

Economic Risk In Hydrocarbon Exploration

Eventually, you will unconditionally discover a new experience and triumph by spending more cash. still when? complete you tolerate that you require to get those all needs next having significantly cash? Why dont you try to acquire something basic in the beginning? Thats something that will lead you to comprehend even more roughly speaking the globe, experience, some places, gone history, amusement, and a lot more?

It is your entirely own grow old to accomplish reviewing habit. among guides you could enjoy now is **Economic Risk In Hydrocarbon Exploration** below.

[The Taxation of Petroleum and Minerals](#) - Philip Daniel 2010-04-15

Oil, gas, and mineral deposits are a substantial part of the wealth of many countries, not least in developing and emerging market economies. Harnessing some part of that wealth for fiscal purposes is critical for economic development. This book shows how the harnessing in few areas of economic life are the returns to good policy.

[Energy Finance and Economics](#) - Betty Simkins 2013-02-19

Thought leaders and experts offer the most current information and insights into energy finance Energy Finance and Economics offers the most up-to-date information and compelling insights into the finance and economics of energy. With contributions from today's thought leaders who are experts in various areas of energy finance and economics, the book provides an overview of the energy industry and addresses issues concerning energy finance and economics. The book focuses on a range of topics including corporate finance relevant to the oil and gas industry as well as addressing issues of unconventional, renewable, and alternative energy. A timely compendium of information and insights centering on topics related to energy finance Written by Betty and Russell Simkins, two experts on the topic of the economics of energy Covers special issues related to energy finance such as hybrid cars, energy hedging, and other timely topics In one handy resource, the editors have collected the best-thinking on energy finance.

[Decision Analysis for Petroleum Exploration, 3. 0 Edition](#) - Paul D. Newendorp 2013-08-12

This is a major rework of Paul Newendorp's 1975 best-seller, which became the standard reference in the field. This book is now structured as a handbook of over 330 important concepts in risk and economic decision analysis. As the title suggests, well over half the examples apply to petroleum exploration investment decisions. Perhaps 80% of the topics are generally applicable to capital investment, project management, and operations decisions. Topics in the book represent a composite of evaluation practices and problem-solving approaches now commonly used in oil & gas and other capital-intensive industries. Several important and practical techniques were first published in the first edition. Decision analysis methods apply to any type of decision. The emphasis here is on quantitative methods useful in capital investment decisions and decisions to acquire additional information. This will be of special interest to anyone involved in the evaluation of property acquisitions, geophysical surveys, prospect drilling, and field development decisions. This book is intended for petroleum geologists, engineers, geophysicists, evaluation and planning analysts, and managers. This is not a first book in decision analysis. We presume the reader has a general familiarity with management, economics, decision analysis, and knowledge of the oil & gas industry. As a handbook we are

focusing on what is most important and practical. Major topic areas include the decision analysis process, key concepts in probability and statistics (including Bayes' rule and easy equivalents), decision policy (including risk policy expressed as a utility function), popular economic metrics and concepts, project and enterprise modeling, decision tree analysis, Monte Carlo simulation, and various special topics. Value of information problems receive special attention. Over 270 figures help illustrate the concepts. The expected value (EV) concept is central throughout. Most often we assume a decision policy that maximizes EV. Most of the discussion presumes a business context and measuring outcome as net present value (NPV). We also describe approaches for multi-criteria decision making including HSE. Expected monetary value (EMV = EV NPV) is the principal decision criterion used in most examples. The EV calculation incorporates judgments about risks and uncertainties expressed as probabilities and probability distributions. EV is the cornerstone of formal, quantitative analysis for decisions under uncertainty. The key calculation methods are decision trees and Monte Carlo simulation. Small decision trees can be solved with a hand calculator, while larger trees and Monte Carlo simulation usually require a computer. Software supporting these methods is now widely available as Microsoft(r) Excel(r) spreadsheet add-ins and for other platforms. The material is organized into seven sections: Decision Analysis Process, Probability and Statistics, Decision Policy, Economic Matters, Modeling, Decision Tree Analysis, and Monte Carlo Simulation. Throughout, real-world exploration examples are presented to illustrate the risk and decision analysis methods. This revised 3.0 edition features a larger page format, an updated and expanded bibliography, and an extensive glossary. We also offer additional material online, including extended discussions, software resources, and example Excel spreadsheets.

