School of Slavonic and East European Studies /www.ssees.ac.uk/

Centre for the Study of Economic and Social Change in Europe

THE INFLUENCE OF ALLIANCES ON CORPORATE GROWTH IN THE POST-SOVIET PERIOD: LUKoil AND YUKOS

James Henderson and Slavo Radosevic

University College London

School of Slavonic and East European Studies

Working Papers Series No. 34

Key words: oil and gas, corporate restructuring, alliances, Yukos, LUKoil
June 2003

University College London
School of Slavonic and East European Studies
Senate House, Malet Street, London, WC1E 7HU
Tel: 44(0)20 7636 8000 (Switchboard)
Fax: 44(0)20 7862 8642
http://www.ssees.ac.uk/economic.htm

THE INFLUENCE OF ALLIANCES ON CORPORATE GROWTH IN THE POST-SOVIET PERIOD: LUKoil AND YUKOS[1][2]

James Henderson[3] and Slavo Radosevic[4]

Introduction

Any firm has three basic strategic choices for growth: to (a) undertake generic expansion, (b) conduct mergers and acquisitions, and/or (c) develop inter-organisational relationships, i.e. networks, respectively (Peng and Heath, 1996; Peng, 2000). Networks help overcome a firm's problem of not having enough resources to accommodate growth, while avoiding the substantial bureaucratic costs of internalising operations (ibid, p. 513). In the period of the post-socialist transition, deficiencies in resources have pushed firms to pursue a network strategy.

In chapter 4 of this volume, we show that the dominant mode of growth in Central Europe is growth based on networking and foreign acquisitions. Even in cases where firms grow through generic expansion, they still rely heavily on networking, i.e. on different forms of alliances. At a macro level, this mode of growth can be described as foreign led modernisation. As pointed out elsewhere in this volume foreign led modernization is a process of technological upgrading and productivity improvement where foreign firms control the key aspects of the process (assets, technology capability; distribution; supply; finance). In contrast to this is domestic led modernization or the process of modernization where domestic corporations control the key aspects of the process. Several chapters in this volume show the prevalence of domestic led modernization in Russia and Ukraine and its less influential presence in central Europe. However, in reality we do not find clear examples of these extreme model cases. Technological, financial or market dependence complicates any corporate strategy or country policy that tries to fully control the key aspects of the modernization process. Most often the issue is how to get access to critical resources

[1] We are grateful to Virginia Acha for research assistance in early stages of this research.
[2] This paper will appear as chapter in Radosevic, S. and B. Sadowski (eds.), The Management of International Strategic Alliances in Industrial Restructuring in Central and Eastern Europe, Kluwer,
[3] jh@russiaenergy.freeserve.co.uk

[4] s.radosevic@ssees.ac.uk

(technology, access to market or finance) while at the same retaining control over the process of modernization. The outcome is a consequence both of the resource deficiencies of the local company as well as its ability to network with foreign firms and to retain control over the modernization process. The strength of firms rests on their established organisational capabilities, which have been mastered through endogenous learning processes as well as through inter-organisational linkages i.e. alliances. Based on this Chandlerian perspective the current chapter analyses the issue of the growth of Russian oil companies LUKoil and Yukos and the role that alliances have played in both companies.

The growth and restructuring of Russian oil corporations are very relevant to an understanding of the strategic choices that are involved in domestic led modernization. Unlike in Central Europe, Russian oil corporations have leverage in their ownership of natural resources (assets), which they can trade when trying to get access to the technological or financial assets that they lack. This enhanced bargaining power has strongly shaped their attitude towards alliances and towards networking as a mode of growth in general. However, over and above the structural differences that characterize Russian companies in the natural resource sectors compared to Central European firms, we would also point to important differences in the way that Russian companies themselves use alliances as a mechanism for their restructuring and growth. Specifically, we address the following three key questions. First, what is the role of alliances in the growth of Russian enterprises? Are alliances central or peripheral to their growth? Second, who is in control in alliances, i.e. are they shared alliances or is one party dominant? Third, how do the various resources (technology, finance and market access) shape the dynamics of alliances? How has the control of Russian companies over their oil assets shaped their relationships with foreign partners given their fundamental need to obtain the resources of technology, finance and market access that they so clearly lack.

Our conclusion is that LUKoil and Yukos have used alliances extensively as part of their strategy and expansion. However, for LUKoil the alliances have not been strategic in the true sense of the word, as they do not seem to be central to improvements in its operational efficiency. Management has not only tried to maintain full control over its operations and its cash flow but has also been reluctant

to trade access to the latest technology in return for giving up either ownership, cash flow or even some management control over any of its assets. We argue that this reluctance to place any reliance on alliance partners has led to LUKoil's restructuring being a much more protracted process than for other Russian oil companies, with Yukos being a prime example. Indeed, we discuss how LUKoil has fallen behind on several indicators of productivity performance when compared with Yukos over the past few years, as it has effectively emphasized strategic expansion over efficiency improvements. For Yukos, alliances have been central to the improved operational efficiency and the tremendous growth of the company seen since 1998. This has been mainly due to the fact that the company's management has been prepared to place a significant amount of confidence in alliance partners, particularly in the area of technology, and to effectively delegate management control of some core assets to them. Although reliance on alliances might lead to some problems in terms of strategic autonomy and the basis for further autonomous growth, the contractual nature of the key relationships and the mutual benefits enjoyed by both parties have ensured that to date alliances have had a significant positive impact on the company.

This chapter is organized into several sections. First, we provide brief histories of LUKoil and Yukos and point to the key issues and stages of their development. Second, we analyze the scale and scope of their networking activities, in particular alliances. Third, we point to the key differences in the role of alliances in the growth of Yukos and LUKoil. Our conclusions summarize the key results and point to differences between Russian alliances in the natural resource sectors and Central Europeans alliances.

1. LUKoil and Yukos: a brief history

The Post-Soviet Industry: Building Vertically Integrated Structures

Five large companies currently dominate the Russian oil industry, of which three are private Russian domestic companies, one is a 50:50 joint venture between an international oil major (BP) and a Russian partnership and one is 100% state-owned. However, as described by Moser & Oppenheimer (2001), in the immediate aftermath of the collapse of the Soviet Union all oil industry enterprises reported directly to the

Ministry of Fuel and Energy. One government proposal at the time essentially implied the continuation of this situation, with a single entity Rosneftegaz to replace the Ministry as overseer of the sector. However, Vagit Alekperov, who was then general director of Kogalymneftegaz and a Deputy Minister of Oil and Gas, opposed this view, and, leading by example, formed the first Russian vertically integrated oil company (VIOC) in partnership with two other general directors at Langespasneftegaz and Uraineftegaz, naming their company LUKoil.

LUKoil proceeded to incorporate two refineries and a number of marketing companies within its structure to become a truly integrated company, based on the western model established by the international oil majors. The Russian government, struggling for a methodology for restructuring the industry, decided to follow Alekperov's lead and through presidential decree no. 1403 of November 1992 legally established the first three VIOCs (including Yukos) and set out the reform agenda for the oil and gas sector. The structure that was then established set the trend for the consolidation that was to follow, as it essentially created VIOCs with two tiers, a holding company in which the government maintained a controlling stake, and subsidiaries in which the holding company had equity voting control with a 51% stake. However, although this new structure had brought the theoretical benefits of vertical integration, two key problems remained to be resolved by management. Firstly the distribution of assets and subsidiaries had been accomplished more due to contacts and influence than economic logic, meaning that the VIOCs were structurally inefficient as well as suffering from the legacy of Soviet oilfield development techniques. And secondly the shareholding structures of the new entities meant that the holding companies did not completely control their subsidiaries (as a 75% majority interest was needed to implement key strategic changes), while the minority shareholders in both the subsidiaries and the holding companies were effectively at the mercy of the owners of the holding companies.

