

Managing Global and Local Challenges in Natural Resource-Seeking Firms

Abstract

This paper examines how context specific research can extend our knowledge of the multinational corporation. Using Royal Dutch Shell and the firm's environmental challenges as an example, we look at how natural resource-seeking firms differ from manufacturing firms. Because of the differences in internationalization motives, natural resource-seeking firms experience different external pressures than a manufacturing firm would face. Shell must deal with different local pressures in many of the regions it operates in, from the Niger Delta to the Canadian oil sands, while at the same time tackling global problems such as growing its oil reserves and managing the firm's contribution to global environmental problems like climate change. The dual pressures that Shell faces at the corporate and subsidiary level and how the firm manages those pressures presents researchers with an opportunity to extend our theoretical knowledge beyond the manufacturing firm.

Introduction

Royal Dutch Shell is one of several oil and gas multinationals facing intense global and local pressure to roll back investments in the Canadian oil sands (e.g. Greenpeace, 2008). While the Canadian oil sands offer enormous resource potential, second only to the Saudi Arabian reserves, the production of useable energy from oil sands has been criticized as too intensive in its use of land, water, energy and the emission of carbon dioxide (Pembina, 2009). To successfully address the local challenges Shell faces the

vital organizational challenge of how to develop location-bound technical and political expertise for the Canadian oil sands. The challenge is even more acute when, in order to achieve the strategic objective of growing resource reserves, firms must operate in ever more complicated, remote and environmentally sensitive locations. While managing such local issues Shell must also work to meet the increasing global demand for energy and show investors around the world that the firm has reserves to replace those already developed, something the oil sands play a large role in (Macalister, 2008). Using the oil sands to grow the firm's resource reserves has been met with resistance because of global environmental issues like climate change. Greenpeace, along with other environmental organizations has openly criticized the firm for its reliance on the oil sands for future reserve growth, citing that developing these reserves will increase Shell's carbon intensity by 85 per cent (Hoyos, 2009).

This is an example of a general challenge facing multinationals operating in choice-limited locations: how to balance the global and local external pressures? The context of environmental pressures is particularly illustrative, as multinationals both face challenges and possess resources to address those challenges at the global and local level. We argue that it is particularly critical to examine dual pressures facing natural resource-seeking firms further as their internationalization decisions are often driven by gaining access to specific resources, where firms are bound by external factors that directly influence firm-level strategies and roles of the foreign subsidiaries. Such contexts create significantly different external pressures on the global versus local focus of foreign operations than where firms seek locations for efficiency reasons. As Bamberger states: "context counts

and, where possible, should be given theoretical considerations” (2008). When examining natural resource-seeking firms, we can expect to find high levels of integration in some areas where core knowledge, technology and resources can add value across borders. The industry is filled with large global competitors that create further pressures for a global focus. To exemplify, standard industry measures of efficiency such as finding costs per barrel or development costs per barrel are commonly used to compare performance of firms in the oil and gas industry (FT, 2007; Huber & Mills, 2005). At the same time, these firms need to address specific local needs related to regulations, and licensing as well as geological and environmental differences that create a need for local solutions to the operations. In this paper we will review current research on global versus local approaches in MNCs as well as current insights into oil and gas firms. We suggest a number of hypotheses intended to extend our current theoretical framework and finally conclude with a discussion of managerial implications.

Theoretical Background

Global Integration and Local Adaptation Tensions within MNCs

The strategic challenges of pursuing global integration versus local adaptation have been examined for decades. Earlier studies examined industry pressures for a global or local approach (Porter, 1986; Yip, 1989) and firm level emphasis on control and coordination mechanisms (Bartlett & Ghoshal, 1989; Prahalad & Doz, 1987). It is now commonly accepted that many firms seek a global approach to internationalization where activities and organizational units are integrated across national borders to achieve synergies and

efficiencies (Bartlett & Ghoshal, 1998; Prahalad & Doz, 1987; Asmussen, Pedersen, & Peterson, 2007).