Computing Risk for Oil Prospects - John Warvelle Harbaugh 1995

The petroleum industry is enduring difficult financial times because of the continuing depressed price of crude oil on the world market. This has caused major corporate restructuring and reductions in staff throughout the industry. Because oil exploration must now be done with fewer

people under more difficult economic constraints, it is essential that the most effective and efficient procedures be used. *Computing Risk for Oil Prospects* describes how prospect risk assessment — predicting the distribution of financial gains or losses that may result from the drilling of an exploration well — can be done using objective procedures implemented on personal computers. The procedures include analyses of historical data, interpretation of geological and geophysical data, and financial calculations to yield a spectrum of the possible consequences of decisions. All aspects of petroleum risk assessment are covered, from evaluating regional resources, through delineating an individual prospect, to calculation of the financial consequences of alternative decisions and their possible results. The bottom lines are given both in terms of the probable volumes of oil that may be discovered and the expected monetary returns. Statistical procedures are linked with computer mapping and interpretation algorithms, which feed their results directly into routines for financial analysis. The programs in the included library of computer programs are tailored to fit seamlessly together, and are designed for ease and simplicity of operation. The two diskettes supplied are IBM compatible. Full information on loading is given in Appendix A - Software Installation. Risk 1 diskette contains data files and executables and Risk 2 diskette contains only executables. The authors contend that the explorationist who develops a prospect should be involved in every facet of its analysis, including risk and financial assessments. This book provides the tools necessary for these tasks. *Economic Risk in Hydrocarbon Exploration* - Ian Lerche 1999-01-08 *Economic Risk in Hydrocarbon Exploration* provides a total framework for assessing the uncertainties associated with exploration risk from beginning to end. Numerous examples with accompanying microcomputer algorithms illustrate how to quantitatively approach economic risk. The text compares detailed assumptions and models of economic risk, and presents numerical examples throughout to facilitate hands-on calculations using popular spread-sheet packages on personal computers. Covers economic risk from exploration through production models Brings methods to a level where all can be done on a PC Analyzes

numerical examples from the real world Removes "mystery" from how economics is done Addresses assumptions in models and shows how they influence projections

Petroleum Exploration and Production Rights - Silvana Tordo 2010

The paper aims to provide practical information to policy makers on the advantages and disadvantages of various practices used by petroleum producing countries to allocate exploration, development, and production rights.

Project Valuation and Decision Making under Risk and Uncertainty applying Decision Tree Analysis and Monte Carlo Simulation - Donald Dibra 2015-04-28

This work presents the application of the Monte Carlo Simulation method and the Decision Tree Analysis approach when dealing with the economic valuation of projects which are subjected to risks and uncertainties. The Net Present Value of a project is usually used as an investment decision parameter. Using deterministic models to calculate a project's Net Present Value neglects the risky and uncertain nature of real life projects and consequently leads to useless valuation results. Realistic valuation models need to use probability density distributions for the input parameters and certain probabilities for the occurrence of specific events during the life time of a project in combination with the Monte Carlo Simulation method and the Decision Tree Analysis approach. After a short introduction a brief explanation of the traditional project valuation methods is given. The main focus of this work lies in using the Net Present Value method as a basic valuation tool in conjunction with the Monte Carlo Simulation technique and the Decision Tree Analysis approach to form a comprehensive method for project valuation under risk and uncertainty. The extensive project valuation methodology introduced is applied on two fictional projects, one from the pharmaceutical sector and one from the oil and gas exploration and production industry. Both industries deal with high risks, high uncertainties and high costs, but also high rewards. The example from the pharmaceutical industry illustrates very well how the application of the Monte Carlo Simulation and Decision Tree Analysis method, results

in a well-diversified portfolio of new drugs with the highest reward at minimum possible risk. Applying the presented probabilistic project valuation approach on the oil exploration and production project shows how to reduce the risk of losing big.

