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STRATEGIC MANAGEMENT IN A NATIONAL OIL CORPORATION: THE CASE OF LIBYA

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Abstract

This empirical study investigated senior managers' perceptions and application of strategic management in the Libyan National Oil Corporation (NOC). Key factors influencing the processes of strategic management were identified and overall findings have been compared with a model of strategic management. A case study approach was adopted, based on a two-stage research design. The first stage comprised of a survey involving seventy senior managers and was followed by twelve semi-structured interviews to deepen the questionnaire findings with qualitative data. Findings suggest that the Libyan NOC may have relied too heavily in the past on strategy formulation and strategic management as the preserve of a very few individuals at the top of the organization. Whilst political directives set the strategy for the whole organisation, a gap in knowledge and understanding existed between the senior business managers and the political appointments to the Board. The case study does not necessarily reflect the situation in other NOCs. Furthermore, it excludes the impact of the revolution in Libya. Recommendations have been made for improving practice concerned steps in the strategic management process and senior managers' effectiveness within the Board team. In the context of an example of a state-owned enterprise, the inclusion of three elements was suggested: Board effectiveness, medium-term objectives and social responsibility as an aspect of environmental scanning. This is a first time empirical study of senior managers' perceptions of strategic management in a National Oil Company.

Keywords: Strategic Management, Oil Corporation, Libya

Introduction

Strategy has traditionally been the preserve of senior managers, the CEOs (Chief Executive Officers) and MDs (Managing Directors), although it

is recognized that many more managers are now involved (Mintzberg, 1994; Wilson and Gilligan, 1997 and Analoui, 2002). Strategic management is “all that is necessary to position the firm in a way that will assure its long-term survival in a competitive environment”, appropriate to the latter situation (Dobson et al., 2004, p.3).

The last twenty years have seen increasing academic research into strategy and strategic management, more recently as a phenomenon that contributes to shaping countries (Whittington, 2006). Kotler et al. (1997) terms this ‘total national approach strategic market management’, linking company growth to national wealth and stressing the importance of strategic vision followed by implementation. Despite the importance of oil to both national and global economies, the literature review indicated a lack of relevant literature on strategic management in national oil companies (NOCs) (Marcel and Mitchell, 2006) except on issues of global concern such as politics, carbon emissions, global warming and security of energy supply. Even recent major research programmes have added little to the knowledge of this field, with Marcel and Mitchell (2006) the notable exception (Baker Institute, 2007). Since strategic management is inextricably linked with strategy and so both were taken into consideration with due regard for the specific context of the Libyan National Oil Corporation

This paper is based on the findings of a recent empirical study which aimed at exploring senior managers’ perceptions of strategic management processes in the Libyan NOC. In order to achieve this aim, first a brief review of the literature will be presented, then the methodology adopted and the findings of the study will be discussed in some detail and relevant conclusions will be reached.

A Brief Review of NOCs and Strategic Management:

State-owned enterprises producing a highly valuable global commodity, NOCs have to both create public value and deliver optimum profits over a maximum time-span for their country. From the day they were established, their purpose was more than producing oil and gas (McPherson, 2003). NOCs control approximately 80%-90% of world oil reserves (Marcel and Mitchell, 2006; Hartley and Medlock, 2007; www.worldbank.org), placing them in a global market in which market forces interact with political forces. It is therefore inevitable that their strategies and strategic management will be more complex than those of multinational oil companies and that expertise and excellence in strategic management are of critical importance. In addition, state owned enterprises share at least one key characteristic with public sector organisations, namely the constraints imposed on the available choice of strategies by the interplay of social needs, fiscal pressures and attendant political pressures (Joyce, 2000).

Despite their considerable control of reserves, it has been highlighted that NOCs face unprecedented challenges from the combination of national political expectations and market demands and they have to be competitive in both arenas (Marcel and Mitchell, 2006). NOCs in developing countries are often the political means of achieving a variety of objectives other than maximizing government revenues, for example employment of nationals and provision of food and other subsidies. Whilst the national mission can be difficult to identify, two strands have emerged: “(i) protecting the national hydrocarbon wealth and (ii) promoting economic development”, with the possible addition of a third, champion of political interests abroad (Stevens, 2008, p.6).