Consolidation and control

The initial privatisation of the Russian oil industry, as described by Moser and Oppenheimer (2001), saw the government retaining a 51% interest in all the oil producing, refining and marketing subsidiaries, with the remained being sold to employees, management and the public (in exchange for privatisation vouchers). The

state's 51% interests were then used to form the holding companies, with the plan being that the government would retain its control over the sector by maintaining at least a 51% interest in each VIOC for a period of three years. For both LUKoil and Yukos this three year period expired in late 1995, but as David Lane and Iskander Seifmulukov (1999) describe, each company was privatised rather differently with important consequences for the original management teams.

LUKoil's management aimed to have its shares distributed in a series of medium-sized lots with the main purpose of maintaining its own control over the company. Sales began in 1994 and proceeded in incremental stages through to 1999, but then proceeded more slowly than anticipated with the result that the state retained a 60% at the end of 1996, despite having originally planned to own only 51% by the end of 1995. Indeed, even by the end of 1997 this stake had only been reduced to 30% (see table 1).

Table 1: LUKoil ownership structure in 1997

	Ordinary		Preferred		Total	
	No Shares	**%**	**No Shares**	**%**	**No Shares**	**%**
Russian government	200.8	30%	0	0%	200.8	27%
NIKOIL	117.5	18%	17.1	22%	134.6	18%
LUKoil-Garant	71.3	11%	0	0%	71.3	10%
Other	110.5	17%	41.6	54%	152.1	20%
ADR holders*	169.3	25%	18.5	24%	187.8	25%
Total	669.4	100%	77.2	100%	746.6	100%

Source: LUKoil

One key element of the process, however, was that at no time did management acquire a controlling stake in the company, although they did manage to increase their declared interest to 21% through a series of managed auctions after 1997 (see table 2). Thus a key distinction needs to be drawn between management control of LUKoil, which remained very much in the hands of the original Soviet-era managers, and ownership, which was and is still fairly evenly spread between international holders of ADRs, domestic investors, employees (via the pension fund) and management, with the state currently retaining an 8% share. Interestingly, though, although management has never directly owned a controlling stake, it has consistently had influence over enough shares, in the hands of the State, NIKOIL, LUKoil-Garant and its own or employee ownership, to have effective voting control over the company. As such a classic principle-agent problem has been present throughout the life of the company.

Table 2: LUKoil ownership structure in 2003

	Ordinary No Shares	%
Russian government	66	8%
NIKOIL	107	13%
LUKoil-Garant	99	12%
Directors/Management	173	21%
ADR holders	355	43%
Total	825	97%

Source: LUKoil
* ADR - American Depository Receipts

Unlike LUKoil, Yukos' original management team failed to prevent the company coming under the control of an outside shareholder, in this case Group Menatep. Having originally acquired a 33% stake in Yukos at an investment tender in December 1995, Menatep subsequently increased its interest via the loans-for-shares auctions in 1996, and by the end of that year either owned or directly influenced an 85% interest in the company (see table 3). Having established majority voting control, Menatep then infiltrated Yukos with large numbers of its own employees, including the current CEO Mikhail Khodorkovsky who is also the largest beneficial owner of shares in Group Menatep and thus in Yukos itself. As such the link between the ownership and management structure at Yukos is in stark contrast to that at LUKoil, because at Yukos the managers are the largest economic beneficiaries from the increase in the equity value of the company. In addition the Yukos managers are not ex-Soviet oilmen, a distinction with LUKoil that has played a key role in the development of the company.

Table 3: Yukos ownership structure in 1996

State property pledged to Menatep	33.3%
Menatep Group	38.6%
Russian Investors (linked to Menatep)	12.8%
Yukos-Invest	7.1%
Others (inc. Yukos management & employees)	8.3%
Total	100.0%

Source: Lane (1999)

Despite their Soviet heritage, though, LUKoil's managers (in particular Vagit Alekperov) were at the forefront of the restructuring of the Russian oil industry during the 1990s. Indeed LUKoil was the only company to have completed the consolidation

of its subsidiaries into a single entity by the end of 1999, a move vital to the control of the company's overall cashflows. It was also the first to be listed on the London stock exchange and to establish a joint-venture abroad, and was viewed as a model of strong strategic leadership and good corporate governance, although with hindsight this was only relative to a very poor peer group. Indeed, LUKoil's management structure appears to have been far from optimal, with its Soviet history resulting in a division of responsibilities amongst a cadre of senior managers, each running their own parts of the organisation with little central co-ordination. In addition to this organisational issue, LUKoil's senior staff had a much closer bond to previous Soviet oil industry methods and had worked on the LUKoil asset base over many years. As such they were less prepared to fully integrate alternative international techniques into their field developments than some of their peers.

This inefficiency is perhaps best exemplified by the company's corporate structure, which not only demonstrates a lack of centralised control but also shows its continued interest in a number of non-core activities. Indeed the contrast with Yukos' structure is illuminating and relevant to each company's ongoing use of alliances. LUKoil has 44 core subsidiaries, although numerous others exist in a further sub-structure (Interfax 2002). It has nine upstream oil producing subsidiaries, including one international holding company, four Russian refining subsidiaries, three international refining subsidiaries, sixteen domestic marketing and other subsidiaries, one international marketing subsidiary, ten financial subsidiaries (including six banks) and an association with Nikoil, which in turn has a further ten financial subsidiaries. As such LUKoil is often described as an amalgamation of individual fiefdoms, with many of the original Soviet managers still in charge of their specific domain, although now with a new link to a central headquarters. Indeed LUKoil's recently announced (2002) restructuring plan acknowledges the need to simplify this diversity of subsidiaries, and targets to reduce the number of entities in just one region (Timan Pechora) from 87 to 3 within 3 years.

Yukos, in contrast, has a much more centralised organisational structure. It has one main upstream producing division, with seven subsidiaries under its control, and one refining and marketing division, with 30 subsidiaries reporting to it. It then has three financial subsidiaries, including a bank, an insurance company and an investment

company. This much simpler structure is a result of the desire of the majority owners to have tight control over the company's operations and has made the implementation of new strategies much more effective.

Yukos' consolidated structure only emerged after a significant struggle for control of the holding company and its subsidiaries, however. Iji (2003) describes in great detail how the consolidation of Yukos into a single entity was a lot more complicated than the process at LUKoil because of the involvement of a number of large minority investors both at the holding company and subsidiary level. The fact that Group Menatep also had to hand over 36% of Yukos as collateral for a defaulted loan from three Western Banks following the 1998 economic crisis added a further level of difficulty. The period 1997 to 1999 saw a series of hotly disputed share swaps, transfers of subsidiary shares offshore, threats of significant dilution of minority shareholders and ultimately agreements with key western counter-parties to sell their shares to Group Menatep or its affiliates. This eventually left Group Menatep with a controlling 68% stake in the company at the beginning of 2000 (Allen, Satskov, Henderson, 2001). This has subsequently been diluted to 61% via a series of share placements, although Menatep still has a dominant influence over more than 75% of the company through its control over the voting rights of the Veteran Petrloeum Trust, the treasury shares and the shares that support the Union Bank of Switzerland (UBS) exchangeable bond. Importantly, though, senior management has a significant economic stake in the firm, with company CEO Mikhail Khodorkovsky alone owning 59.5% of Group Menatep, implying a 36% interest in Yukos.

Table 4: Yukos ownership structure in 2002

	Ordinary No Shares	**%**
ADR holders	276	12.8%
UBS Exchangeable Bonds	54	2.5%
Other individual and institutional shareholders	229	10.6%
Veteran Petroleum Trust	216	10.0%
Treasury	78	3.6%
Group Menatep	1304	60.5%
Total	2156	100.0%

Source: Yukos

Strategy, growth and performance

In the mid-1990s LUKoil CEO Vagit Alekperov warned the Seven Sisters (the leading international oil companies at that time) that his company was aiming to join their ranks as the eighth sister by 2010. He thus established LUKoil's growth strategy as an aggressive expansion of the company's asset base over the next decade combined with the maintenance and refurbishment of its existing Russian interests. As described by Henderson (1997) and Lane and Seifulmulukov (1999) the company embarked on a period of expansion by acquisition both within Russia and overseas (mainly in former Soviet states or related countries) that saw its reserve base grow from 7.9 billion barrels in 1996 (Miller and Lents) to 15.3 billion at the end of 2002. Through a series of corporate purchases, the establishment of joint ventures and the acquisition of new licences LUKoil established new core operating units in Timan Pechora, the Caspian, Central Asia, Eastern Europe and even North America to add to its West Siberian and European Russia foundations. Indeed LUKoil was the first Russian company to own international assets, was the first to have international partners and was the first to welcome the involvement of a strategic shareholder. However, one predominant feature of LUKoil's strategy is that it has never been willing to relinquish control of the management or ownership of any assets inside Russia, and indeed also controls many of its international ventures too.