Modeling the Impact of Taxes on Petroleum Exploration and Development - Mr. James L. Smith 2012-11-27

We present a simple model of petroleum exploration and development that can be applied to study the performance of alternative tax systems and identify potential distortions. Although the model is a highly simplified, it incorporates many factors and some of the key tradeoffs that would influence an investor's investment behavior. The model recognizes the role of enhanced oil recovery and treats the impact of taxation on exploration and development in an integrated manner consistent with an investor's joint optimization of investments at both stages of the process. The model is simple and user-friendly, which facilitates application to a broad range of problems.

Challenges in Balancing Government and Investor Interests Under a Production Sharing Agreement - Nzila Masunga Masunga 2017-07-14

Seminar paper from the year 2014 in the subject Business economics - Law, , language: English, abstract: This paper argues that, although the government is fully confident that there has been enough exploration success to justify higher government take and increase other socio-economic benefits under the new terms, there remain challenges towards encouraging foreign investment in petroleum exploration and development activities in the country. A critical aspect of an oil and gas exploration and production agreement is balancing the interests of the state and investors. The broad objective of any resource rich government is to insure that it maximizes as much revenues as possible from its natural resource and insuring that there is always an appropriate level of investment in exploration and development activities in the country. The investors on the other hand are interested to maximize as much profit as possible by minimizing the costs, quick recovery of these costs and working with stable governments. In order to ensure a sustainable

development of exploration and development activities in the country these varying state and investor's interest has to be balanced.

Oil Exploration - Ian Lerche 1992

This book presents the quantitative procedures for assessing predictions of potential oil recovery (basin size, hydrocarbon content), and economic impact (exploration cost, production, transport, refining). Emphasis is placed on advances made in analytical methods and improved techniques developed during the last decade. The book is intended for oil exploration personnel in industry, graduate students in economic geology, and researchers in petroleum engineering.

Decision Analysis for Petroleum Exploration - Paul D. Newendorp
2017-07-20

Decision Analysis for Petroleum Exploration By Paul D. Newendorp

Petroleum Economics and Risk Analysis - Mark Cook 2021-01-29

Petroleum Economics and Risk Analysis: A Practical Guide to E&P Investment Decision-Making, Volume 69, is a practical guide to the economic evaluation, risk evaluation and decision analysis of oil and gas projects through all stages of the asset lifecycle, from exploration to late life opportunities. This book will help readers understand and make decisions with regard to petroleum investment, portfolio analysis, discounting, profitability indicators, decision tree analysis, reserves accounting, exploration and production (E&P) project evaluation, and E&P asset evaluation. Includes case studies and full color illustrations for practical application Arranged to reflect lifecycle structure, from exploration through to decommissioning Demonstrates industry-standard decision-making techniques as applied to petroleum investments in the oil and gas industry

The Art of Exploration - Uli Weber 2013-05-22

The upstream oil business is an important branch to employ people with geo-scientific education. Beyond clear geological HC-schoolbook-traps there is a certain gap between pure geosciences and a final G&G model in hydrocarbon exploration. The absolute knowledge of geosciences about Mother Earth will always remain on an intermediate level somewhere in between zero and hundred percent. Aiming from such