Furthermore, differences of structure, competition, operations and markets exert differing impacts on value creation (Tordo et al., 2011). Management of an NOC requires oil industry expertise and public administration expertise with a high level of political skill; politicians and political advisers, and managers and leaders from very different backgrounds and disciplines have to work together to formulate and implement strategy. An additional layer of complexity was identified in the range of operational, professional and strategic roles within a state owned enterprise. The complexity related to “strategic business-boundary issues, pricing decisions, resource acquisition and mobilisation issues”, control and “political visibility” (Lioukas et al, 1993, p.646). A negative relationship between the intensity of control and market factors such as competition and unpredictability of demand has less impact on NOCs due to OPEC policies and quotas.

Understanding NOC’s management requires taking into consideration the notion that Schools of Management thought, strategy and strategic management have evolved over time (Peterson et al., 2003). It has been proposed (Johnson et al., 2008) that a particular approach to management is suited to specific conditions of high or low uncertainty and controllability in the environment.

For oil-producing countries like Libya who seek, even in highly uncertain environments, maximum sustained yield to develop and diversify their economies (World Bank, 2006; OPEC, 2006), this poses a potential problem. The use of scenario planning by OPEC (2006) indicates acceptance that the environment in which they operate is highly uncertain and largely outside their control, despite continuing reliance on the regulation of oil supplies to influence prices. However, oil exploration and extraction also requires long term planning associated with sustained commitment of significant resources (Jaffe and Soligo, 2007).

Approaches to strategy have also evolved. There are widely recognized differences between strategy formulation and implementation,

between strategy that mainly concerns long-term planning and strategy aimed at responding to changes in the business environment, and between strategy at the corporate, business unit and functional level. In addition, approaches to strategy can be classified into four broad groups: classical, processual, evolutionary and systemic (Analoui and Karami, 2003, p.50). Whereas a classical approach assumes a stable environment, evolutionary assumes a response to change in order to achieve profit maximisation, processual emphasizes the ways of formulating strategy, and systemic emphasizes the whole organisation operating in its environment (Whittington, 2001).

Various models of strategic management were considered for the theoretical model. Three particularly influential approaches were examined: the 'rationalist', 'evolutionary', and 'processual' schools of strategic management. It can be said that in general the rationalist school of strategic management is related to the classical school of management and assumes that it is possible to find the one best strategy through a process of rational decision making. The evolutionary school in contrast assumes that decision making is not always rational and that companies react to changes in their environments, therefore the strategy may only be clearly visible in hindsight. The 'processual school' is different in that it places the emphasis on the process of creating strategy. However, the underlying stages of strategy formulation and the tasks they entail appear in similar terms in all approaches.

Consideration was given to the design school of strategy model developed by Mintzberg (1994), scenario planning (Schwartz, 1996), the Wheelen and Hunger model (1998), public sector strategic management (Joyce, 2000) and the strategic planning cycle in the private oil majors (Grant, 2003). Although Grant's model is the only one derived from research in oil companies, it is based strongly on the annual planning cycle with forecasts, scenarios and assumptions have been based on trends and built into the planning guidelines, a factor which limits its general applicability.

It is argued that the Wheelen and Hunger model, which includes scanning of the external and internal environments, applies to all sectors. The strength of this model lies in the clarification of the tasks involved in each stage; mission, objectives, strategies and policies in the strategy formulation stage. However, it does not take account of the types of working relationships and associated tasks that are commonly found in NOCs.

However, NOCs have been shown to be created with specific political, social and economic purposes in mind. Hence, the theoretical model selected as the basis for this study was that developed by Karami (2007). Karami's model clearly places the mission as the first step, followed by scanning the internal and external environments in order to develop the

organisation's long term objectives. The long term objectives are broken down into short term objectives on the one hand, and on the other are combined to form a grand strategy. This sequence is followed by the production of operating strategies, policies, implementation of strategy and control and evaluation.

