insight to the research of governance structures in general and strategic alliances in particular. Furthermore the framework should aid in determining the optimal governance structure for an exchange relationship, thus being normative in nature. In order to facilitate the framework development, we set out to elaborate on the three theories.

## Industrial networks

The essence of the paradigm of industrial networks is to take the holistic view of the economic exchange landscape, and sensitise the practising managers and academics alike to the broader perception of the firm, its dyadic relationships, and its focal network, of which it is a part. Håkansson and Johanson (1992) presented a model for industrial networks that effectively provides the framework for analysing business networks. According to this model, three basic classes of variables can be identified, namely *actors, activities,* and *resources*. The network actors can be identified on many organisational levels (e.g. individuals, groups of individuals, business units, firms, groups of firms).

As the essence of the industrial network theory is about relationships and position in the network, the main strategising issue becomes that of interaction, i.e. *how should companies interact in business networks*? Furthermore, one is concerned about managing the firm's relationships, which are, by definition, complex, long-term, and a result of previous interactions between the firms as actors. Importantly, the network approach requires the examination of an exchange relationship in the wider context of other connected business relationships, as events and transactions in one will influence the others directly or indirectly, substantially or marginally (Håkansson/Ford 2002). Strategic action is taken to influence the firm's position in the network towards a more favourable one (Gadde/Huemer/Håkansson 2003).

Håkansson and Ford (2002) suggest three managerial paradoxes in networks that are useful in considering the implications of the paradigm to business strategy. A firm's relationships may, in some cases, be considered the most valuable resource the firm enjoys, whilst they also enable the firm to tap to other resources. It is paradoxical that these very relationships that enable the firm's development simultaneously lock the firm in the current operation mode and hinder their exploitation of opportunities to innovate in the market. According to Gadde et al. (2003: 358) *the first strategizing issue for a company, then, is to identify and establish appropriate levels of involvement in its relationships with individual partners*.

Relationships are the venues in which influence is exerted in order to gain access to resources and execute economic exchange. The venues are two-way streets implicating influence being exercised both ways. While exerting influence

through the relationships, it is again paradoxical *that the company is itself the outcome of those relationships and of what has happened in them* (Håkansson/Ford 2002: 136). Thus *the second issue for strategizing is about balancing the interplay between influencing others and being influenced* (Gadde et al. 2003: 358).

Finally, firms strive to control their focal network by managing relationships in order to facilitate the achievement of objectives, and in so doing, risk the possibility of implementing hierarchical governance structures to relationships where innovativeness and market incentives should reign. Thus the *third paradox is that the more that a company achieves this ambition of control, the less effective and innovative will be the network* (Håkansson/Ford 2002: 137). Consequently *the third strategizing issue for a company is thus to identify adequate ambitions regarding control* (Gadde et al. 2003: 358).

Obviously the common denominator in the earlier presented three strategising issues is the relationships between firms that facilitate economic activity. One has to ask: how to design the interface, or the governance structure, between companies in order to take into consideration all the strategising issues and their implications to a specific business context?

## Resource-based theory of the firm

According to the resource-based view, the firm is seen as a combination of resources that ultimately define the competitive position of a firm. The often firm-specific and immobile nature of resources generates heterogeneity among the firms, which, in turn, yields possible competitive advantages (e.g. Wernerfelt 1984; Barney 1991; Grant 1991). The resource-based view thus embodies an approach emphasising the internal assets and knowledge of the firm (Barney 1991). The firm's competitive strategy and its subsequent accomplishments are thereby strongly influenced by the firm's accumulated resources, i.e. what the firm possesses or controls (e.g. Das/Teng 2000).

The resource-based view offers an appropriate means of examining the inter-organisational relationships and networks, since, at the core of strategic inter-firm relations lies the purpose to access the other firms' potentially valuable resources. The resource-based view, thus, suggests that strategic alliances between firms are based on the value-creation potential of the firms' combined resources (Chen/Chen 2003). As the inter-organisational strategic alliances often incur considerable governance expenses (e.g. Baughn/Osborn 1990), entering the strategic alliances is reasoned only if the firm cannot efficiently obtain the resources directly from factor markets (Das/Teng 2000). The resources not acquirable in factor markets often embody the characteristics of imperfect mobility, imperfect imitability, or imperfect substitutability, acting as barriers to directly obtaining the resources (Barney 1991; Peteraf 1993). Thus, the more

imperfect the mobility, imitability, or substitutability of the desired resource, the higher the possibility that the other firms will seek for that resource through some form of strategic alliance, as opposed to market transactions (Das/Teng 2000).