As we will discuss later, this led not only to inefficiency but also to poor use of many of the alliances formed by the company. Indeed, this inefficient use of alliances was particularly exemplified in the case of its arrangement with ARCO, which purchased a 7.99% stake in LUKoil in 1996 and formed the LUKARCO joint venture at the same time. The 7.99% equity interest was specifically chosen as a limit by LUKoil because it was below the 8% threshold that guaranteed board representation, and the LUKARCO JV split, at 54% LUKoil and 46% ARCO, was also designed to maintain LUKoil control. LUKoil's refusal to accept outside influence to play a significant role in these cases led to both forms of alliance ultimately failing to reach the goals that were set for them.

LUKoil's overall growth strategy has been undermined by its inability to manage its operations efficiently, however, and this has ultimately been reflected in its equity market capitalisation. As Landes (2003) demonstrates, LUKoil's oil production

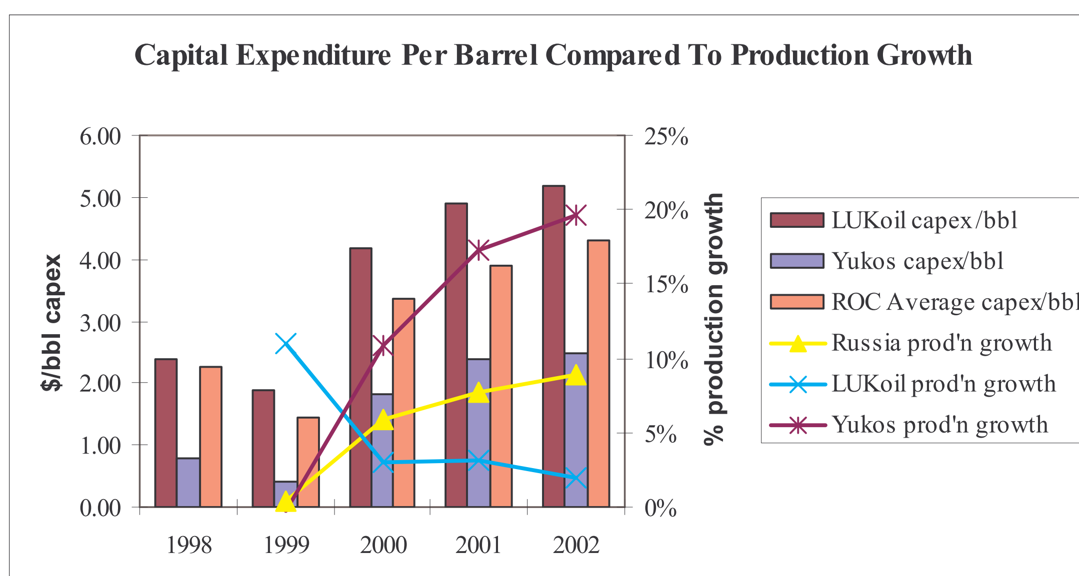
subsidiaries have operated with significantly higher costs on a per barrel of production basis than industry leader Yukos since 1998, with the result that the companies profit margins have been much lower (see table 5). In addition the company has been seeing a much lower return from its capital investments, as shown in the graph below. Having consistently spent 10-20% more per barrel of production than the average Russian oil company and more than twice as much as Yukos, LUKoil has achieved growth in oil output well below the Russian industry average and at a fraction of the growth achieved by Yukos. One reason for this (Henderson, 2001) is that LUKoil's strategy is focused on the longer term development of new regions such as Timan Pechora and the Caspian, but nevertheless it would still seem that the company is optimising neither its operating not its capital expenditures.

Table 5: Production costs and margins of Yukos and LUKoil in 1998-2001 period

Production Costs	**1998**	**1999**	**2000**	**2001**
$ per barrel				
LUKoil	2.87	1.36	2.40	3.10
Yukos	1.16	0.84	1.44	1.70
Pre-tax profit margin				
PTP as % of revenues				
LUKoil	13%	17%	29%	21%
Yukos	-24%	41%	58%	41%

Source: Renaissance Capital

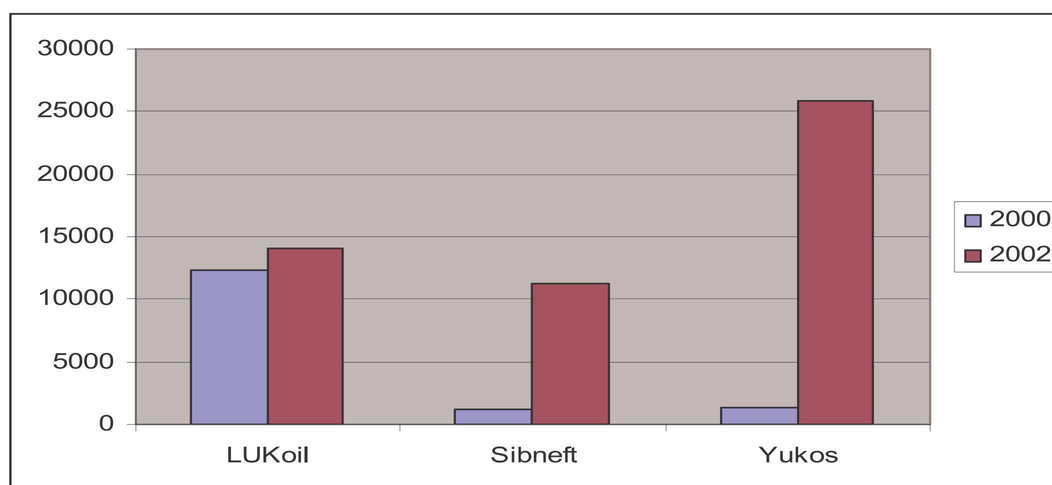
Figure 1: Capital expenditure per barrel compared to production growth



Source: Companies, Renaissance Capital

LUKoil's poor operational performance relative to its Russian peers has been reflected in its equity market capitalisation, which has stagnated over the past few years. The most marked contrast is with the new industry leaders, Yukos and Sibneft, who have shown dramatic operational outperformance over that time (O'Sullivan 2003). Figure 2 shows the change in market capitalisations of the three companies between May 2000 and May 2003, with LUKoil growing by 13% over the period compared with the 844% growth experienced by Sibneft and the 1746% growth seen at Yukos. Even allowing for the fact that the latter two were starting from a very low base following corporate governance and operational underperformance during the 1990s the difference in share price performance still underlines the changing balance of power in the Russian oil sector over the three years.

Figure 2: Market capitalisation of LUKoil, Sibneft and Yukos, $mm



Source: Renaissance Capital

The strategy of Yukos' management and shareholders has seen two distinct phases. Whereas at LUKoil the management always maintained control of the holding company and consolidated its subsidiaries quickly, Yukos' owners had a much more complicated task. As such their strategy can be fairly precisely charted – 1996-1999, establish control of Yukos as a single entity; 2000 onwards, grow the equity value of the company. Mosser and Oppenheimer (2001) describe the processes through which Yukos' owners initially consolidated the cashflows of the subsidiaries via transfer pricing schemes and then carried out a series of share swaps at rates beneficial to the holding company in order to maximise their ownership stake in the combined entity. Minority shareholders in the subsidiary companies were significantly disadvantaged

during this transition period, with notable battles being fought with the Dart Enterprise and with three international banks who inherited Yukos shares after Group Menatep defaulted on a loan in the aftermath of the 1998 economic crisis.