trusted intermediate standpoint for a final scientific solution of a given exploratory problem, the number of possible G&G models would increase to infinity then. Geosciences provide the general technical platform for all exploratory tasks, but to achieve the final decision level for a monetary investment in hydrocarbon exploration a human filter must be added to this G&G technology. Such human filter consists of the personal experience of people and the solid technical brain trust of upstream oil companies. Solely this human filter could delimitate the number of possible scientific solutions in hydrocarbon exploration to just one final G&G model which has then to face the economic project hurdles and the exploratory risk. It's a fully normal behaviour when human beings are permanently trying to avoid risks because we all have an immanent adherence to safeness. But in hydrocarbon exploration only those characters will be successful who could accept a failure to be a landmark on their way to success. The discrepancy amongst pure geosciences and the requirements of hydrocarbon exploration may be generally defined to be the gap in experience between a junior and a senior G&G position in the upstream oil business. This book aims to close this gap with a closer look on the basic requirements of hydrocarbon exploration. In addition, this book describes the general economic rules of the upstream oil business and tries to pass some practical information to the next generation of explorationists. At the very end, to become explorationists in the upstream oil branch, people with university degrees in Geology and Geophysics must learn to stand up again after having drilled a failed wildcat and fight for their next project chance in hydrocarbon exploration with the same unbowed belief.

Inverse and Risking Methods in Hydrocarbon Exploration - Ian Lerche 2005

This book looks at how modern developments have enhanced the utility of basin analysis in hydrocarbon exploration. A major factor is modern computing power, which enables complex Monte Carlo-type calculations to be rapidly carried out; a second is the transfer of concepts from the economic arena to the theatre of hydrocarbon production, for example setting risking procedures to cope with data uncertainties. In addition

now there are available powerful methods for handling the determination of parameters in the highly non-linear world of equations describing various facets of basin analysis. Th.

Crude Oil Exploration in the World - Mohamed Younes 2012-03-16
"Crude Oil Exploration in the World" contains multidisciplinary chapters in the fields of prospection and exploration of crude oils all over the world in addition to environmental impact assessments, oil spills and marketing of crude oils.

Economic Analysis of Oil and Gas Engineering Operations - Hussein K. Abdel-Aal 2021-02-25

Engineers seek solutions to problems, and the economic viability of each potential solution is normally considered along with the technical merits. This is typically true for the petroleum sector, which includes the global processes of exploration, production, refining, and transportation. Decisions on an investment in any oil or gas field development are made on the basis of its value, which is judged by a combination of a number of economic indicators. *Economic Analysis of Oil and Gas Engineering Operations* focuses on economic treatment of petroleum engineering operations and serves as a helpful resource for making practical and profitable decisions in oil and gas field development. Reflects major changes over the past decade or so in the oil and gas industry Provides thorough coverage of the use of economic analysis techniques in decision-making in petroleum-related projects Features real-world cases and applications of economic analysis of various engineering problems encountered in petroleum operations Includes principles applicable to other engineering disciplines This work will be of value to practicing engineers and industry professionals, managers, and executives working in the petroleum industry who have the responsibility of planning and decision-making, as well as advanced students in petroleum and chemical engineering studying engineering economics, petroleum economics and policy, project evaluation, and plant design.

Economic and Political Incentives to Petroleum Exploration - Jeremiah D. Lambert 1990

To find more information about Rowman and Littlefield titles, please visit

www.rowmanlittlefield.com.

Development Geology Reference Manual - Diana Morton-Thompson 1993

Quantification and Prediction of Hydrocarbon Resources - A.G. Doré 1996-12-17

The oil price shocks of the mid-1980s and their aftermath created radical changes in the petroleum industry, and underlined the need for reliable information on petroleum resources. Integration between the disciplines of petroleum geology, exploration geophysics, reservoir/petroleum engineering and economics became a necessity for resource management and strategic planning. This volume is designed to bring together some of the best techniques evolved to meet these challenges. The very broad scope of the volume, ranging from the macro (global) to micro (field and prospect) level, provides an overview of the thought processes currently prevalent in the industry and academia on the subject of resource quantification and prediction. This is one of the first books to cover the extensive assembly of hydrocarbon quantification and prediction techniques - of value to petroleum industry management, geoscientists, engineers and economists. Containing hundreds of illustrations, some in colour, the book is arranged in 26 chapters with a detailed subject index. Many service companies and university departments with links to the industry will also find much to interest them.