Assuming the resources are not accessible through simple market transactions, firm resources can be further typified according to their characteristics, influencing the choice of the structure of inter-firm relationship. The scholars have proposed various classifications, the most popular of which include the differentiation between tangible and intangible resources (Grant 1991) and the differentiation between physical resources, human resources and organisational resources (Barney 1991). A useful typology is further provided by Miller and Shamsie (1996), who classify resources into categories of property-based and knowledge-based resources. Property-based resources include legal properties owned by a firm, protected by clear property rights, which are thus complicated to obtain by other firms. Knowledge-based resources, on the other hand, refer to a firm's intangible know-how and skills. Due to knowledge and information barriers, these knowledge-based resources are mostly inimitable, i.e. hard to copy by other firms.

According to Das and Teng (2000), the classification of resources presented by Miller and Shamsie (1996) has a direct influence on the desired mode of inter-organisational relationships between the firms. Consequently, they propose a normative framework for the design of such relationships (Table 1).

*Table 1. Resource Types and a Firm's Structural Preferences (Das/Teng 2000)*

| | **Partner Firm (B)** | |
|---|---|---|
| **Firm (A)** | Property-Based Resources | Knowledge-Based Resources |
| Property-Based Resources | Unilateral Contract-Based Alliances[1] | Equity Joint Ventures[2] |
| Knowledge-Based Resources | Minority Equity Alliances[3] | Bilateral Contract-Based Alliances[4] |

An example of the above-presented reasoning is the case in which the firm has primarily the knowledge-based assets to offer to the alliance, with its partner

[1] Unilateral contract-based alliances: e.g. licensing, subcontracting, distribution agreements etc.; light engagement of partners.

[2] Equity joint ventures: integration of joint efforts of partners in a separate entity with shared ownership.

[3] Minority equity alliances: one or more partners take a minority equity position in another firm.

[4] Bilateral contract-based alliances: e.g. joint production, joint R&D, joint marketing and promotion; heavy engagement of partners.

having primarily property-based resources to offer. This combination is suggested as yielding the preference for minority equity alliances as opposed to contract-based alliances or joint ventures. The minority equity alliance structure is seen to provide the necessary protection for altering the firm's knowledge-based resources, compared to the insecurity of contract-based relations, or the higher risk of the partner firm appropriating these valuable resources under a joint venture structure.

## New institutional economics

Transactions which take place in the inter-organisational relationships of economic exchange have diverse attributes that make the implementation of a governance structure into a business relationship a challenging managerial decision. The cost of transacting, therefore, varies depending on the governance structure (market-hybrid-hierarchy) in place. The objective of the firm should be transaction cost-economising, i.e. the alignment of transactions with a proper governance structure that facilitates the inter-organisational economic exchange (Williamson 1998).

The transaction cost key constructs include (1) uncertainty, (2) asset specificity, and (3) fundamental transformation. Firstly, uncertainty is one of the most salient causes of 'friction in the economic machine', the natural science equivalent of transaction costs. Misinformed decisions are made due to nondisclosure, disguise, or the distortion of information that leads to inefficiencies in economic activity, examples of which are delayed investments, inadequate inventories, and safeguards against the business partner's non-compliance of contracts (Williamson 1996).