The consolidation process ended with the re-purchase of Yukos shares from the international banks at the end of 1999, and immediately the attitude and strategy of Yukos' majority owners changed. In January 2000 Yukos CEO Mikhail Khodorkovsky made his first statements about increasing shareholder value and improving corporate governance as part of a deliberate policy to increase the market capitalisation of the company. At the same time Yukos increased its efforts, begun in 1998, to improve its operational performance and to restructure its working methods. In stark contrast to LUKoil, Yukos' senior management and shareholders did not have an oil industry background and perhaps even more importantly seemed to appreciate that they lacked specific knowledge required to improve the operational performance of the company. To that end a strategic alliance was formed with western oil service company Schlumberger as early as 1998 to review and improve Yukos' oil producing activities. Schlumberger has been given increasing authority since then to rehabilitate specific Yukos assets and has provided training to Yukos staff in international well management techniques. As a result the company has been less influenced by previous Soviet methods and has recovered from its post-Soviet collapse more quickly. Indeed, even before the recent merger with Schlumberger Yukos was set to replace LUKoil as the leading Russian oil producer, having already achieved a much stronger financial performance. As the charts above illustrate, Yukos has lower operating costs, better margins and superior capital investment efficiency than its main rival, mainly as a result of the achievements of the past three years.

2. MORPHOLOGY OF LUKOil AND YUKOS' ALLIANCES

Industrial enterprise can grow through horizontal expansion, vertical integration, geographical expansion, and related diversification (Chandler, 1990). In the case of LUKOil and Yukos all these types of expansion are present including limited unrelated diversification. In this section we analyse alliances and other strategic business relationships of LUKOil and Yukos. In both cases we have attempted to

segment the relationships into three key areas, defining them as being a function of the need for market access (M), technology (T) or financing (F). We have defined market access as being both the ability to sell product into a new market and also access to new assets with which to supply existing markets; in other words we use M to mean the ability to expand market share. The definitions of technology and financing are more obvious, with technology implying access to new operational or management skills intended to improve corporate performance and financing meaning access to funds needed for growth and/or the sharing of financial risk on a project or series of projects.

Clearly some alliances have more than one driver. To reflect this we have allocated a primary driver (M, T or F) to each new relationship, and where appropriate a secondary driver (again M, T or F). The allocation of both primary and secondary drivers has been at the subjective discretion of the authors, but in most cases the corporate motivations were clear. In the subsequent analysis of the alliances we have then considered the primary and secondary drivers separately and then as a weighted average, allocating the secondary drivers a weighting of 50% of the primary drivers. The summary results and the full list of alliances follow:

Table 6: Summary of Yukos and LUKoil alliances by drivers

Yukos	Primary	Secondary	Total	Weighted *	Primary %	Secondary %	Total %	Weighted %
M alliances	26	0	26	26	68%	0%	57%	62%
T alliances	8	1	9	8.5	21%	13%	20%	20%
F alliances	4	7	11	7.5	11%	88%	24%	18%
Total	**38**	**8**	**46**	**42**	100%	100%	100%	100%

** Weighted = (Primary*1)+(Secondary*0.5)*

LUKoil	Primary	Secondary	Total	Weighted	Primary %	Secondary %	Total %	Weighted %
M alliances	91	1	92	91.5	75%	4%	63%	68%
T alliances	14	11	25	19.5	11%	44%	17%	14%
F alliances	17	13	30	23.5	14%	52%	20%	17%
Total	**122**	**25**	**147**	**134.5**	100%	100%	100%	100%

** Weighted = (Primary*1)+(Secondary*0.5)*

Table 7: Yukos Alliances*

Date	Alliance	Category	
1998		Primary	Secondary
	Strategic alliance signed with Schlumberger for oilfield services	T	
1999			
2000			
	Yukos, Sibneft and Stroitransgas agree to join forces for bidding in ONACO tender	M	F
	Yukos acquires 19.9% stakes in East Siberian Oil Company	M	
	Yukos, LUKoil and Gazprom form joint venture for exploration in Caspian Sea	M	F
	Yukos concludes jet fuel supply agreement with Aeroflot	M	
	Yukos agrees to include Rosneft into consortium to build oil pipeline to China with Transneft and China National Oil & Gas Corp	M	
	Yukos signs co-operation agreement with RINCO Group giving Yukos management control of Angarsk refinery	M	
	Yukos signs agreement with Croatian oil transport company JANAF to modernise Adria pipeline	M	
	Yukos and Microsoft sign co-operation agreement for building efficient information system	T	
	Yukos receives loan for $150mm from international banking syndicate	F	
	Yukos concludes consolidation of subsidiaries, and now owns 75-98% in all of them	M	
2001			
	Yukos increase stake in Eastern Oil Company to 68%	M	
	Yukos and Sibneft sign agreement for joint development of Val Gamburtseva field in case they win tender in Nenetsk region	M	F
	Yukos and Marathon Oil (US) for strategic alliance to expand international business for both companies	M	F
	Yukos and Sibneft set up joint venture for exploration in Chukhotka region	M	F
	Yukos and Itera sign co-operation agreement for gas production, transportation and distribution	M	
	Yukos buys controlling stake in Angarsk refinery	M	
	Yukos and Williams (US) sign co-operation agreement over Mazeikiu Nafta refinery in Lithuania	M	
	Yukos, Transneft and CNPC sign framework agreement to develop feasibility study for Russia-China pipeline	M	F
	Yukos wins tender for 49% interest in Transpetrol, the Slovak state-owned pipeline company	M	
	Yukos acquires the hydrocarbon business of Kvaerner ASA (Norway)	T	
	Yukos signs co-operation agreement with TECHNIP for constructing oil and gas surface facilities and developing pipeline systems	T	
	Yukos and UOP sign technical services agreement for installation of enhanced processing at Yukos' refineries	T	
	Yukos signs co-operation agreement with AspenTech to implement integrated software solutions	T	
	Yukos Level 1 ADR programme launched	F	
2002			
	Yukos and Rosavtodor (Russian Sate Road building Agency) sign agreement on providing high quality bitumen for road building industry	M	
	Yukos and TotalFinaElf (France) agree joint co-operation in Black Sea exploration project	M	T
	Yukos acquires 77.5% interest in exploration block in Kazakstan owned by First International Oil (US)	M	
	Yukos acquires 88% interest in Arctic Oil and Gas from Benton Oil and minority investors	M	
	Yukos and UES sign Memorandum of Understanding on Yukos involvement in utility sector restructuring	M	
	Yukos signs Protocol of Intent with French Petroleum Institute to develop oil industry technology for Russia	T	
	Yukos signs joint development agreement with MOL for West Siberian oilfield	F	
	Yukos and Williams (US) agree on Yukos equity participation in Mazeikiu Nafta, and Yukos buys 26.85% stake	M	
	Yukos increases interest in Mezeikiu Nafta to 53% through purchase of remaining Williams interest	M	
	Yukos, LUKoil, Sibneft and TNK sign Memorandum of Understanding on construction of pipeline to Murmansk	M	F
	Yukos sells 44% of Rospan International to TNK	F	
2003			
	Yukos agrees that TNK should manage Rospan International despite the fact that Yukos has a 56% interest in the firm while TNK has 44%	T	
	Yukos majority shareholders agree merger with Sibneft	M	