Petroleum Exploration and Production Rights - Silvana Tordo 2010

Many governments rely on oil companies to efficiently exploit natural resources. Governments have the challenging task of deciding which companies should be awarded exclusive rights to explore, develop, and produce their petroleum resources, and on what conditions such rights should be awarded. This paper analyzes the available evidence on the advantages and disadvantages of various systems used by petroleum-producing countries to allocate petroleum exploration, development, and production rights, and considers the policy implications of each system. The experience of six petroleum-producing countries is presented in detail, and numerous other examples are provided to derive lessons of

wider applicability. The paper presents various conclusions for policy makers about the optimal design of allocation systems.

Petroleum Exploration Strategies in Developing Countries - 1982
Papers presented at the United Nations Meeting on Petroleum Exploration Strategies in Developing Countries, held from 16-20 March 1981 at the Netherlands Congress Centre, the Hague.

Petroleum Investment Policies in Developing Countries - Nicky Beredjick 1988

Twelve chapters cover a wide variety of topics, including finance, contracts, political risk insurance, legal issues, economics, and technical cooperation. All treatment of these subjects focuses on conditions expected to exist in the mid 1990s. No subject index or bibliography. Annotation copyright

Economic Problems Related to Oil and Gas Exploration - Maurice Mainguy 1976

Reviews problems related to the economics of petroleum exploration. Chapter 1, a general discussion and introduction, looks into the taxation of producers' surplus and the return on risk investment. Chapter 2 relates the subject to Asia. Chapters 3 and 4 examines China's potential and the future of oil and gas in east Asia respectively. The epilogue makes observations on the world future of hydrocarbons.

The Economics of Oil and Gas - Xiaoyi Mu 2020

Economic Study of Oil and Gas Exploration - Roshdy Ebrahim 2018-03-14

One of the characteristics of oil in its early exploration and production has been the requirement of large capital investments for exploratory activity associated with unexplored fields surrounding new oil reserves, and costly development expenditures that are subsequently needed for extension and expanding of such fields once they were explored. Therefore, the evolution of the oil industry had not been and cannot be treated in a manner of a mom-and-pop enterprise in which capital has yet to turn into a well-developed process of concentration and centralization. On the other hand, in the late nineteenth century, Taylorism was just

giving rise to standardization and thus automated assembly line mass production in need of capital on a scale beyond individual wealth. That is why oil was characterized by the assemblage of several financial syndicates for the venture of exploration in both the United States and abroad. And it is the minimum size of capital that in part plays a pivotal role in development of capitalist competition in oil and in other businesses. The genesis of hydrocarbon can be traced to colonial fusion of capitalistically developed and undeveloped parts of the world--a world whose overwhelming majority had not yet lived within capitalism proper. Exploration for petroleum originated in the latter part of the nineteenth century when geologists began to map land features that were favorable for the collection of oil in a reservoir. Of particular interest to geologists were outcrops that provided evidence of alternating layers of porous and impermeable rock. The porous rock (typically a sandstone, limestone, or dolomite) provides the reservoir for the petroleum while the impermeable rock (typically clay or shale) prevents migration of the petroleum from the reservoir. A basic rule of thumb in the upstream (or producing) sector of the oil and gas industry has been (and maybe still is in some circles of exploration technology) that the best place to find new crude oil or natural gas is near formations where it has already been found. The financial risk of doing so is far lower than that associated with drilling a rank wildcat hole in a prospective, but previously unproductive, area. you can get all the information about exploring oil and gas, economics, physics, and engineering information

Economics of Petroleum Production: Profit and risk - Ian Lerche 2004

Report :Original ISBN not available, alternate ISBN recorded Comments :ISBN 9780906522233 replaced with 9780906522240.