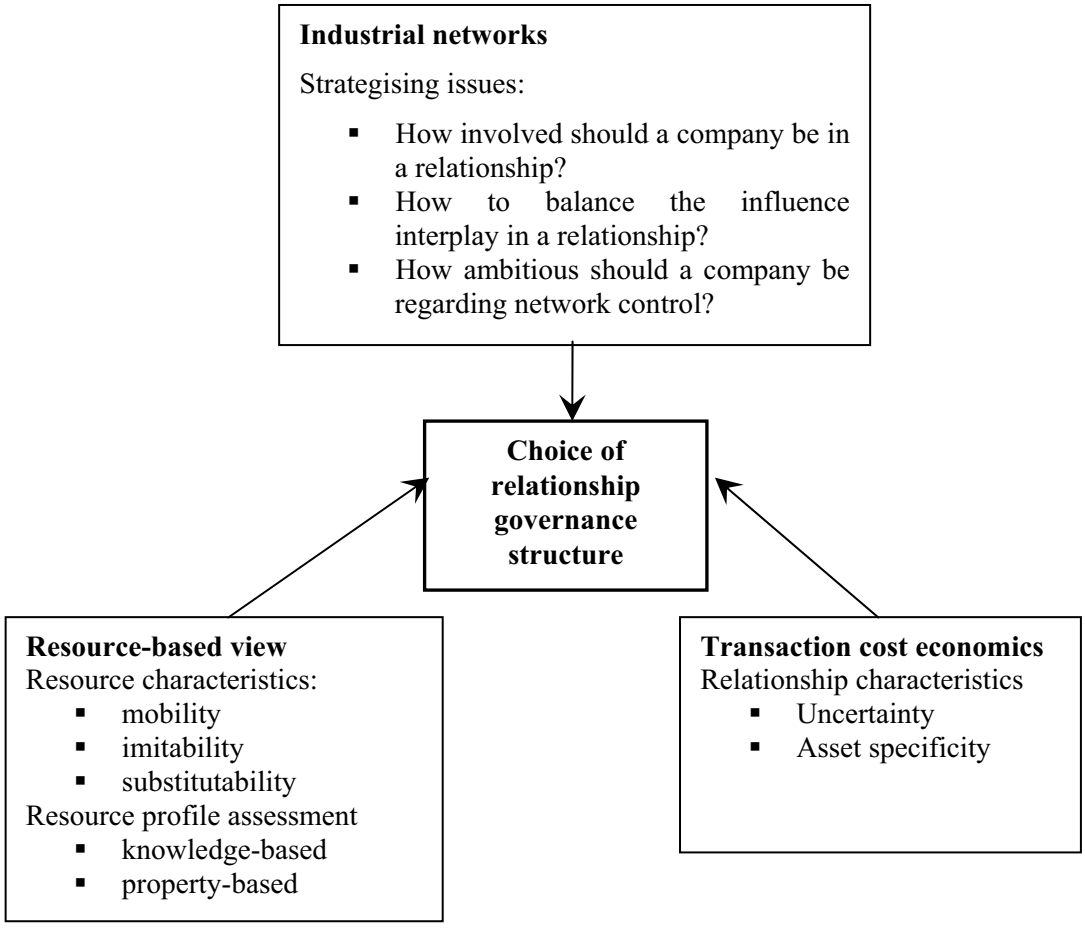
Secondly, asset specificity has reference to the degree to which an asset can be redeployed to alternative uses and alternative users without sacrifice of productive value (Williamson 1996: 59). A specific asset can be tied to, for example, a location, such as an oil pipeline, or it may take the form of a physical object, such as a die dedicated to serve the needs of a particular customer.

Thirdly, in the initial phase of a business partner search, it is often the case that the large number bidding situation applies, thereby keeping prices and contractual terms competitive. As cooperative agreements are reached and investments are made to relationship-specific assets, a *fundamental transformation* takes place from a large numbers bidding situation to a small numbers context, as the sunk costs encourage the continuation of, for example, a supplier relationship, even on suboptimal or non least-cost terms (Williamson 1996).

Behavioural assumptions of bounded rationality and opportunism have a fundamental role in the transaction cost economic theory. In contrast to the neoclassical assumption of the rational and calculative behaviour of utility

maximising, transaction cost economics endorses the view of 1978 Nobel prize winner Herbert A. Simon (1955), who argues that economic actors are, in fact, *intendedly rational, but only limitedly so*. Coupled with opportunism, which is popularised as *self interest seeking with guile*, the transaction cost economic behavioural assumptions help us understand the reality of contracting as follows: (1) it is impossible to draft complete and comprehensive contracts to govern economic exchange ex ante, making the ex post considerations all the more important; and (2) contracts as promises of commitment and obligation to certain terms of exchange cannot be regarded as universally reliable (Williamson 1996). Consequently, ex ante screening of exchange partners and ex post safeguarding activity need to be implemented, effectively giving rise to transaction costs, even though they aim for the containment of the same.