Table 8: LUKoil Alliances*

Date	Alliance	Category	
1993		Primary	Secondar y
	Govt of Tatarstan - LUKoil: joint venture operating company in Tatarstan	M	
	Govt of Azerbaijan - LUKoil: Protocol to develop the GUNESHLI oil field	M	
	LUKoil - BP - Statoil - Amoco -Unocal - Pennzoil - McDermott Intl - Turkish Petroleum Company (TPAO) - Ramco (UK): Consortium to develop GUNESHLI fields in Azerbaijan; also Chirag fields; Ramco is a UK services company	M	T
	LUKoil-Ural - LUKoil-Scandinavia (Denmark) - Rima (Sweden): joint venture TAN EL, under agreement with GoldStar to produce on large-scale consumer electronics and household appliances; Rima is a GoldStar dealer in Russia	M	
1994			
	LUKoil-Tatarstan - Langepasneftegaz: service contract by LUKoil subsidiary for repairing oil wells owned by Langepasneftegaz (also part of LUKoil)	T	
	LUKAgip: joint venture between LUKoil and Agip (Italy) for oil exploration in Siberia and Tunisia offshore development; First time a Russian company participates in a foreign oil joint venture	M	T
	LUKoil - ENI (Italy): Strategic Partnership framework agreement; including initially 3 projects and Agip participation	F	
	LUKoil-Urajneftegaz - Western Atlas: supplier contract for computerised geological modelling; to be implemented across LUKoil	T	
	LUKoil - ABB Lummus Crest: Long-Term Contract to modernize LUKoil-Perm refinery, update processes	T	
1995			
	LUKoil - Turkmenistan: unofficial accord for participation in offshore projects in Turkmen Caspian.	M	
	LUKoil - Vlada (Moldova) : joint venture to be subsidiary of LUKoil (LUKoil-Moldova)	M	
	LUKoil - Zarubezhneft - Vietsovpetro: joint development of resources offshore Vietnam	M	
	LUKoil - Rosneft - Novopolotskij Oil Processing Enterprise (NNPZ): joint venture for reconstruction of NNPZ with additional processing capacities	M	
	LUKoil - YUKOS - PO NAFTAN (Byelorussia) - Govt of Byelorussia: two joint venture enterprises regarding oil processing	M	
	LUKoil - Yuzhneftegaz: joint venture Kumkol-LUKoil enterprise; to develop Kumkol oil deposit in Kazakhstan	M	
	LUKoil - Eurodek (Estonia): joint project for the construction of terminals in Estonia for liquid chemicals and oil products	M	
	LUKoil - ARCO: Equity stake; Arco acquired 8% of LUKoil through 2 stock purchases	F	T
	LUKoil - Geological Enterprise (Iset): joint venture LUKoil-Iset company (subsidiary of LUKOIL) to produce decoration stone materials; purchase of needed equipment from Fantini, Pedrini, Ravelli and Monlevi (Italian companies) of Italy	M	
1996			
	LUKoil - Tatarstan Republic: Agreement for access to most oil extraction and trade projects in Tatarstan; Tatneft tried to block the deal but failed.	M	
	LUKoil - Chevron - Rosneft - Mobil - British Gas - Agip - Oryx Energy (US) - Kazakhmunaigaz - Russian State (24%) - Kazakhstan (19%) - Oman (7%): Caspian Pipeline Consortium; to have been operational by late 1999 but much delayed	M	
	LUKArco: joint venture 56% owned by LUKoil, 44% by ARCO; completed 1997	F	T
	LUKoil - Transneft - ABB Lummus Global - Agip - Mitsui: consortium for construction of oil refinery; to process crude from W. Siberia and Kazakhstan	M	T
	LUKoil - Pennzoil: Memorandum of Cooperation and Joint Venture to collaborate on motor lube oils production and marketing; Pennzoil provides technology	T	
	LUKoil - Sonatrach (Algeria) : Production Sharing Agreement for development of Algerian oilfields	M	
	LUKoil - Amoco - BP - Exxon - Unocal - Pennzoil - Statoil - Itochu (Japan) - Ramco (UK) - TPAO (Turkey) - SOCAR - Delta Nimir (Saudi Arabia): Pipeline Consortium Novorossisk to Baku; provides pipeline route avoiding Russia; completed 1997	M	

Year	Event		
	LUKoil - SOCAR - BP - Statoil - TPAO (Turkey): Equity Stake in SHAKH DENIZ projects; LUKoil to take 20-30% of the Azerbaijani 40% share of the project; other shares held by other companies. LUKoil and SOCAR have additional joint projects on Shakh Deniz.	M	T
	LUKoil - Dagneft - JKX (UK): Caspoildevelopment joint venture to explore and develop Inchke-More offshore field; stalled because of lack of production sharing agreement legislation	M	
	LUKoil - KamAZ (Tatarstan): Cooperation Agreement; LUKoil to finance development of 30-ton offroad KamAZ truck for oil use	M	
	LUKoil - Calgary Overseas Development (Canada): joint venture VATOIL; to provide oil field services, well repair; 1996??	T	
	Izvestia: LUKoil acquires 41% stake	M	
	LUKoil - SOCAR (State Oil Company of Azerbaijan): Memorandum of Intent for Joint Venture insurance company; to insure oil & gas operations	F	
	LUKoil - Azerotel: Equity Stake in Azerotel together with GPT (UK) and the Ministry for Communications of Azerbaijan; GPT is providing the technology; Azerotel to modernize the telephone network in central Baku	M	
1997			
	LUKoil - Rosneft - GNKAR (Azerbaijani national oil industry concern): development of KYAPAZ field in Azeri Caspian; GNKAR (50%); LUKoil (30%); Rosneft (20%)	M	
	LUKoil - GNKAR: Participation in YALAMA project: LUKoil to have 60% stake in project; In 1997, LUKoil partner to GNKAR in 5 of the 7 international projects connected with oil production	M	
	LUKoil - Russian Ministry of Railways: purchase agreement for an extra 1,500 tank-cars from the ministry; Ministry to conduct a flexible tariff policy with respect to LUKoil-Trans (Company's forwarding agent)	M	
	NEXUS Fuels: 50% owned by LUKoil opens first of 2,000 gas stations in US grocery store parking lots	M	T
	LUKoil - Arkhangelskgeoldobycha (AGD): Controlling Equity Stake acquired; AGD is part of the Timan Pechora Company	M	
	LUKoil - Imperial Bank (Moscow): joint company LIKard Processing Company; LIKard will operate the smart-card system at fueling stations owned by LUKoil (800+ in Russia)	F	
	LUKoil - Chevron - Tengizmunaigaz - Mobil: Equity stake in TENGIZ-CHEVROIL joint venture; Chevron sells 5% stake in project to LUKoil; JV in Kazakhstan	M	F
	LUKoil - SOCAR: development of D-222 deposit in Caspian; LUKoil holds 60% stake	M	
	LUKoil - SOCAR - Far Eastern Levingston Shipbuilding Ltd (Singapore): joint venture to provide engineering services to companies using floating platforms in Caspian	T	
	LUKoil - Agip - British Gas - Texaco - Kazakhstan: Consortium development of Karachaganak fields; production sharing agreement; LUKoil stake 15% transferred to LUKArco in 1998 (hence Arco stake)	M	F
	LUKoil - NORSI-oil (Nizhniy Novgorod): Equity Stake; LUKoil to buy shares to allow modernisation of NORSI-oil refinery	M	
	Nestro-LUKoil JV - SCOP (subsidiary of the Iraq National Oil Company): production sharing agreement for W. Qurna Field; Nestro-LUKoil is LUKoil (70%), Zarabezhneft (15%) and Mashinoimport (15%); additional Western capital will be sought	M	
	LUKoil - Gazprom - Royal Dutch/Shell: Memorandum of Understanding for a joint bid in the Rosneft privatization tender on a parity basis; ultimately no bids are accepted by Russian government; Shell opts out of bid.	M	F
	LUKoil - AvtoVAZ: Cooperation Agreement; construction of LUKoil fuel stations on AvtoVAZ service centers; LUKoil to buy AvtoVAZ vehicles	M	
	LUKoil - Amo ZIL (Moscow): Cooperation Agreement; for development and production of special vehicles for use at oil producing and processing sites; LUKoil to pay the R&D costs and obtain rights for distribution of ZIL vehicles more widely	M	
	LUKoil - ANTEJ (Moscow): Cooperation Agreement; ANTEJ is an anti-aircraft missile concern, to provide assistance in the development of oilfield and refinery equipment and technologies.	T	
	LUKoil - EIAZ (Tatarstan): Cooperation Agreement; EIAZ automotive company; LUKoil to place fuel stations on EIAZ service centers; LUKoil to help distribute EIAZ cars on Russian Territory	M	
	LUKoil - UralAZ (Chelyabinsk): Cooperation Agreement; automotive company producing special vehicles and equipment for oil production; LUKoil to purchase 250-300 vehicles annually	M	