Firms taking a global approach often have large multinational competitors and end products that do not require significant adaptation to each market. This creates pressures for efficiency, economies of scale, and taking advantage of potential synergies.

Successful integration depends on sufficient levels of control and coordination as well as an ability and mindset to transfer resources across national and organizational borders.

The transferability of resources is an underlying assumption of pursuing a global approach. Transferable resources can add value across several organizational and national boundaries (Harzing, 2002; Rugman & Verbeke, 2001; Verbeke, 2009, Dunning, 1998). Examples of transferable resources include specific knowledge or technology, organizational capabilities (e.g. ability to plan and execute large development projects) or established routines for a successful marketing roll-out (Verbeke, 2009).

Other contexts require firms to adapt to specific local needs where the value of transferring resources across borders may be lost due to location-specific characteristics that diminish the value of resources. Such firms need to develop resources that are specific to a particular area that may not be feasible or value adding to transfer to other locations. Examples of non-transferable resources include specific market knowledge and strong external relations to key local stakeholders (Verbeke, 2009).

Dual pressures in MNCs have indeed been recognized in previous studies. The seminal works Prahalad and Doz (1987) and Bartlett and Ghoshal (1989) address a form of dual pressure through the discussion of the multifocal and transnational MNCs. The multifocal firm, however, was primarily seen as a compromise to integration in order to gain support from local governments (Prahalad & Doz, 1987). Similarly, the transnational MNC recognizes different needs across foreign subsidiaries where some may need to be more responsive while other foreign subsidiaries create synergies and efficiencies by being closely integrated with the rest of the organization. In line with the transnational perspective, Nohria and Ghoshal (1994) identified the differentiated MNC, arguing that firms need to move away from treating all of their foreign subsidiaries the same.

Both the transnational and differentiated multinational take a firm level approach and primarily expect differences in global and local focus to surface across the foreign subsidiaries rather than within each foreign unit. Such differentiation, however, is recognized across foreign subsidiaries rather than within each foreign subsidiary. Subsequent research has shifted focus from approaching the issue at a firm level to subsidiary level strategy (Birkinshaw, 1998), subsidiary specific relations (Andersson et al, 2007), and different needs across functions (Carpano & Chrisman, 1995; Kim et al., 2003; Nobel & Birkinshaw, 1998; Hewett et al, 2003). Although differences in a global versus local focus may be more nuanced at a functional level, we argue in this paper that even within a function, firms may experience dual pressures. Environmental pressures on natural resource-seeking firms are a good example of where climate issues generate global challenges while each geographical location also experiences very local

environmental pressures such as the use of land, water, and energy in the Canadian Oil Sands.

MNC Internationalization Motives

Despite extensive efforts to gain better insights into the global versus local strategic challenges, existing empirical data on global versus local approaches in MNCs has overwhelmingly been based on efficiency-seeking firms. Four internationalization motives are commonly discussed in international management literature: market-seeking, efficiency-seeking, strategic resource-seeking, natural resource-seeking (Verbeke, 2009). We can expect the emphasis on global versus local pressures to vary greatly according to the firm's internationalization motives. Firms that internationalize based on efficiency-seeking motives often seek efficiency cost reductions and economies of scale through integration of value activities. The location of foreign operations will thus depend on where the firm can optimize their value activities according to these criteria. Firms with a natural resource-seeking motive, on the other hand are physically bound to locations where the natural resources are with significant differences in environmental pressures from location to location.