*Figure 1. Framework of organisational arrangement considerations in industrial relationships*




In summary, we present the key propositions of transaction cost economics as follows: (1) bounded rationality and opportunism give rise to transaction costs, (2) transaction costs are higher under conditions of high asset specificity and high uncertainty, (3) the most efficient governance structure (market-hybrid-

hierarchy) needs to be chosen in order to organise economic activity and economise on transaction costs.

## Framework for organisational arrangement considerations in industrial relationships

The review of the three theoretical bases for our framework has provided us with normative suggestions and important matters for consideration concerning the task of industrial relationship design. Whilst the precise hierarchy and interplay of the theoretical elements is difficult to define at this point, with the extensive research conducted by established scholars we can certainly claim the relevance of each element. Managerial decision-making will potentially be improved, as one considers the relationship to be redeveloped with the help of the framework provided (Figure 1).

As can be observed from the framework, the three theories with relevant core issues should be assessed as one seeks to find an optimal solution for the organisational arrangement of industrial relationships. In following, the presented framework will be utilised in a case study on a Russian-Finnish strategic alliance in the energy sector, in order to further discuss its relevance.

## Case study: Gazprom in the Finnish natural gas market

### Overview of Gazprom's Foreign Operations

Gazprom is the largest industrial corporation in Russia, by several indicators. In addition to being the world's largest natural gas producer, Gazprom is Russia's largest taxpayer, employer, exporter, and investor. In 2004, Gazprom generated nearly 10% of Russia's GDP. In practice, the company holds a monopoly position in Russia's natural gas sector. Gazprom covers over 80% of Russia's gas production and a similar stake of the country's gas exports. Although a number of individual natural gas producers are operating in Russia, Gazprom is in control of the gas infrastructure assets and export outlets. Quotas are allocated to individual producers on the basis of reciprocal agreements, in which, however, the other companies hold very low levels of bargaining power. Restructuring of the Russian natural gas sector has been on the governmental agenda for several years now without any actual decision on the nature or timetable of the restructuring process.

In 2005, the Russian Government became a direct majority owner in Gazprom, increasing its present ownership share of 37% to 51%. Together with the increased state ownership in Gazprom, foreign investors are likely to be granted the free right of acquiring Gazprom's shares, the international trade of which has been strictly restricted until now.

*Table 2. Main Production and Financial Indicators of Gazprom in 2003-2004.*

| | **2003** | **2004** | **Increase 2003-2004, %** |
|---|---|---|---|
| Gas production, bn cm | 540.2 | 545.1 | 0.9 |
| Condensate and oil production, mn tn | 11.0 | 12.0 | 9.1 |
| Gas export to Europe, bn cm | 132.9 | 140.5 | 5.7 |
| Gas export to CIS and Baltic States, bn cm | 42.6 | 52.5 | 23.2 |
| Turnover, mln € | 21 570 | 24 516 | 13.7 |
| Operating profit, mln € | 5 735 | 5 847 | 9.1 |
| Return on equity, % | 7.6 | 8.7 | 14.5 |
| Gross investments, mln € | 5 670 | 6 596 | 16.3 |
| Net assets, mln € | 47 174 | 51 173 | 8.5 |

The researchers have identified Gazprom's equity investments in 18 EU member countries (see Table 3). In these countries, Gazprom has some 40 subsidiaries and affiliates. Besides the EU25, Gazprom has investments in the future members of the EU, i.e. Bulgaria, Romania and Turkey, and in the CIS countries. Worldwide, Gazprom has, altogether, some 60 subsidiaries. In addition, the company participates in authorised capital of over 100 Russian and foreign companies.

