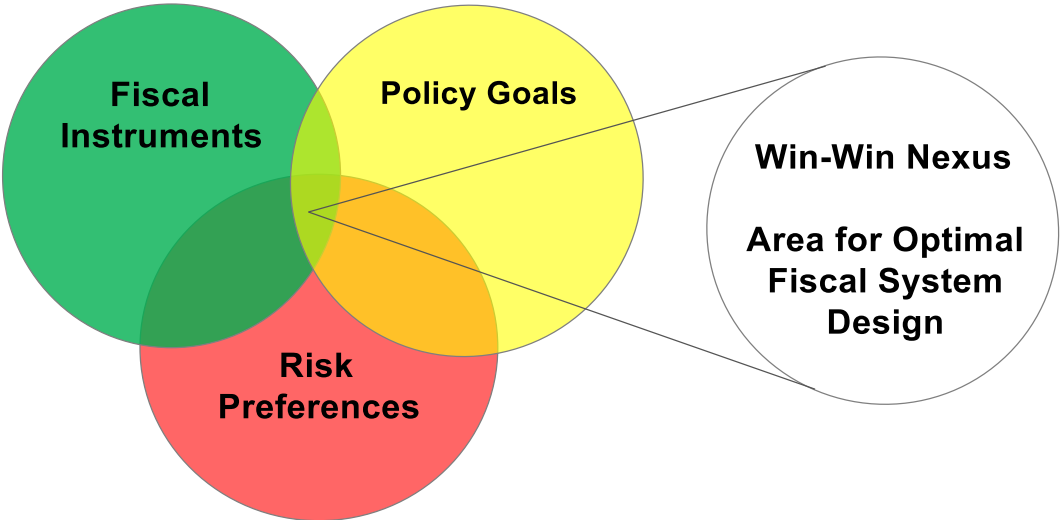


**Course Outline**

**Applied  
Upstream  
Petroleum Fiscal Modeling  
&  
Economics**

**Course Leader: Barry Rodgers**

# Fiscal Systems Nexus



# Upstream Petroleum Fiscal Modeling & Economics

## Day 1 – Morning (0830:12:00)

### Introduction

- Participants Introductions & Goals
- Course Objectives
- Introduction to PEET – Course Model Inputs, Outputs, and Capabilities

### Review

- Economics Concepts; e.g., Definitions of Costs, TVM, Discounting
- Investment Decision Making Criteria; e.g., EMV, VRI, NPV, ROR

### Fiscal Systems Context

- Government Share, Economic Rent, & Divisible Income
- Fiscal Systems Classification
- Fiscal Policy Nexus – Fiscal Instruments, Policy Objectives, and Risk Tolerances
- Resource Policies
  - Promote Exploration
  - Promote Net Back Price Maximization
  - Promote Maximum Efficient Development of Reserves
  - Promote Cost Efficient Development of Resources.
  - Gas development, differentiation of oil and gas terms
  - Economic Policies
  - Encourage Job Creation, Investment, and Re-Investment
  - Maximizing Domestic Economic Growth
  - Frontier/Regional Development

### Fiscal Instruments - Getting Started

- Fiscal Instruments - Bonuses, Rentals, Royalties
- Signature Bonuses, Production Bonuses
- Rentals & Acreage Management
- Fixed and Sliding Scale Royalties
- Severance Tax
- Royalty In-Kind or Gross Revenue
- Royalty Valuation
- Royalty Variations - Jurisdictional Comparisons
- Other Variations: e.g.,
- Value Added Tax Import Duties, Excise Tax, Property Taxes, Carbon Levies

### *Exercises*

# **Upstream Petroleum Fiscal Modeling and Economics**

## **Day 1 – Afternoon (13:15:17:00)**

### **Corporate Income Tax**

- Corporate vs Project
- Taxable Income
- Treatment of Operating Costs
- Intangibles vs Tangibles
- Depreciation and Amortization
- Treatment of Interest
- Treatment of Subsidies
- Carry Forwards and Backwards
- Tax Rates
- Tax Credits
- Depletion Allowance
- Home Country Treatment of Foreign Tax
- Country Variations
- Stand Alone and Consolidated