Significant differences in environmental pressures from location to location can be an issue for efficiency-seeking firms as well. However efficiency-seeking firms have a choice of whether or not to operate under those pressures. Some key factors efficiency-seeking firms use to choose locations are: freedom to trade, investment incentives, presence of suppliers, quality of infrastructure and institutions, availability of educational

programs (Dunning, 1998), policy instability, uncertainty in the costs of regulation (Tybout, 2000) and more recently, environmental risks (Condliffe and Morgan, 2009). Key factors that resource-seeking firms use to choose locations are the availability of resources, the presence of infrastructure that will allow the firm to develop the resources, investment incentives, and the presence of potential partners (Dunning, 1998). Manufacturing firms can (at a cost) exit locations or relocate to more favorable locations without abandoning the resources, as a resource-seeking firm would have to. This means that resource-seeking firms are much more limited in their ability to choose between locations, and thus can face country, political, or environmental risks that an efficiency-seeking firm would avoid. Natural resource-seeking firms must also deal with local issues around property rights over the resources the firm is producing as well as disruption of the natural environment that occurs during that production. Efficiency-seeking firms typically operate in existing developed areas and are considered to have a lower impact on the natural environment. We thus expect global and local pressures to influence the two types of firms differently. Yet, a literature search of the top management journals reveals that very few studies use natural resource-seeking firms as their empirical base.

Most studies have focused on manufacturing firms, which typically illustrate efficiency-seeking firms. While manufacturing firms commonly internationalize their operations due to efficiency and market-seeking motives, internationalization of some of the world's most influential firms seem to be driven by other motives. Six of the ten largest firms according to Fortune's Global 500 ranking in 2008 are natural resource-seeking firms (Fortune, 2008). More specifically, the six identified natural resource-seeking firms are

all vertically integrated oil and gas majors. We recognize that natural resource-seeking firms can also be efficiency-seeking firms, but their primary reason for internationalization is accessing natural resources. The existing research has examined global versus local pressures in a context that may exclude challenges facing some of our most influential multinationals. In the next section, we build towards expanding this literature (eg. Prahalad and Doz, 1987; Bartlett and Ghoshal, 1989; JArillo and Martinez, 1990; Harzing, 2002) by focusing our attention on studies set in the context of oil and gas. Studies that do focus on global versus local approaches at a functional level are also primarily based on data from manufacturing firms (Carpano & Chrisman, 1995; Kim et al., 2003; Nobel & Birkinshaw, 1998).

The Oil and Gas Industry Context

Our literature review revealed four general reasons why the oil and gas industry context was chosen as the focus of any given study: data or methodological issues, industry characteristics, uncertainty within the industry, and the environmental or social issues facing the industry. Data issues included the facilitation of data collection (Sharma and Vredenburg, 1998) and the containment of extraneous variables (Beale and Fernando, 2009). Industry characteristics included the presence of a large number of joint ventures (Kent, 1991) and the size of the organizations (Grant, 2003; Ketola, 1993). Uncertainty within the industry examples were centered around the oil crisis (Murray, 1989) but also included the sociopolitical history (Prasad and Mir, 2002) and general uncertainty in the industry (Grant, 2003). Finally, environmental and social issues facing the industry included the social pressures on the industry (Hastings, 1999; Sharma, 2000), the

environmental issues facing the industry (Beale and Fernando, 2009) as well as the ability of the industry to impact the environment (Ketola, 1993). These studies make various theoretical contributions, however none of them look how oil and gas firms manage the global and local pressures that the firm faces.

A timely and interesting example of the global and local pressures oil and gas firms experience is that of environmental pressures. Shell, a firm considered to be environmentally proactive, has recently experienced conflicting pressures in relation to their Oil Sands operations. When planning their oil sands operations, Shell must consider global and local pressures as well as how the firm will manage the combination of both. Shell is not unique in having to manage complex environmental issues as they impact all firms in the industry and have become a key strategic challenge.

Oil and gas firms are frequently criticized for their role in greenhouse gas emissions as well as their impact on forests, watersheds, and other local issues (Beale and Fernando, 2008). Climate change has emerged as the most prominent issue facing the oil and gas industry, with good reason. Climate change is considered a global problem that will “cut across every nation and sector of the economy, ultimately affecting every human being in one way or other” (Jeswani et al. 2008: 46). Regulation such as the Kyoto Protocol, which call to limit greenhouse gas emissions, have a major impact on oil and gas firms, forcing them to not only look at their emissions but also look at strategies for managing them. It is thus an area where we can identify issues that are important on a global level, such as climate issues, while simultaneously find many issues that are very local in nature

that differ across geographical locations. In the Canadian oil sands, for instance, water use, deforestation, and relations with aboriginal communities are all critical to address for successful operations. Multinational firms that operate in the Canadian oil sands must manage the local issues associated with oil sands production as well as the global issues, such as climate change. This is a particularly complex task as some of the social pressures associated with oil sands operations traditionally thought of as “local” are amplified by stakeholder attention paid to the MNCs at the global level.