*Table 3. Gazprom's equity investments in current and future EU member countries*

| **Country** | **Company** | **Gazprom's Share, %** |
|---|---|---|
| Estonia | Eesti Gaas | 37 |
| Latvia | Latvijas Gaze | 34 |
| Lithuania | Lietuvos Dujos | 34 |
| | Stella Vitae | 50 |
| Poland | EuRoPol GAZ | 48 |
| | Gas Trading | 16 |
| Czech Republic | Gas Invest | n.d. |
| Slovakia | Slovrusgas | 50 |
| | Slovenský Plynárensky Priemysel | 16 |
| Slovenia | Tagdem | n.d. |
| Hungary | Panrusgaz | 40 |
| | Borsodchem | 25 |
| | DKG-EAST Co. Inc | 38 |
| | TVK | 14 |
| | General Banking and Trust | 26 |

| | | |
|---|---|---|
| Austria | Gas und Warenhandelsgesellschaft | 50 |
| Finland | Gasum | 25 |
| | North Transgas OY | 50 |
| Greece | Prometheus Gas | 50 |
| Germany | Wingas | 35 |
| | WIEH Berlin | 50 |
| | ZMB | 100 |
| | ZBM | 100 |
| Italy | Promgas | 50 |
| | VOLTA S.p.a | 49 |
| France | Fragaz | 50 |
| The Netherlands | Gazprom Finance B.V. | 100 |
| | Blue Stream Pipeline Co | 50 |
| | West East Pipeline Project Investment | 100 |
| UK | Gazprom UK Trading | 100 |
| | Gazprom UK Ltd | 100 |
| | Interconnector (UK) Ltd | 10 |
| | HydroWingas | 50 |
| Bulgaria | Overgaz | 23 |
| | Overgaz Incorported | 50 |
| | Topenergo | 100 |
| Romania | Wirom | 25 |

*Table 4. Gazprom's Major Transnational Pipeline Projects*

| **Project** | **Main outlines** | **Other parties involved** | **Gazprom's share,%** |
|---|---|---|---|
| West-East Pipeline | A projected 4000 km Trans-Chinese pipeline | Royal Dutch/Shell, ExxonMobil, PetroChina, Sinopec | 15 |
| The Blue Stream | 1200 km Russia-Turkey gas pipeline under the Black Sea (16 bn cubic meters/annum) | ENI | 50 |
| North European Gas Pipeline (NEG) | A projected gas pipeline under the Baltic Sea from Vyborg to Germany (20 bn cubic meters/annum) | High interest shown by European Commission and several leading oil&gas companies | n.d. |
| Interconnector Pipeline | A pipeline linking Belgium and the UK (20 bn cubic meters/annum) | Several operators, each with predefined supply quotas | 10 |

The foreign expansion of Gazprom largely follows its natural gas export flows. In many of the Baltic and CIS countries, for example, Gazprom owns either

minority or majority shares in local gas distribution companies, to which it is the main supplier of natural gas. Through its outward expansion, Gazprom receives revenues directly (via sales to its foreign subsidiaries) and indirectly (via the profit distribution of its foreign subsidiaries). Gazprom's investments in the EU prove that the Russian corporations may benefit directly from the enlargement, even if Russia is not a member of the EU. On the one hand, Gazprom's investments in foreign gas companies may increase the predictability of the gas supplies from Russia to the EU, which are to grow significantly during the next decade. On the other hand, Gazprom is one of the main drivers of Russia's economic and political power in the EU and CIS. In the former Soviet republics, the company is practically the sole supplier of natural gas.

Gazprom is engaged in several major international pipeline projects in co-operation with western oil majors (see Table 4). One of the most interesting cases, regarding the future of EU-Russian energy co-operation, is the projected North-European gas (NEG) pipeline, enabling large-scale deliveries of Russian gas to Europe under the Baltic Sea. The European Commission has set the project as one of the highest priorities for the development of the energy sector and the preliminary contract for constructing the pipeline was signed in April, 2005. Due to its gigantic nature, the project will, however, be a subject for both long-term planning and further negotiation procedures, with the actual operationalisation possible around 2010.