Year	Event		
	LUKoil - Microsoft: contract for IT services and software.	T	
	LUKoil - UES (Russian): cooperation agreement; UES to meet LUKoil needs for heating and electricity on a flexible tariff policy; LUKoil to supply petroleum products	M	
	LUKoil - Foster Wheeler USA (FWUSA): Strategic Alliance Cooperation memorandum; To upgrade LUKoil-Rostovneftechimproject, a LUKoil-owned engineering design institute	T	
	LUKoil first Russian company to sell BONDs to international investors	F	
	LUKoil - Inkombank (Moscow): Loan Finance for Investment: LUKoil to use funds to buy shares in NORSI-oil company for modernization of the refinery	F	
1998			
	LUKoil - Administration of Arkhangelsk: Access to Oil Resources; Exploration and development rights agreed. Regional administration to fund the 3-D survey; LUKoil to develop, produce and process in region.	M	
	Equity purchase Petrorel refinery (Romania): LUKoil 51% stake	M	
	LUKoil - Murmansk Shipping Company: Controlling Equity Stake acquired; Murmansk operates Russia's nuclear ice breaking fleet and is responsible for sea transport through the Russian Arctic	M	
	Possible Takeover: LUKoil announced potential buy-out of Sidanco; LUKoil could persuade Gazprom as Sidanco has gas assets of interest	M	
	CONOCO-LUKoil: Strategic Partnership Timon Pechora; to develop oil and gas reserves in Russian northern territories; LUKoil has 60% stake, Conoco 40%	F	T
	LUKoil - Gazprom: Partnership Agreement; merger improbable, but to join forces in specific projects and in politicking; LUKoil to involve Gazprom in all its big foreign projects; LUKoil to help Gazprom with transportation and refining.	M	F
	LUKoil - Tatneft: Strategic Partnership; joint development of oil fields in Russia and abroad	M	F
	LUKoil - Tatneft - Central Fuel Company (TSTK): Strategic Cooperation Agreement; alliance for coordinated exploration and development of oil deposits, oil transmission and processing	M	F
	LUKoil - Central Fuel Company (TSTK): Strategic Alliance; opens $5-7 billion Moscow fuel market for LUKoil through new fuel stations	M	
	LUKoil - Gazprom - Nigeria National Oil Company: Joint project to develop hydrocarbons in Nigeria	M	F
	LUKoil - Timan-Pechora Company: strategic partnership to develop Timan-Pechora project; TPC to turnover 50% share of contract area ot LUKoil (30%), Rosneft (10%) and Arkhangelskgeodolbycha (10%, owned by LUKoil)	M	F
	LUKoil - Gazprom - YUKOS: joint venture for Russian Caspian development projects; organised by Russian government to avoid infighting.	M	F
	LUKoil - ONEXIMBANK: Strategic Partnership: assumes cooperation in financial and manufacturing industry; "soft partnership agreement"; ONEXIMBANK controls Sidanco	M	F
	LUKoil - India National Oil Company (ONGC): Possible Equity Stake in LUKoil; ONGC is offered a 8% stake in LUKoil; Together with agreements for expanding exports to India; Key market for LUKoil	F	M
	LUKoil - Western Petroleum: Long-Term oil purchase contract to support LUKoil's $1.5 billion credit line; Western is a marketer of Russian crude oil	F	
1999			
	LUKoil - Czech Government: potential for cooperation; LUKoil accounts for up to 70% of crude oil supplies to Czech refineries	M	
	LUKoil - general co-operation agreement with government of Bashkortostan	M	
	LUKoil - co-operation agreement on fuel supply and general business development with city of Kiev administration	M	
	LUKoil Petrol acquires controlling stake in Bulgarian petrochemical plant (58% of Neftokhim)	M	
	LUKoil Neftechim plans to buy Nitron, a chemical manufacturer in Stavropol	M	
	LUKoil Sintex acquires controlling interest in Odessa refinery in Ukraine (52% interest)	M	
	LUKoil - Agip SpA - British Gas - Texaco: joint investment project for gas/condensate processing facility	M	T
	LUKoil - Western Pipeline System (Latvia): Protocol of Intent for development of pipeline with potential to double Russian oil export throughput annually	M	
	LUKoil - Greek Hellenic Petroleum SA: cooperation agreement to lead to joint venture; for exploration, production, refining & sales of crude oil and oil products; focus on SE Europe and Black Sea	M	

	LUKoil - National Iranian Oil Company (NIOC): Provision of Well Repair Services; LUKoil to provide services and oil related facilities; important to generate cash for LUKoil	M	
	LUKoil - TONAR (Moscow): Joint Investment Project of Budenovsk chemical complex to produce polypropylene; LUKoil will provide the raw materials	M	
	LUKoil - general co-operation agreement with Aeroflot on supply of oil products and aviation fuel	M	
	LUKoil Neftechim and Fina Research sign licensing agreement	T	
	LUKoil - SBERBANK (Moscow): Loan Finance; $150 million loan for oil production and refining project	F	
	LUKoil gets $77mm loan from EBRD for first stage of development of ACG project	F	
2000			
	LUKoil - general co-operation agreement with Moscow Regional administration	M	
	LUKoil - agreement with UNOPS - United Nations Office for Project Services	T	
	LUKoil acquires 56.25% interest in Parmaneft (Komi Republic)	M	
	LUKoil acquires Getty Petroleum in the US (retail sites in NE US)	M	
	LUKoil and Fortum sign co-operation protocol	M	
	LUKoil, Yukos and Gazprom found the Caspian Oil Company (33% each)	M	F
	LUKoil signs co-operation agreement with Sibur concerning gas refining and petrochemicals	M	T
	LUKoil and Chevron Oronite sign protocol of intentions to produce lubricants at Volgograd	T	
	Reforma Investment wins investmenttender for 67.2mm LUKoil shares (tender was in October 1999)	F	
2001			
	LUKoil - co-operation agreement with Krasnodar and Stavropol regions	M	
	LUKoil - co-operation agreement with Perm region on fuel and energy supplies	M	
	LUKoil - co-operation agreement with Astrakhan region	M	
	LUKoil acquires Bitech Petroleum, a Canadian-based producer of oil in the Komi Republic	M	
	LUKoil Overseas acquires 55% interest in AmKomi, a Timan Pechora-based oil producer	M	
	LUKoil Overseas buys 50% of Permtex from SOCO to bring its stake to 100%	M	
	LUKoil - co-operation agreement with Russian arms sales agency Rosoboronexport concerning foreign sales	M	
	LUKoil, Itera and Uzbekneftegas agree jointdevelopment of fields in Uzbekistan under PSA terms (45% interest for LUKoil)	M	F
	LUKoil and Latsis Group express joint interest in bidding for 30% of Hellenic Petroleum	M	F
	LUKoil and SOCAR sign agreement on rehabilitation of fields in Azerbaijan	M	
	LUKoil signs co-operation agreement with SG-Trans, with SG providing specialised facilities for transporting liquified gas and petrochemicals	T	
	LUKoil and Chevron Oronite sign Master Supply Agreement covering supply of lube oil additives to LUKoil	T	
2002			
	LUKoil - protocol of co-operation with Stavropol region on stable oil products supply	M	
	LUKoil - co-operation agreement with Astrakhan region concerning development of energy projects	M	
	LUKoil - co-operation agreement with Vladimir region concerning oil products delivery	M	
	LUKoil - memorandum of understanding with Nenetsk Autonomous Territory on the development of energy projects	M	
	LUKoil - co-operation agreement with city of Nizhny Novgorod	M	
	LUKoil - co-operation agreement with Komi Republic concerning the promotion of long-term projects	M	
	Agreement on oil product railway transportation with Ministry of Railways	M	
	LUKoil and Gazprom sign general strategic partnership agreement of 2002-2005	M	
	LUKoil, Yukos, Sibneft and TNK sign MoU re Murmansk pipeline	M	
	LUKoil signs strategic partnership with Bank of Foreign Trade on development of oil product supplies network in Russian Federation	F	
	LUKoil gets $26.4mm credit facility for US Exim Bank, with Commerzbank providing funds for oilfield equipment	F	
	LUKoil achieves full listing on London Stock Exchange	F	
	LUKoil sells 10% interest in ACG in Azerbaijan to Impex	F	
2003			
	LUKoil acquires PFG Energy, which owns 27% of LUKoil Perm, for $398mm	M	

	LUKoil - memorandum of understanding with Kazmunaigaz concerning the development of fields offshore in the Caspian Sea	M	
	LUKoil signs letter of intent with Norsk Hydro on implementation of joint projects	M	T

Source: authors based on various sources

* It should be noted that the above tables do not include transactions that involved the establishment of full control by LUKoil or Yukos, but rather only those that continued to involve another partner in a business relationship.

