



Technical Session 2013 SPEE Annual Meeting

Risk Adjusted Values in Exploration Portfolio Management

Chris Moore

Maximizing Expected Present Value predicts that firms will seek 100% working interest in attractive ventures. However, firms frequently desire less than the entire working interest, and clearly pay much less than EPV to participate. This management behavior is often explained as the result of firms' risk aversion.

Although there is little published evidence that firms routinely calculate Risk Adjusted Values (RAV), we find that they provide a useful way to quantify risk aversion. Methods of deriving RAV and an Optimum Working Interest are available in the literature. Previous studies have tended to concentrate on defining a firm's Risk Tolerance, a necessary input in determining RAV.

We have expanded the use of RAV in a number of ways. Firstly, we believe that a firm's RT is not a single value, but varies by business unit to match the strategic direction of the firm. Secondly, we show examples to illustrate the use of RAV in (a) rationalizing the Fair Market Value of exploration portfolios, (b) defining the relative contributions of firms' exploration assets in mergers and acquisitions, (c) assessing farm-out premiums and targeting potential farminees, and (d) selecting aligned partners for bidding groups.



BIOGRAPHY

Chris Moore has been a Managing Director with Moyes & Co., Inc. in Dallas, Texas since 2000. Prior to joining Moyes he held a variety of technical, financial and managerial positions with BP, Tricentrol, ARCO British, and ARCO International. He has over 35 years of industry experience.

At Moyes, Chris provides consulting services primarily in the areas of economic analysis and valuations, and more generally in commercial aspects of the upstream industry, including expert testimony for arbitration and litigation.

Chris read Natural Sciences at the University of Cambridge, receiving BA (Hons) and MA (Cantab) degrees. He is a Fellow of the Geological Society of London, and a member of the AAPG and SPE. He is active with the Association of International Petroleum Negotiators, and co-chairs the AIPN's Oil and Gas Asset Valuation & Decision Analysis Workshop.

Chris Moore
Managing Director
Moyes & Co