**Gasum Oyj - Background**

The following information and considerations are largely based on company information (annual reports, financial statements, websites) and on the interview with Gasum Chief Executive Officer and Chairman of the Board, Mr. Antero Jännes (28.9.2004).

Gasum Oyj ranks as the 71st largest company in Finland, measured by turnover (653 MEUR in 2003). The company was established in 1994 when Neste Oyj separated its natural gas operations from the parent corporation, creating an independent natural gas company. Neste Oyj remained principal shareholder in the new company and the remaining 25%-stake was sold to the Russian natural gas provider, Gazprom. Along with the improved predictability of gas deliveries, Gazprom's stake in the new company secured Russia's strategic interests in the Finnish natural gas markets. Apart from Gazprom, the principal owners of Gasum currently include the Finnish national energy company, Fortum (25%), the Finnish State (24%) and the German energy giant, E-ON Ruhrgas (20%). The remaining 6%-stake is divided between three Finnish forestry companies, thus granting the majority ownership for the domestic entities. Gasum's management team consists entirely of Finnish nationals, the principal owners being represented on the Board of Directors, including two

representatives from Gazprom and one from E-ON Ruhrgas. The financial indicators of Gasum are provided in Table 9.

*Table 5. Main financial indicators of Gasum Oyj in 2003-2004.*

| | **2003** | **2004** | **Increase 2003-2004, *%*** |
|---|---|---|---|
| Turnover, *mln €* | 653 | 611 | -7 |
| Net profit, *mln €* | 41 | 44 | 7 |
| Return on equity, *%* | 16 | 15 | -6 |
| Gross investments, *mln €* | 8 | 23 | 288 |
| Net assets, *mln €* | 526 | 537 | 2 |

Gasum's operations cover the importation, marketing and selling of natural gas in Finland. The company is the only importer of natural gas to Finland and the sole operator of the country's 1000-km gas pipeline network. In addition, Gasum is involved in value-added activities such as the technological maintenance of the pipeline network and natural gas retailing. Recently, the company opened its first natural gas stations for private consumers. The Finnish pipeline network is currently connected only to that of Russia, thus being entirely dependent upon her gas supplies. Geographical factors provide the trade partners with mutual advantages – the prices for natural gas are lower in Finland than in other parts of Europe, but the profit margins for the supplier are still higher than on any other market, mainly due to the low delivery costs.

The natural gas purchases are based on 20-year supply contracts with Russia's Gazprom. Since the supplier is the holder of world's largest natural gas reserves, the availability of gas remains certain, should Finnish consumption increase in the future. Along with the constant development of Western-Siberian gas deposits, Gazprom has further shown interest in the development of gas pipeline projects in Northern Europe and Scandinavia. If realised, Finland is likely to have a key position in these developments, due to its strategic location and existing pipeline connections to Russia.

Currently, the share of natural gas in total energy consumption in the EU area stands around 25%. According to various estimations, the consumption of natural gas will considerably increase in the future, further giving rise to gas imports from Russia. Finland ranks among the largest importers of Russian natural gas in the EU, together with Germany, Italy and France. Along with the EU enlargement, the role of the new member states will considerably increase in the planned Trans European Network –projects, including the elaborated gas pipeline under the Baltic Sea to the German coast. Together with Baltic gas companies, Gasum is currently elaborating on the possibilities to utilise Latvian natural gas reserves.

Gazprom's involvement in the organisational structure of Gasum will be discussed in the following. Firstly, a short overview of the formulation of the

current ownership structure is provided, followed by a conceptual analysis on the organisation of strategic co-operation.