### ***Exercises***

# Upstream Petroleum Fiscal Modeling and Economics

## Day 2 – Morning (0830:12:00)

### Production Sharing

- Definition
- Conceptual Variations – Indonesia, Egypt, Others
- Allocation Petroleum
- Cost Petroleum – Definitions and Rates
- Cost Petroleum Limit
- Profit Petroleum – Definition and Rates
- Special Features; e.g., Excess Cost Petroleum, First Tranch Petroleum
- Treatment of Interest and Deemed Interest
- Interaction of Production Sharing and Royalties
- Interaction of Production Sharing and Corporate Income Tax
- Domestic Market Obligation
- Booking Reserves
- Production Sharing System Comparisons; e.g, Indonesia, Angola, Gabon, China, Libya

### Service Fee Contracts

- The Service Fee System
- Variations; e.g., Angola, Bolivia, Ecuador, Iran, Iraq, Kuwait, Venezuela
- Criticisms/Evolution

### *Exercises*

# Upstream Petroleum Fiscal Modeling and Economics

## Day 2 – Afternoon (13:15:17:00)

### Profit Sharing

- Corporate Income Tax Variations
  - Hydrocarbon Tax; e.g., Norway, United Kingdom, Denmark
- ROR Based Systems
  - Additional Profits Tax; e.g., Ghana
  - Petroleum Resource Rent Tax; e.g., Australia, Canada Frontier Lands, AB, BC, NL, NS
  - Algeria ROR Variation
  - Mexico Hydrocarbons Revenues Law 2014 (ROR Variation)
  - Application of ROR to Production Sharing Contracts; e.g., Angola, Azerbaijan, Tanzania
- R-Factor Based Systems
  - R-Factor Royalties; E.G., Peru, Canada-NL, Tunisia
  - R-Factor Profit Sharing; e.g., Canada-NL, Ireland, Tunisia
  - Special R-Factor Systems: Malaysia, Thailand
  - Application of R-Factor to Production Sharing Contracts; e.g., Cameroon, Chad, India
- Other Variations; e.g., Trinidad and Tobago, Netherlands
- Windfall Profits Taxes; e.g., China, Malaysia, Pakistan

### Incremental and Gold Plating Analysis

- Incremental Analysis: Royalties and Corporate Income Tax
- Incremental Analysis: ROR based features
- Incremental Analysis: R-factor based features
- Incremental Analysis: Production Sharing
- Incremental Analysis: State Participation and Carried Interest

### *Exercises*

# **Upstream Petroleum Fiscal Modeling and Economics**

## **Day 3 – Morning (0830:12:00)**

### **Joint Ventures and Carried Interest**

- Joint stock companies versus joint operating agreements
- Jurisdictions with State Participation
- Fixed percentage participation and sliding scales
- Working Interest and Carried Interest
- Repayment Options

### **Win-Win Nexus – Fiscal System Design Criteria (Filling in the Gap)**

- Neutrality
- Equity
- Efficiency

### **Measuring Fiscal System Performance**

- Government Share & Investment Competitiveness
- Fiscal System Contribution of Risk
- Fiscal System Performance (Regressive – Neutral – Progressive)
- Achieving Policy Goals

### ***Exercises***

# **Upstream Petroleum Fiscal Modeling and Economics**

**DAY 3: Afternoon (13:00 to 16:00/17:00)**

**CASE STUDY** – Participants Evaluations of Selected Fiscal Systems / Policy Goals

**Discussion:** Discussion of specific examples of fiscal systems; e.g., US Gulf of Mexico, UK, Norway, Egypt, China, Indonesia, Colombia, Other Jurisdictions

**World Fiscal Characteristics and Trends Presentation** - Course Leader

**Wrap-Up**