We would make a number of observations based on the tables above. Perhaps most obviously, alliances should reflect the strategy of a company and its organisational deficiencies and strengths. During the 1990s, the Russian oil companies were primarily trying to establish control over their subsidiaries, with LUKoil being the most successful and achieving full control much earlier than its peers. This was one of the key drivers of company growth, establishing a positive image for LUKoil at home and abroad and opening access to sources of foreign funding, investment and technology. Fast consolidation of control enabled LUKOil to be the first Russian oil company to attract a strategic foreign equity stake (the 7.99% equity purchase by ARCO in 1996), and in 1997 LUKoil was the first Russian company to sell bonds to international investors. At home, LUKoil also managed to receive loan finance for investments to buy shares in NORSI-oil company (1997), and it is clear from the tables above that LUKoil started the general process of alliance formation earlier than Yukos.

The distribution of the alliances formed by LUKoil also reflects its growth-focused strategy during the 1990s. The high proportion of alliances related to market access reflects it goals, which were in turn catalysed by various internal and external drivers. Perhaps the most important was the economic situation in Russia at the time, with relatively low prices for domestic crude sales and high levels of non-payment or barter payment. This made access to markets vitally important in order to secure outlets for oil products, and is reflected in the large number of alliances formed with specific regions. These alliances also increased LUKoil’s political leverage during a period of significant uncertainty and also helped to bolster the company’s image as the most important Russian oil company. This image was then exploited in establishing alliances with a number of overseas countries where the company was effectively seen as the oil and gas representative of the Russian state. These international relationships not only provided access to new markets, but also to markets in which prices were higher and cash payment was more readily achieved,

providing LUKoil with huge competitive advantage at that time. In addition to establishing these agreements on supply with strategic clients, LUKoil also formed new relationships to ensure transportation of oil to its clients and to build a network of fuelling stations (which again brought the significant benefit of 100% cash payment). Also important were those alliances related to the construction of pipelines, terminals for oil products, vehicles used in oil production and railway and shipping links.

Yukos has also had a growth focus since it achieved full consolidation at the end of 1999, although based more on the rehabilitation of its existing asset base than on expansion by acquisition. As such it has also been keen to secure market access for its growing output, and agreements to achieve this make up the highest proportion of its new alliances. However, the proportion of alliances in this area is not as high as for LUKoil and involves many fewer alliances with regions and countries. This not only reflects the fact that Yukos had a much poorer "political" image than LUKoil at the end of the 1990s but also that the company was much more focused on commercial activity involving other companies. Its alliances generally involve joint agreements with other corporate entities to develop new markets, infrastructure or assets rather than the higher level agreements that LUKoil sought to establish at state-level.

Although LUKoil was the first Russian vertically integrated oil company the primary focus of its business has always been the upstream oil production sector. As a result the majority of LUKoil's alliances are in the areas of exploration, drilling and field development and take the form of consortia, joint ventures and strategic partnerships. The differences between these three forms of alliance are not always clear, but they generally reflect the need for large financial and technological investment in projects where no single company is able to undertake all the activities by itself. One feature of the alliances undertaken by LUKoil, though, is the fact that it is almost always the dominant partner in ventures on Russian soil.

In contrast Yukos established many fewer upstream alliances focused on the expansion of the company's asset base. At the end of the 1990s Yukos' production subsidiaries has experienced almost a decade of continuous decline, and the main value to be added for the shareholders was to be found in rehabilitating existing assets rather than establishing new areas of operation. Yukos did make some moves to

expand their operating base, but primarily within Russia mainly for the longer term (for example in East Siberia, the gas market or the Black Sea). One other area of contrast between Yukos and LUKoil is the fact that the former has been prepared to form partnerships on assets that are already producing oil (for example its agreement with MOL in West Siberia). LUKoil, on the other hand, has only really formed partnerships for the future development of new assets. This would seem to reflect Yukos' greater willingness to ally at all stages of the value cycle in order to secure more far-reaching benefits for all parties, rather than to only seek to exploit partners in higher risk ventures.

Despite his company's upstream bias, LUKoil CEO Vagit Alekperov was nevertheless the first advocate of the international model of vertically integrated oil companies. As a result LUKoil's expansion has involved the acquisition of downstream capacity in Russia, and it was also the first Russian oil company to acquired stakes in foreign refineries (in Romania, Bulgaria, and Ukraine). This again reflected the need to find outlets for its growing crude oil output, and also the desire to sell as much product as possible in more liquid non-Russian markets.

Yukos too has expanded its downstream base, perhaps most importantly through its participation in the Mazheikiu Nafta refinery in Lithuania, where it now has a 53% stake. This acquisition provided a non-Russian outlet for Yukos' crude oil as well as bringing a greater balance to the company's overall portfolio. This latter goal has also been achieved via the acquisition of various refineries in Russia itself as well as by the recent merger with Sibneft, which has a much greater downstream focus than Yukos.

The main noticeable difference between the alliances formed by Yukos and LUKoil is in the percentage formed to access technology and the ultimate employment of those alliances. The first point, from a pure mathematical analysis of the numbers of technology-inspired alliances, is that technology was the primary driver for a much higher percentage Yukos' alliances than LUKoil's (21% versus 11% respectively). We have identified technology as a secondary driver for a number of other alliances made by LUKoil, but this cannot disguise the fact that it was a greater priority at Yukos. However, the pure numbers mask other important features of the companies'

respective technology alliances. The first point is that LUKoil's most important upstream alliance was made by one of its subsidiaries (Uraineftegas) in 1994, at a time when the company was not fully consolidated. As a result the full benefits of the introduction of western technology are unlikely to have been spread across the company, and the alliance does not appear to have had a long-lasting effect. By contrast, Yukos' key alliance with Schlumberger (initially made in 1998), has continued to flourish following the full consolidation of the company and has been one of the main engines of growth in Yukos' upstream business. As already mentioned, the acceptance by Yukos' majority owners that they needed help in developing the oil business led to a much greater delegation of management authority to Schlumberger on specific Yukos assets, once an initial period of assessment had been completed. Importantly, following the success of the Schlumberger arrangement Yukos has made other alliances with technology partners (including Technip of France and the French Petroleum Institute) and also purchased John Brown Hydrocarbons and Davy Process Technology from Norwegian company Kvaerner in order to bring some of the expertise "in-house". This latter move should help to alleviate some of the problems inherent with technology alliances, in particular the risk of growing dependence on outside sources to sustain operational efficiency.

In contrast with Yukos, many of LUKoil's technology alliances have been in the downstream refining sector, with specific arrangements for improvement of particular plants. As such they have not been true alliances, but rather contractual arrangements driven by LUKoil to fix a problem identified by them. In the upstream business LUKoil appears to have pinned its hopes for improvement on its own technology institutes and service companies as well as on the potential for learning from international joint venture partners. However, the latter strategy would appear to have been undermined by LUKoil's continued insistence on controlling all Russian ventures, while LUKoil also now seems to have accepted that the use of in-house technological resources is also a flawed strategy. Indeed, it has now taken the decision to sell its oilfield service company LUKoil Drilling, with Schlumberger being one of the leading contenders in the ongoing auction. Unfortunately for LUKoil, its delay in seeing the full benefits of new technology has allowed its Russian peers to overtake it in terms of upstream performance and financial valuation, as noted above.

