

The elusive optimal fiscal regime for an extra-heavy oil resource: a case study

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Abstract:

Oil and gas exploration, development and production are economic activities that are inextricably characterized by uncertainty. In their efforts to maximize returns, resource owners tweak fiscal regimes with unintended consequences on future investment decisions. We present a case study for the optimal fiscal regime for the exploitation of a substantial extra-heavy oil asset with limited exploration risk but with development, production and market risks. Our analysis is based on a discounted cash flow model for the asset that incorporates the risks associated with key uncertainties through Monte-Carlo simulation. The introduction of novel elements into the fiscal regime structure that capture optionality tied to the development of the asset is also discussed.