Global versus local environmental pressures impacting oil and gas firms

Global environmental pressures in the oil and gas industry

Climate change and air pollution are two of the most pressing environmental concerns of our time, and have been a subject of organizational research for over a decade (Shrivastava and Scott, 1992). Not surprisingly, oil and gas firms are frequently cited as the main contributors to climate change, due to the fact that the industry develops oil, natural gas, and coal, all of which are main sources of greenhouse gas emissions (Beale and Fernando, 2008). Responses from oil and gas firms to climate change issues have been mixed. ExxonMobil, the world’s largest oil company, initially stood against climate change policy that limits emissions and has supported those who debate the science of climate change, while Royal Dutch Shell has admitted that climate change will impact the industry and supports the Kyoto Protocol (Beale and Fernando, 2008). These responses are also dynamic, with ExxonMobil becoming more open to climate-related concerns, and Royal Dutch Shell weakening its climate enthusiasm over time. Whatever stance the

organization takes on climate change, both must dedicate resources to dealing with the pressures associated with such global issues.

Kolk and Pinske (2008) discuss the factors that make dealing with global issues so difficult. They site governmental, societal, and market forces operating at various levels as contributing to the development of a global issue. This is especially true in cases like climate change, where “public opinion, regulation, competition, and scientific evidence” (Kolk and Pinske, 2008: 1360) are constantly changing the demands on multinational firms. Further to this, in a manner similar to pressure on multinational firms regarding local issues, firms must respond to stakeholders regarding their performance on more global issues in order to facilitate their license to operate. While manufacturing firms may have to consider how global issues impact their business, manufacturing firms do not undergo the same scrutiny regarding global issues that firms in the oil and gas industry must endure. The oil and gas industry is a huge target for stakeholders concerned with climate change, as shown by regulation such as the Clean Air Act (Hastings, 1999). With advances in technology providing greater access to information as well as easier means of communication across borders, multinational firms can no longer hide dirty operations in developing countries. Social activists have taken up global issues and scrutinize the actions of firms beyond their own border, again pressuring multinational firms to follow regulation and act in a socially responsible manner if they wish to operate without the global spotlight being placed on them (Edoho, 2007).

Firms internationalizing with a natural resource-seeking motive have competitors that are often global multinationals that seek synergies and learning across borders. The end products in the oil and gas industry are also commodities, which create significant cost pressures. The high level of investment in the production of oil reserves also puts pressure on firms to develop cost efficiencies, which are oftentimes used as performance measures for oil and gas firms (Financial Times, 2007). Efforts to transfer resources across borders and take advantage of existing resources on a global scale are therefore expected and required in order to compete successfully. In fact, current research demonstrates that transferring resources across organizational and national boundaries adds value to the organization and increases competitiveness in a global industry. Developing transferable resources allows firms to manage global pressures with global resources.

H1: Oil and gas firms face significant global external pressures that necessitate the successful transfer of resources across organizational and geographical boundaries.

Local environmental pressures in the oil and gas industry

Adding to the complication of dealing with global pressures is the necessity for the firm to respond to different local pressures at the same time. Oil and gas firms differ from manufacturing firms in their need to locate facilities where the resources they seek are, rather than where the most favorable local conditions (economic, political, and environmental) are found. For example, Condliffe and Morgan (2009) find that manufacturing firms that are considered heavy polluters take federal guidelines like the

Clean Air Act Amendments into consideration when deciding where to locate their plants. Oil and gas firms must choose between the limited locations where the resources are located and endure the economic, political, and environmental conditions of that region in order to develop the reserves. Relocation in the event of unfavorable conditions means the firm is giving up the opportunity to develop the resources in that region¹. Consequently, oil and gas firms typically choose to endure unfavorable conditions in order to develop the reserves the firm has invested in rather than divest.