The review of the literature also identified a number of important factors that influenced senior managers' perceptions of the strategic management process, as represented. These were grouped under the headings of internal and external factors, and personal characteristics; together they shaped senior managers' perceptions of the process of strategic management, which in turn shaped the process itself. The impact of this sequence on establishing and achieving strategic objectives of company goals then fed back into the internal factors affecting senior managers' perceptions.

These influences on senior manager's perceptions (effectiveness), together with board effectiveness formed the framework of analysis for making sense of the the data collected during the fieldwork.

Scope of the study and methodology

The study aimed to explore the senior managers' perception of strategic management. In order to achieve this aim following objectives were perused. These are;

- To explore senior managers' awareness, and involvement in formulation, implementation, and evaluation processes of strategic management in Libyan oil companies;
- To identify whether there were aspects of strategic management as perceived by senior managers that had worked well and why;
- To clarify the role and influence of the public sector in the management of oil companies; and,
- to assess the implications of the research, including identification of management development needs for senior managers of state owned oil companies as a whole.

The methodology for this study was a combined approach employing a quantitative approach and supported by qualitative data gathered from interviews. Data were analysed in accordance with the views of Bryman (2008) and Creswell (2009) that quantitative and qualitative approaches can complement each other. The principal data collection instrument was a structured questionnaire which used a variety of closed, multiple choice, open and Likert scale questions to elicit information within categories derived from the literature review. The categories were: perceptions of strategy and strategic management, formulation of strategic management, implementation of strategic management, applicability of strategic management to the NOC, factors influencing strategic management

processes in the NOC and strategic management influence on aspects of operations. Content validity was assured by a process of peer review and review by expert academics, while a Cronbach's alpha value of 0.85 indicated a very good level of reliability.

For the questionnaires, a response rate of just under 30% in useable form was achieved (70 of 252), a good rate for top and senior managers (See Table One). Twelve semi-structured interviews followed, with interviewees selected on the basis of their roles, the variety of roles, and a spread from different types of company within the NOC (exploration, production, technical support, logistics, consultancy and support services). Triangulation of data was facilitated by the use of secondary data from Libyan oil companies' policies and records in addition to primary data from questionnaires and interviews.

Findings

Regarding perceptions of strategy and strategic management, senior managers recognized the long term, high level nature of strategy and strategic management. The majority perceived strategy to be the preserve of the most senior level of management, typically identifying their job roles as contributing to implementation and, to a lesser extent, providing information to be used in long term planning. More were aware of a written statement of strategy than of a written mission statement or systematic approach to strategic management. Some evidence indicated confusion between strategic and operational plans.

The implementation of strategic management in NOC took the form of implementation of long-term plans which were prepared in a context where, despite the overall framework for strategic management being one of a classical, rationalist approach, the external environment was considered far less important than in-country factors. Whereas the role of middle managers was understood to be one of implementation, the quality of leadership was considered to be very important. The twin influences of company and country were evident in the main aim of strategy formulation; profitability and productivity (company perspective) and maximizing revenue to fund public services (country perspective).

With regard to the applicability of strategic management, implementation of strategy was seen as having a moderate rather than a significant impact on organizational performance. Typically, strategy was reviewed through monthly reports, 6-monthly technical meetings and exceptional Board meetings for urgent matters. Despite the acknowledgement that a systematic approach to strategic management in the future could result in greater impact, many senior managers interpreted their role in terms of high level supervision, aimed at ensuring compliance with

budgets, rules and regulations. The relevance of strategy was considered to be related to achieving maximization of revenue (See Table One).

