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Global Petroleum Market Entry Risk Assessment and Opportunity Mining Through Comparison Matrix Approach

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Abstract

Escalation of per-barrel crude prices is expected to continue on an inflation adjusted basis in the foreseeable future according to most analysts. Rising prices are largely attributed to market forces fueled by surging world economy and growing demand, particularly in Asia and Middle East. Relatively flat rates of exploration and exploitation success have been unable to keep pace with that growth, leading to tight supplies. Politics, weather, speculation and other factors further contribute to supply uncertainty.

International Oil Companies (IOCs) face competition from other IOCs as well as from entrepreneurial national oil companies (NOCs) aggressively looking to develop assets domestically and overseas, and reserve replacement remains a challenge as suppliers try to gain access to incremental upstream resources in order to meet growing demand. NOCs no longer remain in a simple asset management role for domestic resources; rather, many entrepreneurial NOCs have joined the fray alongside IOCs in pursuit of E&P resources outside national boundaries.

Besides straight E&P initiatives, associated major projects and services are also expanding internationally. With the growing number of international ventures in the petroleum and energy market, the significance of market entry risk assessments has also increased correspondingly. Timely, objective basis for decision-making provides a distinct business advantage in a dynamic global market. Consistent application of the Rajan-Vikas model^{1,2} enables rapid screening of candidate markets as relevant to the project or initiative. Other model artifacts include risk characterization profile for the various countries, and relevance profiles for each project or initiative. Different forms of these various profiles, in turn, lend themselves to mining for opportunities once a substantial knowledgebase is built. The focus of this paper is on potential opportunities exposed when the Rajan-Vikas model is applied for market entry risk assessments.

Introduction

The global energy balance is changing, as growth rates slow down in the western developed nations, while countries in Asia and the Middle East are developing rapidly, and energy demand has also grown correspondingly. Oil consumption in OECD Europe, for instance, increased from 13.7 MMbbl/d in 1990 to 15.5 MMbbl/d in 2005, net 1.8 MMbbl/d. Over the next 15 years that oil consumption is expected to only increase 0.1 MMbbl/d. On the other hand, oil consumption in India, China, Russia, and FSU countries is expected to grow dramatically. These global shifts in demand growth will define the future oil markets.

International energy initiatives, particularly in the petroleum sector, have accelerated in the past decade. As capacity becomes obsolete and demand continues to rise in the energy industry, the International Energy Agency projects steadily increasing needs for capital investment in this sector³. Most of the investment needs, as a matter of fact, relate to developing countries. Although unit development cost in OECD countries is higher, at 20% share of total upstream spending in the Middle East, relative increase in contribution to global production is not as large. Large portions of upstream investment may actually occur outside OECD countries; those investments and many projects in the Middle East, however, will still relate directly to supply of crude and products to OECD countries. Rapidly developing Asian countries such as India and China will greatly influence the global balance of energy in coming years. Between 2003 and 2006 China alone accounted for over a third of the 4.75 MMbbl/d increase in world petroleum consumption⁴. Previously no more than custodians of their national E&P