Risk Analysis and Management of Petroleum Exploration Ventures - Peter R. Rose 2001

Oil and Governance - David G. Victor 2011-12-08
National Oil Companies (NOCs) play an important role in the world

economy. They produce most of the world's oil and bankroll governments across the globe. Although NOCs superficially resemble private-sector companies, they often behave in very different ways. Oil and Governance explains the variation in performance and strategy for NOCs and provides fresh insights into the future of the oil industry as well as the politics of the oil-rich countries where NOCs dominate. It comprises fifteen case studies, each following a common research design, of NOCs based in the Middle East, Africa, Asia, Latin America and Europe. The book also includes cross-cutting pieces on the industrial structure of the oil industry and the politics and administration of NOCs. This book is the largest and most systematic analysis of NOCs to date and is suitable for audiences from industry and academia, as well as policy makers.

Oil and Gas Exploration and Production - Nadine Bret-Rouzaut 2011
With contributions by D. Babusiaux (IFP Energies nouvelles), S. Barreau (IFP Energies nouvelles), P.-R. Bauquis (Total), N. Bret-Rouzaut (IFP Energies nouvelles), A. Chétrit (Total), P. Copinschi (IFP Energies nouvelles), J.-P. Favennec (IFP Energies nouvelles), R. Festor (Total), E. Feuillet-Midrier (IFP Energies nouvelles), M. Grossin (Total), D. Guirauden (Beicip), V. Lepez (Total), P. Sigonney (Total) et M. Valette (Total). The first edition of this book has been selected for inclusion in Choice's annual Outstanding Academic titles list. It has been rewarded for its excellence in scholarship and presentation, the significance of its contribution to the field, and its value as important treatment of the subject. The steps that lead to the production of oil and gas are diverse, complex and costly. They are diverse because the detection of oil and gas involves input from many specialties, ranging from geology to reservoir engineering. They are complex, as shown by the development of the job of the petroleum architect, who coordinates all the operations. They are costly, as the investments for exploration and production represent more than half of all investments in the oil and gas sector. Moreover, exploration is a risky activity, both from the technical and financial viewpoint: only one well in five produces marketable oil. Meanwhile, the areas for exploration and production are spread throughout the world. This book provides a complete overview of the stakes and challenges

involved in oil and gas exploration and production. Following a historical review and a survey of the markets, the technical phases are covered, as are the evaluation of reserves, the estimation of investments and costs, the decision-making and control processes, and the accounting, legal and contractual environment for these activities. The book concludes with a discussion of the role of safety, and of environmental and ethical issues. This work, which is designed for readers concerned with the various aspects of the oil and gas upstream sector, is accessible to all. This second edition takes into account the huge changes in the oil and gas industry, particularly the large increases in oil prices, investments and costs observed since the first edition. This book is available in French under the title "Recherche et production du pétrole et du gaz". Contents :
1. Petroleum: a strategic product. 2. Oil and gas exploration and production. 3. Hydrocarbon reserves. 4. Investments and costs. 5. Legal, fiscal and contractual framework. 6. Decision-making on exploration and production. 7. Information, accounting and competition analysis. 8. Health, safety, the environment, ethics. Bibliography. Glossary. Index.

Technical Guidance for Petroleum Exploration and Production Plans - Tarek Al-Arbi Omar Ganat 2020-03-31

This book presents detailed explanations of how to formulate field development plans for oil and gas discovery. The data and case studies provided here, obtained from the authors' field experience in the oil and gas industry around the globe, offer a real-world context for the theories and procedures discussed. The book covers all aspects of field development plan processes, from reserve estimations to economic analyses. It shows readers in both the oil and gas industry and in academia how to prepare field development plans in a straightforward way, and with substantially less uncertainty.

An Introduction to Exploration Economics - R. E. Megill 1971

Oil Exploration - Ian Lerche 2012-12-02

This book presents quantitative procedures for assessing predictions of potential oil recovery (basin size, hydrocarbon content), and economic impact (exploration cost, production, transport, and refining). Emphasis

is placed on advances made in analytical methods and improved techniques developed during the last decade.