Table 1. Perceptions and applicability of findings: summary

Perception of strategy and strategic management	65% were aware of a written strategic plan 41% perceived a systematic approach to strategic management Strategic plans required political approval
Formulation of strategic management in NOC	80% thought strategic planning essential for future success 61% did not know how often long term strategic plans were prepared Senior managers had little opportunity to apply strategic management knowledge
Implementation of strategic management in NOC	80% said strategic management influenced operational decision making, organisational effectiveness and developing and implementing business plans The main aims of strategic management were profits, profitability and productivity
Applicability of strategic management for NOC	44% said the company strategic plan was reviewed annually 90% said consideration of organisational structure, costings and standard procedures was important for strategy implementation 85% rated internal strengths as more important than internal weaknesses of external factors

Source: Data Analysis

Senior managers identified the principal factors influencing strategic management processes in NOC companies as internal rather than external factors. In particular they stressed the importance of capacity utilization and political stability and, in the short term, history has proved them correct. Although social and cultural trends were seen as slightly less influential, it was recognized that senior managers' relationships and social networks could disrupt organizational performance if they were used inappropriately. OPEC helps to buffer NOCs against external shocks, therefore buyer and supplier influence and changes of strategic plan were seen as not very important, unlike inter-company domestic rivalry. Strategic management is perceived as partly applicable (long-term planning, maximizing revenue, and maintaining company position in the domestic market).

Overall, findings concerning the influence of strategic management on various aspects of operations suggest that the training already received in strategy and strategic management had not had sufficient time to be fully embedded in the oil companies, especially in view of the substantial tradition of strategic planning rather than strategic management in the oil industry worldwide. There remained a strong tendency towards operational rather than strategic management (See Table Two).

Table 2. Influences on and exerted by strategic management

Factors influencing strategic management processes in NOC	Industry strength, political stability and capacity utilization were seen to exert most influence 90% thought senior managers' effectiveness an important factor, followed by technological know-how, HR capability and superior product quality
Strategic management influence on aspects of operations	81% cited influence on organisational effectiveness 77% cited influence on overall performance, profitability and quality 14% said it affected neither organisational effectiveness nor the achievement of objectives The impact on organisational culture was perceived to be less

Source: Data Analysis

One aspect of this study was to test the applicability of Karami's model, in which mission is the first step in strategy formulation, to the context and practices of the Libyan NOC. A comparison between the model and the data obtained in the study revealed several key differences. In the Libyan NOC companies, senior managers mostly exhibited a medium level of strategic awareness but had relatively little involvement in strategy formulation. However, in spite of extensive and regular reporting of progress against the operational plans created from the corporate strategy, there was little evidence to show that the strategy itself was reviewed. Therefore, certain modifications have been proposed to Karami's model to enable it to fit the context of the Libyan NOC.

Discussion

In contrast to the findings of Karami (2007) there was no evidence that younger managers were more aware of the strategic orientation of the company. Greater awareness was related to being in specific roles, mainly in the corporate centre of the NOC, with awareness and understanding at the very top filtering down through the organisation chiefly as operational plans. Despite the assertion by the Minister of Planning (Essaleh, 2010) that the NOC had developed a clear vision and a focused and differentiated strategy of vertical integration based on an understanding of changes in the environment, only the two most senior managers interviewed referred to key elements of the strategy. Without a shared understanding of the overall strategy, NOC companies and the overall organization are vulnerable in times of change and in particular when there is a change of leadership at the top of the organization.

Strongly centralized strategy formulation and decision-making are said to result in less openness to corporate change (Kolk and Levy, 2001). In the case of Shell, openness to change has been actively promoted through the

adoption of scenario-based planning to both intentionally consider the impact of radical changes in the operating environment and explore options for responding to them, and to challenge traditional thinking among senior managers (Kolk and Levy, 2001). The majority view of Libyan NOC managers, that formulation and implementation were the remit of top management, supported by rigorous monitoring of operations, bore out the findings of Alsaed (2000).