Alliances driven by financing appear to be the least important primary driver for both companies, although interestingly we have identified as the most prevalent primary driver in both cases. There are two general reasons for this. The first is that following the economic crisis of 1998 and the related debt defaults financing became almost impossible to find for any Russian company, even those with an internationally-tradable commodity to offer as collateral. Secondly, the combination of the significant devaluation of the Russian rouble and the rise in world oil price after 1999 brought a double windfall to the Russian oil companies. With a cost base mainly in roubles, their operating expenses were essentially reduced by 75% in dollar terms while the price of their main revenue-generator (crude oil and product exports) increased by a factor of 3. Under those circumstances the need for finance was sharply reduced as almost all expenditures could be financed via internal cashflow.

More specifically, Yukos' serious corporate governance problems prior to 2000 meant that most financial institutions had an aversion to offering credit to the company. LUKoil, on the other hand, was able to exploit its positive image in the mid- to late-1990s tap international capital markets for financing, and was the most successful Russian company in this area prior to the 1998 crisis.

Apart from pure borrowing, though, both companies established alliances with what one could describe as a secondary motive related to financing. Relationships with foreign companies were seen as bringing not only access to new markets or technology, but also as a potential means of gaining direct financial assistance from a partner or at least easier access to international capital markets. In addition, any partnership would clearly reduce the specific financial risk on an individual project by spreading the investment burden among the partnership.

3. Conclusions and discussion

In conclusion we summarise the answers to the three questions raised in the introduction and we discuss two general issues which the case studies of LUKoil and

Yukos raise for an understanding of the influence of alliances on firms in the post-Soviet period.

First, our analysis shows that alliances have been important ‘compensatory mechanisms’ for the growth of the Russian oil companies by which they could get access to markets, technology and finance. Alternative, generic expansions would have been a much more costly option with limited acquisition of know- how and limited access to market. Yukos’ alliances have been central to its radically improved production performance while LUKoil’s alliances have been peripheral to its performance and were employed primarily as a mechanism of growth. This raises the issue of the trade off between growth and efficiency that we discuss below.

Second, Yukos and LUKoil have been able to control their use of alliances. In that respect, both are cases of domestic led modernisation, though the effects of this orientation depend on the capability of the company to strategically manage its alliance relationships. Yukos has used its relationships with consultants and other knowledge providers quite well to get access to technology as well as to rejuvenate its asset base. In that respect, the comparison between LUKoil and Yukos shows that domestic led modernisation is not possible without extensive networking and strategic use of alliances.

LUKoil is an example of a company whose strategy is to try to get access to technology, finance, and foreign oil fields or retail markets by going global while retaining full strategic and operational autonomy. The price for this has been operational inefficiency, or at least a neglect of the need for improved efficiency, which LUKoil’s strategy is now trying to rectify.

Third, access to technology and access to markets (directly or indirectly via access to assets) have been central to the improved performance of Yukos and the growth strategy of LUKoil respectively. However, with financial constraints having eased significantly after 1998, the need for financing has not been a primary driver in alliances.

Our analysis has generated several general issues which illuminate the process of growth in post-Soviet Russian corporations.

First, technical modernization and growth are closely dependent on the capability of corporations to use alliances as a mechanism of growth and improved performance. Elsewhere in this volume we show that central European modernization is dominated by foreign investors who control many of the key aspects of the modernization process (technology, access to market, finance). The cases of LUKoil and Yukos show that Russian corporations in natural resource sectors have an advantage in controlling their resources, which gives them a better bargaining position when trying to get access to resources they lack, especially to technology and access to markets. However, this advantage by itself does not represent a real advantage unless the corporations master how to use alliances in improving their productivity and growth prospects and how to build mutually interdependent relationships. In that respect, many Russian companies are far behind their central European peers and have not yet managed to optimise the use of their assets, like natural resources or market access, as a bargaining chip in building partnerships. Partly, this delay may be due to the longer process of consolidation and control of ownership structure that followed the very quick Russian privatization. Irrespective of this, when stakeholders are unable to negotiate inevitable inter-dependencies and are reluctant to commit themselves into alliance relationships this leads to a much more protracted process of restructuring and limited productivity gains. Companies that are able to grow by relying on networking have to give up some of their operational autonomy but it seems that this is more than compensated for by improved access to technology and acquired know how.

Second, there is a trade off between an immediate focus on operational efficiency and a focus on growth, which is key to the successful management of the growth of companies in the long-term. The growth patterns of LUKoil and Yukos show how different choices between strategy and efficiency could have long-term implications on the growth of companies. We could perhaps say that LUKoil took a strategy approach while Yukos followed an efficiency approach. As Ietto-Gillies, (1992:219,220) points out: ‘In a strategy’ approach the main determinant of decision and action is the desire, on the part of the economic agent(s), to acquire advantages

over other economic agents…... An ‘efficiency’ approach is one that stresses the efficient use of resources as the main determinant of decision and action. Both approaches are profit-driven, though the emphasis may be long-run for the ‘strategy’ and short-run for the ‘efficiency’ approach. A strategy may lead to an efficient use of resources in the short run (e.g. low penetration prices for a new market, although it may turn out to be very profitable and efficient in the long run’ (Ietto-Gillies, 1992:219,220).

Indeed, this is how LUKoil’s strategy was perceived in mid-1990s, though it has become clear that the price for this can be poor operational performance. In addition, our analysis show that Yukos also had a growth focus based on the rehabilitation of its existing asset base and is now in a much better position to expand it. In that respect, the initial focus on efficiency seemed to pay off and turned out to be a more appropriate strategy. However, in the absence of systematic inter-industry evidence this conclusion should not be generalised much further. Yet, the trade off between strategy and efficiency orientation are inevitable. Our evidence shows that with a strategic use of alliances and relationships the trade off between a ‘growth’ and ‘efficiency’ orientation may not necessarily be insurmountable. If anything, our analysis suggests that those post-Soviet companies that learn to strategically use networking and alliances are more likely to become global players.

LITERATURE

Allen Steve, Satskov Eugene, Henderson James (2001), *Yukos; Growth Prospects Outweigh Risks,* Renaissance Capital

Henderson James (1997), *LUKoil: A Strategy For Growth,* Renaissance Capital

Henderson James (2001), *Russian Oils: Value And Volume,* Renaissance Capital

Ietto-Gillies, Grazia (1992), *International Production. Trends, Theories, Effects*. Policy Press, London.

Iji Yuko (2003), Corporate Control and Governance Practices in Russia, SSEES *Electronic Working Paper series*, No.

Chandler, D. Alfred (1990), *Scale and Scope: The Dynamics of Industrial Capitalism*, Cambridge MA, Belknap Press.

Khartukov, M. Eugene (1997) The Control of Russia's Oil*, Energy Exploration & Exploitation*, Vol. 15, No.2, pp. 117-125.

Landes, Adam (2003), *Russia Oil & Gas: Upstream Economics,* Renaissance Capital

Lane, David and Siefulmulukov, Iskander (1999), *Structure and Ownership, from The Political Economy of Russian Oil (ed. Lane, David),* Rowman & Littlefield Publishers, USA

Nat Moser and Peter Oppenheimer: The Oil Industry: Structural Transformation and Corporate Governance (2001), In Granville, Brigitte and Peter Oppenheimer (eds.), *Russia's post-communist economy*, Oxford University Press, Oxford

Peng, W. Michael, (2000), *Business strategies in transition economies,* Sage IBS Series, London

O' Sullivan, Stephen (2003), *Licence To Drill: Russia's Oil Boom Continues,* United Financial Group

Peng, W. Mike and P. S. Heath (1996), *The Growth of the Firm in Planned Economies in Transition: Institutions, Organisations, and Strategic Choice*, Academy of Management Review, Vol. 21, No. 2, pp. 492-528.