## Current ownership structure of Gasum Oyj

The sole supplier of natural gas to Finland, Gazprom, holds a 25%-equity share in Gasum, sharing the position of the largest owner in the company together with the Finnish government-owned Fortum Oyj. Development of the current ownership structure can ultimately be seen to have resulted from uncertainties regarding gas deliveries after the collapse of the Soviet Union and the dismissal of former industrial structures in Russia. After the evaluation process initiated by the Finnish authorities and Neste Oyj (the then national oil and gas corporation), in 1992 Finland was officially declared as a strategic trading partner for Russian natural gas and the export quotas were set to be increased accordingly. Two modes of co-operation were discussed, including the trading house-type arrangement suggested by the Russian side, and the Finnish proposal for Russian equity involvement in the prospective listed gas trading company. In Finland, the incorporation of gas importing and marketing activities was seen as a part of the inevitable development of the energy sector, and integrating the exclusive natural gas supplier into the new corporate structure was considered a viable option. After the complicated negotiation process, the solution was found in the 25% equity involvement of Gazprom in the newly-formed Gasum. This strategic option to involve the Russian company in the new corporate structure was preferred, so as to avoid the potentially dubious structure of the planned trading house system. In Finland, the ownership arrangement was viewed to both considerably increase the predictability of Russian gas supplies and to guarantee Russian strategic interests in developments within the Finnish natural gas market. The current ownership structure was created in 1998, when Gasum was separated from the Fortum energy corporation. The Fortum ownership in Gasum was reduced to 25% the remaining share of 50% in the company was divided between the Finnish State (24%), Ruhrgas (20%) and the three Finnish forestry corporations (6%) (Gasum 2003; Parpola/Åberg 2004).

## Analysis of strategic alliance governance structure

In the analysis of Gasum's supplier relationship we utilise the model presented in Figure 1. The analysis is considered from the point of view of the Finnish alliance partner, henceforth referred to as Gasum. In the following, we consider two major issues in the governance structure design of case Gasum: (1) should the relationship be subject to market (arms length) transactions, strategic alliance, or hierarchical governance (vertical integration); and (2) on the condition of choosing a strategic alliance, of what design should it be.

## Market, strategic alliance or hierarchy?

The political uncertainties and resulting concerns regarding energy supply security in Finland created an external third-party impulse for negotiations with the Russian side at a corporate level. The underlying need for the organisational restructuring of Finnish gas sector stemmed from the necessity of obtaining resources, as Neste Oyj (the predecessor of Gasum Oyj) did not possess or was unable to produce internally. This, understandably, triggered the need to seek the resources through a Russian supplier. The specific characteristics of natural gas as a resource suggests it cannot be *imitated, substituted*, *or* exclusively *moved* from one location to another (in a sense that the resource would subsequently be available for continuous use). This consideration leads us to reach a conclusion on the nature of natural gas as an input to Gasum's operations: the resource cannot be efficiently obtained from the factor markets.

Simultaneously one may consider the transaction cost issues of the relationship between the gas supplier and the purchaser: there exists significant *uncertainty* related to attaining the resource through mere market-based transactions (price, reliable supply etc.) as Gazprom is the sole seriously considered supplier. The problem comes down to the small-numbers situation where the limited choice on exchange partner increases the probability of undesirable outcomes in the relationships, such as price increases. Additionally, the nature of the gas infrastructure (pipelines, storage facilities etc.) is subject to *asset specificity* to a considerable degree as the assets could hardly be redeployed for alternative uses, should Gazprom decide unilaterally to change the terms of supply and, thus, subject Gasum to a hold-up position. Simply stated, the assets in question are supplier specific. At this point it is safe to say that (1) market transactions hardly provide an optimal outcome, due to uncertainty and asset specificity, and (2) one should consider some form of strategic alliance as a governance form, as (3) vertical integration is probably not politically nor economically supported.

## The form of strategic alliance

We proceed to the second issue: what kind of strategic alliance structure should be employed along the lines of, for example, the choices presented by Das and Teng (2000) in Table 1? We engage in the assessment of resource profiles of the alliance partners. The proposed alliance structure included the *knowledge-based resources* (marketing skills and technological know-how) to be provided by the Finnish side and the *property-based resources* (natural gas and infrastructure) to be contributed by the Russian side. A conceptual assessment on this resource combination of the two partners suggests that Gasum enter a *minority equity alliance* -structure. The proposed outcome is further supported by the asset specificity and uncertainty considerations as contractual alliance arrangements can hardly address the hazards and incentive alignment issues properly, as they are, by definition, incomplete in nature. Ownership by the Russian supplier in

the alliance would ensure long-term interests in the business and its development.