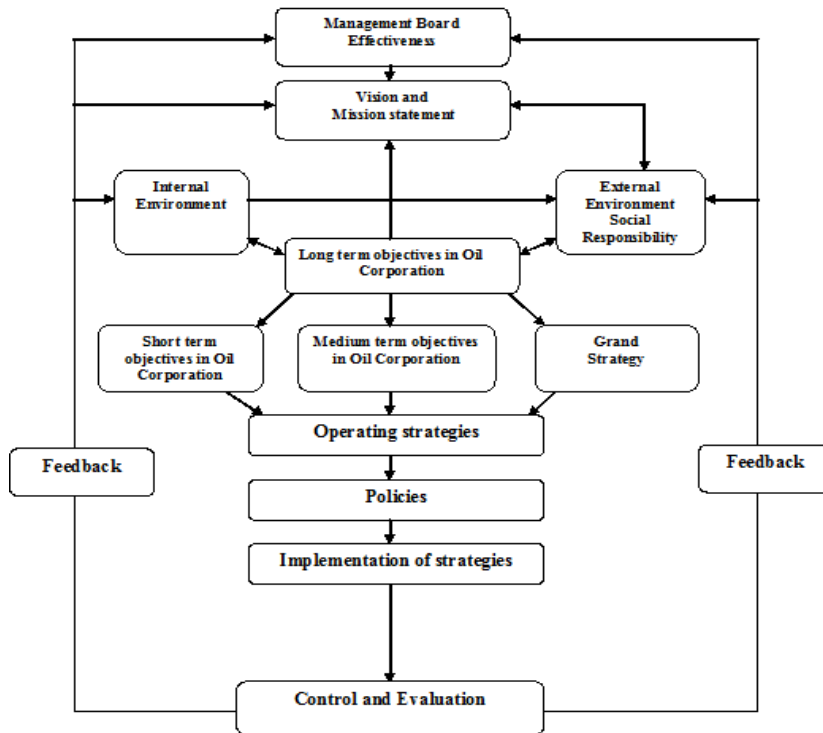
Corporation strategy was formed and implemented at corporate level as identified by Analoui and Karami (2003) and strategies for the industry and business could be identified in response to the existence of a country strategy, as suggested by White (2004). However, there was a general lack of clarity about where strategic plans might be and what they might contain, in contrast to Thompson and Strickland (2003) who asserted that strategic plans were needed at the level of the business. Furthermore, there was little evidence of scanning the environment, in contrast with the findings of Analoui and Karami (2003).

Human resource management did not contribute to the strategy but followed it, with no evidence that internal and external factors from environmental scanning played any part in their planning; the conversation about human resource management as a strategic partner (Garavan, 2007) had not yet started in the Libyan NOC. This makes it difficult for NOC companies to ensure they have the right human resources in place at the time when they are needed, which increases the likelihood of being unable to fulfil the revenue requirements of the government. As stated by Hamel and Prahalad (1994), the ultimate resource available to an organization is their human resource, therefore a strong and sustainable organization needs to be supported by a strategic and robust approach to human resource management.

Findings were more closely associated with Joyce (2000) who suggested that the classical rational strategic management approach was appropriate to an emphasis on performance delivery. Unlike Joyce's businesslike model, however, there was no evidence that power was delegated: urgent issues were always dealt with at very senior level. This confirmed the difference in knowledge between politicians and NOCs and the tension between policy and strategy for oil identified by Castellani and Marcel (2005). Moreover, the strategy formulation process was closest to the model of corporate planning identified in private oil companies by Grant (2003). In summary, strategy was formulated using a rationalist corporate planning model and driven by political imperatives with the state as owner setting political rather than personal objectives which then drove the vision and mission of the NOC companies.

Three distinct changes in the proposed model for National Oil Corporations have been recommended. Firstly, the effectiveness of the management board team as a whole is required as a first step because without an effective board in place, an organization is unable to develop strategy and strategic management. Therefore the researchers proposed that Board effectiveness is included as the first stage of the model.

Figure 1: Proposed model of Strategic Management for State-owned Corporations



Source: Authors

The gap in knowledge and understanding between political appointments to the Board and senior managers needs to be addressed at Board level through the provision of intensive development courses or working seminars, with the modified

The implications for oil companies in Libya are considerable, in particular in view of the enormous changes that the whole country is experiencing. The mission and vision have been continued to be set by the Transitional National Council and thereafter the General National Congress. However, the key players will in all probability need facilitation and support to enable them to produce a meaningful statement that can be translated into company strategies and policies, in preference to a simply aspirational statement. However, at the level of the NOC and individual companies, a

major effort of training and development is required to enable them to produce business strategies reflecting the corporate strategy in addition to what are currently long term operational objectives.