Petroleum Economics and Engineering, Third Edition - Hussein K. Abdel-Aal 2013-12-14

This book explains how to apply economic analysis to the evaluation of engineering challenges in the petroleum industry. Discussion progresses from an introduction to the industry, through principles and techniques of engineering economics, to the application of economic methods. Packed with real-world examples and case studies demonstrating how to calculate rate of return, discounted cash flow, payout period, and more, *Petroleum Economics and Engineering, Third Edition* assists petroleum engineers, chemical engineers, production workers, management, and executives in sound economic decision-making regarding the design, manufacture, and operation of oil and gas plants, equipment, and processes. The fully revised third edition is updated to reflect key advancements in petroleum technology and expanded to include chapters on middle stream operations, known as surface petroleum operations (SPO), and natural gas processing and fractionation. By looking globally at the hydrocarbon industry, the improved text offers the reader a more complete picture of the petroleum sector, which includes the global processes of exploration, production, refining, and transportation.

Oil and Gas Exploration and Production - Denis Babusiaux 2007

The steps that lead to the production of oil and gas are diverse, complex and costly. They are diverse because the detection of oil and gas involves input from many specialties, ranging from geology to reservoir engineering. They are complex, as shown by the development of the job of the petroleum architect, who coordinates all the operations. They are costly, as the investments for exploration and production represent more than half of all investments in the oil and gas sector. Moreover, exploration is a risky activity, both from the technical and financial viewpoint: only one well in five produces marketable oil. Meanwhile, the areas for exploration and production are spread throughout the world.

Economics of Petroleum Production: Value and worth - Ian Lerche 2004

Report :Original ISBN not available, alternate ISBN recorded Comments :ISBN 9780906522233 replaced with 9780906522240.

Exploration and Economics of the Petroleum Industry - 1981

Geological Risk and Uncertainty in Oil Exploration - Ian Lerche 1997

Oil exploration is a high-risk game. With worldwide drilling success of only 10% and a typical price tag of \$15 million per well, it is no surprise the oil industry seeks better methods of managing financial risk. *Geological Risk and Uncertainty in Oil Exploration* answers this need by identifying the various uncertainties associated with basin analysis and incorporating this information into probabilistic models of basin evolution in relation to oil accumulation. Oil and gas explorationists, strategic resource economists, and petroleum professionals who deal with scientific uncertainty and risk issues will benefit from the book's systematic treatment of how to quantify the uncertainty associated with a variety of geological, geophysical, and geochemical problems. The origin of uncertainties associated with flexural plate motion models, dynamical models of sediment evolution, thermal models of sediment maturation, hydrocarbon kinetic models, fault models, and models of basinal sediment fill and turbidite flows are detailed in the first section. The subsequent incorporation of model uncertainties into probabilistic models of basin evolution and behavior constitutes the second half of the book. Throughout, the author interweaves a discussion of scientific probability, risk, and strategy within the context of improving our ability to assess strategic hydrocarbon resources. Key Features * Integrates quantitative knowledge of basin analysis with scientific uncertainty and economic risk to create an informed, integrated hydrocarbon exploration strategy * Instructs the reader in handling a variety of geological, geophysical, and geochemical problems by applying quantitative methods to determine uncertainty * Is student-friendly--each chapter opens with a general introduction to the subject and concludes with a review and discussion of the major concepts * Includes numerous appendices containing ancillary data, equations, and examples

Petroleum Exploration Economics and Risk Analysis - Paul D. Newendorp
1987

Exploration and Economics of the Petroleum Industry - 1966

Hydrocarbon Exploration and Production - Frank Jahn 1998-03-13
This book on hydrocarbon exploration and production is the first volume

in the series *Developments in Petroleum Science*. The chapters are: The Field Life Cycle, Exploration, Drilling Engineering, Safety and The Environment, Reservoir Description, Volumetric Estimation, Field Appraisal, Reservoir Dynamic Behaviour, Well Dynamic Behaviour, Surface Facilities, Production Operations and Maintenance, Project and Contract Management, Petroleum Economics, Managing the Producing Field, and Decommissioning.