H2: Oil and gas firms have fewer geographical location choices and subsequently on average lower levels of divestment than manufacturing firms.

The restriction in number of possible locations for an oil and gas firm force the oil and gas firm to face the local challenges associated with the location they operate in. Local challenges, or country risk, such as government policies and law enforcement, property rights, and the enforcement of contracts can pose great risk to organizations operating with the region (Feinberg and Gupta, 2009). Further to this, non-government organizations and social movements present themselves as critics and sometimes opponents for foreign multinationals operating in their region. Organizations like these advocate the preservation of natural resources and support the issues of local populations, and oftentimes mobilize local populations to fight for the right to have ownership of the resources found in their region.²

¹ Despite numerous violent acts from militant groups in the Niger Delta, Shell continues to operate in the region (Edoho, 2008).

² For example, Shell's operations in the Niger Delta led to stakeholders accusing the firm of "taking away the people's oil and polluting the environment without giving them anything in return" (Okonta, 2000,

In the oil and gas industry in particular, local stakeholders have responded to multinational organizations operating in their region. This could be due to the enormous size of multinational oil and gas firms, the ability of oil and gas firms to impact the environment, the capital intensity involved in natural resource production, property rights, and national sentiment. Ketola (1993) studied the environmental policies of the seven largest oil corporations in the world because of their size. The scope of the seven firms operations was larger than many nations, which also meant that their ability to impact the environment was also enormous. Oil and petroleum has been cited as one of the biggest contributors to environmental issues in the past (Shrivastava and Scott, 1992; Hastings, 1999). Oil and gas organizations also contribute to social issues. For example, building roads to previously remote areas allows outsiders in, along with disease and other social problems. Finally, property rights, national sentiment, and an increased awareness of the damage oil operations can have on the natural environment have led to great scrutiny of foreign multinationals operating in developing nations (Hastings, 1999). Efficiency-seeking firms will typically not choose to locate in areas where significant local responsiveness is required that can reduce the firms' overall efficiency. It is acknowledged that many efficiency-seeking firms do indeed respond in some ways to local needs, leaving few "true globals", but minor adjustments to end products lack the locally embedded approach often necessary to access and extract natural resources. As such, we can expect firms that internationalize with a natural resource-seeking motive to

quoted in Edoho 2008). Shell's lack of responsiveness to these accusations led to numerous acts of violence against oil firms in the region including closing flow stations for days at a time, effectively interrupting supply and raising awareness of stakeholder demands (such as provision of clean water) (Edoho, 2008).

experience some limitations on what resources they can successfully transfer across national borders.

What differentiates an oil and gas firm from a manufacturing firm is the option to choose which local pressures the firm will face. Knowledge gained from international experience can be developed into best practices and applied in other regions with similar local pressures (Bansal, 2005). Where a manufacturing firm can choose to locate in regions with similar local pressures, an oil and gas firm is forced to adapt to local pressures that exist where the resources are located.

H3: Oil and gas firms experience, on average, significantly higher levels of local pressures than manufacturing firms.

Because of the limited choice of location natural resource-seeking firms face and the increased stakeholder pressure these firms face, there is a greater need for oil and gas firms to respond to stakeholders. Natural resource-seeking firms are forced to deal with the local issues in an acceptable manner or face legitimacy questions of their own (Wheeler et al., 2002). In other words, in order to have a license to operate, firms must operate with high environmental and social standards, and respond accordingly to varying local pressures (Bansal, 2005).

H4: When compared to manufacturing firms it is more critical, on average, for oil and gas firms to respond to local stakeholder needs.