It should be noted that the fieldwork was conducted just before the radical changes brought about by the events of 2011 in Libya. It has not been possible to assess as yet what impact these events may have had on the NOC, although strikes related to political appointments and militia action to cease oil production in protest at perceived unfairness of revenue distribution have been widely reported in the media. During the same period, a mission and vision statement has been developed, but there is a lack of in-depth information about how the NOC Board has developed this. Pressures of work in addition to political pressures make it difficult to interview Board members and the sensitivity of much of the information itself means that a complete picture would in any event be difficult to obtain

Conclusion

It has been shown that the predominant approach to strategic management in the Libyan NOC was long range planning. Corporate strategy was largely determined by political factors and imperatives; hence the inclusion of social responsibility and associated government policies within external factors was highlighted as an important aspect of environmental scanning. The majority of senior managers were ambivalent about the overall contribution of strategic management to the individual oil companies and the NOC. Regarding the applicability of strategic management to Libyan oil companies, whilst its usefulness in its current form was clearly understood, there was less recognition that a different approach could be even more useful, as the importance of external factors and stakeholder relationships was not recognized. Contextualization of the recent model of strategic management has shown that amendments to the model would better reflect the situation in the Libyan NOC.

Changes of Board membership could provide opportunities for intensive workshops aimed at reducing the gap in knowledge and understanding between political appointments to the Board and senior managers.

References:

Abozed, M., Melaine, Y. & Saci, K. (2009). *The Influence Of Work Environmental Factors On Motivation To Transfer Management Training: Case Study Of The Libyan Oil Industry*. Paper presented at 4th Annual Conference Liverpool BEAN online at http://www.ljmu.ac.uk/BLT/BUE_Docs/BEAN_Conference_2009_GH.pdf [last accessed 15 Dec 2010]

- Alkhafaji, A.F. (2003). *Strategic management: formulation, implementation, and control in a dynamic environment*. Binghamton, NY: The Haworth Press, Inc.
- Alsead, M.A. (2000). *Strategic Management: Concepts and Practice*. Egypt
- Analoui, F. (2007). *Strategic Human Resource Management*. London: Thomson Learning
- Analoui, F. (2002). What motivates senior managers?: The case of Romania. *Journal of Managerial Psychology* 15 (4), 324-340.
- Analoui, F. & Karami, A. (2003). *Strategic Management in Small and Medium Enterprises*. London: Thomson Learning
- Baker Institute (2007). *Policy Report 35: The Changing Role of National Oil Companies in International Energy Markets*. Houston: James A. Baker III Institute for Public Policy. Online at <http://www.rice.edu/energy/research/nationaloil/index.html> [accessed 15 October 2009]
- Baxter, K. (2009). *Libya's National Oil Company bids for UK refinery*. 9 August 2009 available online at <http://www.arabianoilandgas.com/article-5978-libyas-national-oil-company-bids-for-uk-refinery/> [last accessed 20 September 2009]
- Bryman, A. (2008). *Social research methods*. Oxford: Oxford University Press
- Castellani, J-M. & Marcel, V. (2005). *The NOC Mission and Strategy: Good Governance in Oil and Gas Producing Countries*. Chatham House, 24-25 February 2005 available online at http://209.85.229.132/search?q=cache:2cIs5Z5NeukJ:www.chathamhouse.org.uk/files/6385_ggjmcc.ppt+strategy%2BNOCs&cd=3&hl=en&ct=clnk&gl=uk [accessed 15 August 2009]
- Creswell, J.W. (2009). *Research design: qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage
- Essaleh, A. (2010). *NOC vision and strategy Review of structure and organization in view*. Libya: NOC
- Garavan, T.N. (2007). A Strategic Perspective on Human Resource Development *Advances in Developing Human Resources*, 9 (1), 11-30.
- Grant, R.M. (2003). Strategic planning in a turbulent environment: Evidence from the oil majors *Strategic Management Journal*. 24 (6), 491–517.
- Hamel, G. & Prahalad, C.K. (1994). *Competing for the Future*. Boston: Harvard Business School Press
- Hartley, P. & Medlock, K.B. (2007). *A Model of the Operation and Development of a National Oil Company* Monograph. Houston, TX: James A. Baker III Institute for Public Policy, Rice University
- Jaffe, A. & Soligo, R. (2007). *The International Oil Companies report for the Baker Institute*. Online at

