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Rapid Country Entry Risk Screening Using Objective Relevance-Weighted Model for Transnational Petroleum Initiatives

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Abstract

In OECD Europe, oil consumption increased from 13.7 MMbbl/d in 1990 to 15.5 MMbbl/d in 2005, net increase 1.8 MMbbl/d. Oil consumption is expected to rise only 0.1 MMbbl/d in OECD Europe over the next 15 years. In Russia and FSU countries, though, oil consumption is expected to dramatically increase in next 15 years after years of low consumption levels. Moreover, developing Asia and Middle East is expected to reshape future oil markets. As Rate of Reserve Replacement continues to be challenged, 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. A disproportionately large fraction of reserves are controlled by a few NOCs. Downstream resources are similarly pursued by NOCs and IOCs alike.

Rapid, objective risk assessment of potential countries or regions targeted for petroleum investments has become an increasingly essential part of business development in an equally dynamic global market. Though a critical decision point for transnational ventures, Country Entry Risk Screening remains time consuming, complex, often subjective, and generally provides no basis for objective comparison between candidate locations.

Application of the Rajan-Vikas model¹ enables apples-to-apples comparison between shortlisted countries or regions. Applicable to IOCs, NOCs, or Service Companies (SCs) alike, the model uses scores on a consistent relevance-weighted risk factors matrix to perform simplified objective assessment of a potential country or region under consideration. Screening of candidate locations prior to actual project due diligence is greatly expedited. Model application produces reusable artifacts for quick future reference or input for later detailed project risk management.

Introduction – Global Market Perspective

At the time of writing this paper, per-barrel crude prices were creeping inexorably closer to the \$150 mark. Most analysts agree that \$200 per barrel of crude in the near future does not sound as unthinkable as it did just a few months ago^{2,3}, when we just getting over the shock of \$100 crude. Market forces fueled by surging world economy and growing demand, particularly in Asia and Middle East has contributed largely to tight supplies and inexorably rising prices, and speculation has further exacerbated the situation.

Viable large-scale alternatives to petroleum remain elusive. Political positioning and hype continue to bolster the myth of bio-fuels in the public eye. Inflationary trends are in evidence across the globe in a domino effect from the rising energy prices and increased bio-fuel production is causing food prices to rise^{4,5}. Ultimately, an equilibrium price may be expected for crude prices, but realistically, grain-based ethanol cannot provide significant relief towards meeting increased world fuel demands. While it is imperative that the ethanol mandates must be watched, basic petroleum production has to gear up for the challenge. Technological advances may bring some previously uneconomic or unreachable resources within reach, and exploration may yield new discoveries. Rate of reserve replacement, regardless, will continue to be a challenge to IOCs as well as NOCs.

International energy initiatives, particularly in the petroleum sector, have accelerated in the past decade. The International Energy Agency projects steadily increasing needs for capital investment in the energy industry as capacity becomes obsolete and demand continues to rise⁶. Most of the investment needs, as a matter of fact, relate to developing countries. Although unit