1. Record Nr. UNINA9910462933603321 Autore Smith James L (James Lee), <1950-> Titolo Modeling the impact of taxes on petroleum exploration and development [[electronic resource] /] / James L. Smith Washington, D.C., : International Monetary Fund, c2012 Pubbl/distr/stampa **ISBN** 1-4755-3420-5 1-283-94792-7 1-4755-2592-3 Descrizione fisica 1 online resource (47 p.) Collana IMF working paper; ; WP/12/278 Petroleum industry and trade Soggetti Petroleum - Taxation Petroleum industry and trade - Mathematical models Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali At head of title: Fiscal Affairs Department -- verso of t.p. "November 2012" -- verso of t.p. Nota di bibliografia Includes bibliographical references. Nota di contenuto Cover; Contents; I. Introduction; A. Resource Development; B. Resource Exploration: II. Related Research: III. The Modeling Approach: A. Primary Production; B. Enhanced Production; C. Optimal Field Development; D. Solution Method; E. Modeling Price Volatility and Financial Risk; F. Exploration; G. Integration of Exploration and Development; H. Fiscal Regimes Considered; Tables; 1. Guide to Fiscal Regimes and Background Parameters Used in the Analysis; 2. Background Parameters; IV. Overview of Results; Figures; 1. Impact of Enhanced Oil Recovery Effectiveness on Optimal Development 3. Impact of Enhanced Oil Recovery on Resource Development and Recovery2. Impact of Enhanced Oil Recovery on Resource Recovery and Value; 3. Resource Recovery, by Fiscal Regime and Phase; A. Intensity of Development; 4. Total Net Present Value, by Fiscal Regime; 5. Optimal Development Programs, Price Impact: 4, Impact of Oil Price on Resource Development and Recovery; 6. Fiscal Impacts on Timing of Enhanced Oil Recovery and Abandonment; B. Diligence; 7. Incentive to Delay

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## Sommario/riassunto

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