- <http://www.rice.edu/energy/publications/nocs.html> [last accessed 16 April 2010]
- Johnson, G., Scholes, K. & Whittington, R. (2008). *Exploring Corporate Strategy* 8th ed. Essex: Pearson Education Limited
- Johnson, G., Scholes, K. & Whittington, R. (2005). *Exploring Corporate Strategy: Text and Cases: Enhanced Media Edition* 6th ed. London: Prentice Hall
- Joyce, P. (2000). *Strategic Management for the Public Services*. Buckingham: Open University Press
- Karami, A. (2007). *Strategy Formulation in Entrepreneurial Firms*. Andover: Ashgate
- Kolk, A. & Levy, D. (2001). Winds of Change: Corporate Strategy, Climate Change and Oil Multinationals *European Management Journal*. 19 (5), 501–509.
- Kotler, P., Jatusripitak, S. & Maesinsee, S. (1997). *The Marketing of Nations: Strategic Approach to Building National Wealth*. New York: Simon and Schuster Ltd
- Lioukas, S., Bourantas, D. & Papadakis, V. (1993). Managerial Autonomy Of State-Owned Enterprises: Determining Factors *Organization Science*, 4 (4), 646-666. Online at <http://www.lbs.aueb.gr/images/LBS/Downloads/Publications/Journals/J5.pdf> [accessed 17 August 2009]
- McPherson, C. (2003). National Oil Companies: Evolution, Issues, Outcomes in *Fiscal Policy Formulation and Implementation in Oil-Producing Countries*. In Davis, J.M., Ossowski, R. and Fedelino, A. (eds.) 2003 Washington, DC, International Monetary Fund
- Marcel, V. & Mitchell, J.V. (2006). *Oil titans: national oil companies in the Middle East*. London: Chatham House Brookings Institution Press
- Mintzberg, H. (1994). *The Rise and Fall of Strategic Planning*. New York: Free Press
- OPEC (2006). *Long Term Strategy*. Vienna: Organization of the Petroleum Exporting Countries
- Peterson, G.D., Cumming, G.S. & Carpenter, S.R. (2003). Scenario Planning: a tool for conservation in an uncertain world *Conservation Biology*, 17 (2), 358-366.
- Schwartz, P. (1996) *The Art of the Long View*. New York: Doubleday Business
- Stevens, P. (2008). *A Methodology for Assessing The Performance of National Oil Companies: Background Paper for a Study on National Oil Companies and Value Creation*. Washington, D.C: The International Bank for Reconstruction and Development/The World Bank
- Thompson, A.A. & Strickland, A.J. (1992). *Strategy Formulation and Implementation* Boston: Irwin

- Tordo, S., Tracy, B.S. & Arfaa, N. (2011). *National Oil Companies and Value Creation* World Bank Working Paper No. 218
- Wheelen, T.L. & Hunger, J.D. (1998). *Strategic management and business policy: Entering 21st century global society*. Reading, Mass: Addison-Wesley
- Whittington, R. (2006). Completing the Practice Turn in Strategy Research *Organization Studies*. 27, 613-634.
- Whittington, R. (2001). *What is Strategy and Why does it Matter?* London: Cengage Learning EMEA Higher Education
- Wilson, R.M.S. & Gilligan, C. (1997). *Strategic Marketing Management: Planning, Implementation and Control*. 2nd ed. Oxford: Butterworth and Heinemann
- World Bank Social and Economic Development Group (2006). *Socialist People's Libyan Arab Jamahiriya: Country Economic Report*. Middle East and North Africa Region Report No. 30295-LY Document of the World Bank Available online at www.imf.org/external/pubs/ft/scr/2007/cr07149.pdf [accessed 8 August 2009]