Managing global and local environmental pressures in the oil and gas industry

Multinationals have been criticized for assuming their entire organization can be treated uniformly where a difference in global or local emphasis can be expected across foreign subsidiaries (Nohria & Ghoshal, 1994). We argue that this differentiation is not only valid across foreign subsidiaries but also within the same unit. Birkinshaw and Hood (1998) identified that both internal and external factors influence the roles of the foreign subsidiaries. Most foreign subsidiaries in the oil and gas industry will experience significant pressures for local need when regulatory environments differ as well as the needs of local stakeholders and technical or geological challenges. The global industry competition simultaneously pushes firms to transfer existing resources (e.g. technology, knowledge and internal processes) to create synergies and exploit existing resources where possible. This differs from that previously discussed in literature in terms of the transnational organization (Bartlett & Ghoshal, 1998) or differentiated multinational (Nohria & Ghoshal, 1994) as previous studies have primarily emphasized potential differences in degrees of global integration or adapted to local needs across units in the multinational rather than within the same foreign subsidiary.

H5: Oil and gas firms require a complex organizational structure that enables the firm to manage the dual global and local pressures the firm faces.

Discussion and Conclusion

The dual environmental pressures facing multinationals in the oil and gas industry exemplify how firms internationalizing with natural resource-seeking motives experience strategic challenges that are not adequately captured in our current theoretical frameworks. In order to expand our existing theoretical boundaries, context specific research is proposed (Bamberger, 2008). In order to move beyond manufacturing firms (Merchant & Gaur, 2008) to context specific research we suggest building on the example of global and local environmental pressures. Current research has identified local pressures such as those faced by Shell in the Canadian oil sands as well as global pressures like climate change regulation. Shell must manage both local and global challenges at a firm level as well as within subsidiaries. Examining issues like this will allow researchers to explore strategic challenges faced by natural resource-seeking firms and highlight the different strategic challenges manufacturing and natural resource-seeking firms face. We argue that the impact of external environments differ according to the underlying internationalization motives. We have identified some of the expected differences in terms of environmental issues facing firms that internationalize with a natural resource-seeking motive.

We also suggest that research on subsidiaries look within the subsidiary. Research on subsidiaries has focused on subsidiary roles and the differences across subsidiaries. We believe that research should also look at the different pressures that exist within a subsidiary. Our example of the dual pressures faced by oil and gas firms exemplifies how

one subsidiary or one area within a subsidiary could face both local and global pressures. Insight into an issue like this is lost when the subsidiary is examined as a whole.

Shell provides an excellent example of how a natural resource-seeking firm faces different strategic challenges than a manufacturing firm. Shell has evolved over time to understand that working with local stakeholders is a necessary part of doing business. Today the organization still faces controversy. While considered an environmental leader amongst oil and gas firms, Shell continues to answer to environmental groups about how it will balance global issues such as the continued demand for energy with local issues like environmental degradation in Northern Alberta (Pembina, 2009). Context specific research will uncover how natural resource-seeking firms manage these issues and broaden our understanding of multinational corporations.

References

Andersson, U., Forsgren, M., and Holm, U. (2007). Balancing subsidiary influence in the federative MNC: a business network view, *Journal of International Business Studies*, 38/5, 802-818.

Asmussen, C.G., Pedersen, T., and Peterson, B. (2007). How do we capture “global specialization” when measuring firms’ degree of globalization? *Management International Review*, 47/6, 791-815.

Backer, L. (2009). When oil and wind turbine companies make green sense together, *Business Strategy and the Environment*, 18/1, 43-52.

Bamberger, P. (2008). Beyond contextualization: Using context theories to narrow the micro-macro gap in management research, *Academy of Management Journal*, 51/5, 839-846.

Bansal, P. (2005). Evolving Sustainably: A Longitudinal Study of Corporate Sustainable Development, *Strategic Management Journal*, 26/3, 197-281.

Bartlett, C.A. and Ghoshal, S. (1989). *Managing across borders: The transnational solution*, Boston: Harvard Business School Press.