The industrial network view provides further perspectives to the issue. The issues of involvement, balancing the interplay, and control ambitions are all relevant in the Gasum case. The *network control* (increased control over the gas supplies) and the *balance in being able to influence other actors in the network and being influenced by others* (Gazprom's role in the management of Gasum's operations), are key *strategising issues* for Gasum and other companies contemplating possible alliances with major energy suppliers. Industries and firms that are subject to strategic national interests have to strike a difficult balance as they seek to organise the economic exchange in industrial networks: minimize the control and influence of foreign entities and maximise the benefits of collaboration. Balancing the *influence interplay* becomes crucial.

The presented conceptual approach to the alliance formation between Russia's Gazprom and the Finnish Gasum suggests a certain degree of legitimation for the hybrid model of organisational governance in industrial relationships presented by the authors. The model aids in mapping relevant issues and makes normative suggestions that facilitate the making of educated decisions in similar loss of control and alliance benefits-balancing situations.

## Conclusions and discussion

Gazprom is the leading Russian company in terms of foreign assets. The company owns substantial shares in nearly all EU25 countries' national gas distribution companies. In addition, Gazprom is the largest individual supplier of natural gas to the EU, accounting for nearly half of the EU's natural gas imports. Gazprom's economic and political leverage is strongest on the CIS markets, but also in the Baltic States and Finland, to which the company is the sole supplier of natural gas. The current paper evaluates the ownership of Gazprom in the Finnish natural gas distribution company, Gasum Oyj. Gazprom has been the minority owner in the Finnish gas company since its establishment in 1994.

For the analysis of the strategic alliance, a hybrid theoretical model was developed, which allowed simultaneous considerations of several characteristics of the ownership arrangement. The network perspective was primarily used to analyse the parties' quest for control in the alliance and is complemented by the resource-based view for an assessment of the resources provided to the alliance by both companies. Thirdly, the transaction cost perspective was employed to assess the contractual uncertainties and the role of specific assets in the natural gas business and their importance in choosing the form of strategic co-operation. The theoretical analysis was complemented by an in-depth interview with the CEO of Gasum Oyj.

The evaluation provided us with several key aspects regarding the development of the current organisational structure. From the resource-based view, the Finnish party is solely dependent on the Russian deliveries of a natural resource it can not possibly produce internally or extract from alternative sources due to infrastructure limitations. The position of the Finnish gas company naturally provides it with relatively weak negotiation power in comparison to the Russian gas giant. Being dependent on one supply source only, the primary objective of the Finnish company lies in securing the deliveries of gas for the long term. The viable option was seen to lie in entering into a strategic alliance with the supplier – the only option that would provide limited control over the supply decisions through improved conditions for delivery contracts. In the same vein, the transaction cost analysis suggested the existence of high transaction costs in the market transaction environment, and consequently a potential hold-up situation for Gasum. Although the gas deliveries are still largely based on long-term supply agreements, securing the interest of Gazprom in the Finnish market was seen as an important driver for the ownership arrangement.

Russian investments are relatively often regarded as highly politically-motivated in several target countries and especially in the former socialist countries. Whereas Gazprom is undoubtedly one of the main drivers of Russian economic and political leverage in several of its target markets, it must be remembered that Russian companies often employ different strategies in different regions (Vahtra/Liuhto 2004). The negative experiences of Belarus and Ukraine, for instance, including the cut-off of gas supplies in 2004, were not mirrored in the Finnish case. In Finland, Gazprom is seen as a reliable business partner for the domestic gas company. Similar experiences have been witnessed in the case of Estonia (Kilvits/Purju/Pädam forthcoming). One of the main reasons for differing behaviour on different markets can be explained by their differing strategic importance. Neither Finland nor Estonia can be regarded as particularly strategic markets for Gazprom, mainly due to the fact that both are relatively small end markets for Gazprom's deliveries and are not strategic intermediaries or transit regions in the delivery process. The situation may, however, alter in the future along with the projected gas pipeline from Finland to Sweden and to other Scandinavian markets. Additionally, the political development in Russia and the role of the state in the activities of large enterprises, in particular, is a crucial determinant of future development in the large companies' business orientation as well as in Gazprom's operations throughout Europe and the CIS.

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