Bartlett, C.A. and Ghoshal, S. (1998). *Managing across borders: The transnational solution (Second ed.)*, Boston: Harvard Business School Press.

Beale, F. and Fernando, M. (2009). Short-termism and genuineness in environmental initiatives: a comparative case study of two oil companies, *European Management Journal*, 27/1, 26-35.

Birkinshaw, J. and Hood, N. (1998). Multinational subsidiary evolution: Capability and charter change in foreign-owned subsidiary companies, *Academy of Management Review*, 23/4, 773-795.

Carpano, C. and Chrisman, J.J. (1995). Performance implications of international product strategies and the integration of marketing activities, *Journal of International Marketing*, 3/1, 9-27.

Condliffe, S., Morgan, A.O. (2009). The effects of air quality regulation on the location decisions of pollution-intensive manufacturing plants, *Journal of Regulatory Economics*, 36/1, 83-94.

Cragg, W. and Greenbaum, A. (2002). Reasoning about responsibilities: mining company managers on what stakeholders are owed, *Journal of Business Ethics*, 39/3, 319-335.

- Dunning, J.H. (1998). Location and the multinational enterprise: A neglected factor? *Journal of International Business Studies*, 29/1, 45-66.
- Dunning, J.H. (2001). The eclectic (OLI) paradigm of international production: Past, present and future, *International Journal of the Economics of Business*, 8/2, 173-190.
- Edoho, F.M. (2008). Oil Transnational Corporations: Corporate Social Responsibility and Environmental Sustainability, *Corporate Social Responsibility and Environmental Management*, 15/4, 210-222.
- Feinberg, S. and Gupta, A. (2009). MNC subsidiaries and country risk: Internationalization as a safeguard against weak external institutions, *Academy of Management Journal*, 52/2, 381-399.
- Fortune. (2008). Fortune global 500, Fortune, (July).
- FT. 2007. Oil mergers and acquisitions, Financial Times, Vol. January 31: online: New York
- Grant, R.M (2003). Strategic planning in a turbulent environment: evidence from the oil majors, *Strategic Management Journal*, 24/6, 491-517.
- Grönroos, C. (1999). Internationalization strategies for services, *Journal of Services Marketing*, 13/4-5, 290-297.
- Harzing, A.W. (2002). Acquisitions versus greenfield investments: International strategy and management of entry modes, *Strategic Management Journal*, 23/3, 211-227.
- Hastings, M. (1999). A New Operational paradigm for oil operations in sensitive environments: an analysis of social pressure, corporate capabilities and competitive advantage, *Business Strategy and the Environment*, 8/5, 267-280.
- Hewett, K., Roth, M.S., and Roth, K. (2003). Conditions influencing headquarters and foreign subsidiary roles in marketing activities and their effects on performance, *Journal of International Business Studies*, 34/6, 567-585.
- Hoyos, C. (2009). Shell oil sands project hit with fresh resistance. Retrieved July 11, 2009, from <http://royaldutchshellplc.com/2009/05/19/shell-oil-sands-projects-hit-by-fresh-resistance/>
- Huber, P. and Mills, M. (2005). *Oil, oil everywhere... Why is it expensive? Because it is so cheap*. The Wall Street Journal online: New York
- JArillo, J.C. and Martinez, J. I. (1990). Different roles for subsidiaries: the case of multinational corporations in Spain, *Strategic Management Journal*, 11/7, 501-512.

Jeswani, H., Wehrmeyer, W. and Mulugetta, Y. (2008). How warm is the corporate response to climate change? Evidence from Pakistan and the UK, *Business Strategy and the Environment*, 17/1, 46-60.

Kent, D.H. (1991). Joint ventures vs. non-joint ventures: an empirical investigation, *Strategic Management Journal*, 12/5, 387-393.

Ketola, T. (1993). The seven sisters: Snow whites, dwarfs or evil queens? A comparison of the official environmental policies of the largest oil corporations in the world, *Business Strategy and the Environment*, 2/3, 22-33.

Kim, K., Park, J.H. and Prescott, J.E. (2003). The global integration of business functions: A study of multinational businesses in integrated global industries, *Journal of International Business Studies*, 34/4, 327-344.

Kolk, A. and Pinkse, J. (2008). A perspective on multinational enterprises and climate change: Learning from "an inconvenient truth"? *Journal of International Business Studies*, 39/8, 1359-1378.

Okonta, I. (2000). The lingering crisis in Nigeria's Niger Delta and suggestions for a peaceful resolution. Retrieved July 11, 2009, from http://www.cdd.org.uk/resources/workingpapers/niger_delta_eng.htm

Macalister, T. (2008). Shell wants to produce five times more oil from tar sands. Retrieved July 11, 2009, from <http://www.guardian.co.uk/business/2008/mar/18/royaldutchshell.oil>

Makhija, M.V. (1993). Government intervention in the venezuelan petroleum industry: An empirical investigation of political risk, *Journal of International Business Studies*, 24/3, 531-555.

Marriott, J., Stockman, L. and Kronick, C. (2008). BP and Shell, rising risks in tar sands investments. Retrieved June 24, 2009, from <http://www.greenpeace.org/raw/content/norway/press/reports/bp-and-shell-rising-risks-in.pdf%20Sept%202008>

Merchant, H. and Gaur, A. (2008). Opening the "Non-manufacturing" Envelope: The next big enterprise for international business research, *Management International Review* 48/4, 379-396.

Murray, A.I. (1989). Top management group heterogeneity and firm performance, *Strategic Management Journal*, 10/Special Issue, 125-141.

Nobel, R. and Birkinshaw, J. (1998). Innovation in multinational corporations: Control and communication patterns in international R&D, *Strategic Management Journal*, 19/5, 479-496.

Nohria, N. and Ghoshal, S. (1994). Differentiated fit and shared values: Alternatives for managing headquarters-subsidiary relations, *Strategic Management Journal*, 15/6, 491-502.

Grant, J., Dyer, S. and Woynillowicz, D. (2009). Oil sands myths: Clearing the air. Retrieved June 24, 2009, from <http://pubs.pembina.org/reports/clearing-the-air-report.pdf>

Porter, M.E. (1986). Changing patterns of international competition, *California Management Review*, 28/2, 9-41.

Prahalad, C.K. and Doz, Y. (1987). *The multinational mission: Balancing local demands and global vision*, New York: Free Press.

Prasid, A. and Mir, R. (2002). Digging deep for meaning: A critical hermeneutic analysis of CEO letters to shareholders in the oil industry, *The Journal of Business Communication*, 39/1, 92-116.

Rugman, A.M. and Verbeke, A. (2001). Subsidiary-specific advantages in multinational enterprises, *Strategic Management Journal*, 22/3, 237-250.

Sharma, S. (2000). Managerial interpretations and organizational context as predictors of corporate choice of environmental strategy, *Academy of Management Journal*, 43/4, 681-697.

Sharma, S. and Vredenburg, H. (1998). Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities, *Strategic Management Journal*, 19/8, 729-753.

Shrivastava, P. and Scott, H. (1992). Corporate self-greenewal: strategic responses to environmentalism, *Business Strategy and the Environment*, 1/3, 9-21.

Tybout, J. (2000). Manufacturing firms in developing countries: How well do they do, and why? *Journal of Economic Literature*, 38/1, 11-44.

Verbeke, A. (2009). *International business strategy: Rethinking the foundations of global corporate success*, Cambridge University Press.

Wheeler, D., Fabig, H. and Boele, R. (2002). Paradoxes and Dilemmas for Stakeholder Responsive Firms in the extractive sector: lessons from the case of Shell and Ogoni, *Journal of Business Ethics*, 39/3, 297-318.

Yip, G.S. (1989). Global strategy...In a world of nations? *Sloan Management Review*, 31/1, 29-41.