

Invitation

Hamed Ghoddusi

School of Business, Stevens Institute of Technology (NJ, USA)

Crude or Refined? Optimal Downstream Investment for Oil-Producing Economies

Wednesday, 21 June 2017, 4 pm

wiiw, Vienna 6, Rahlgasse 3, lecture hall
(entrance from ground floor)

Abstract

Should oil-producing countries move toward the downstream sector and invest in the oil refinery capacity? We offer a combination of theoretical, empirical, and qualitative arguments and evidence to discuss the rational for a vertical integration strategy (i.e. downstream investment) by oil-rich economies. The mark-up in the upstream sector is shown to be much larger than refining margins. However, from a hedging prospective the more stable refining margins of the downstream can provide a revenue cushion when crude oil prices are low. We identify distinct time-series properties in the dynamics of crude oil prices and refining margin processes. While crude oil follows a random walk, refining margins are stationary. Through a theoretical model we show that, among other factors, the expected level of crude oil prices, the volatility of the crude oil, relative size of demand to supply shocks, and the extraction cost play significant role in determining the optimal degree of the downstream investment. Our analysis can inform energy policies as well as export diversification policies of oil producing countries.

Hamed Ghoddusi is an Assistant Professor of Finance at the School of Business, Stevens Institute of Technology (NJ, USA). Before joining Stevens he was a postdoctoral associate at MIT's Engineering Systems Division (ESD). He has received his Ph.D. from the Vienna Graduate School of Finance (VGSF) and holds degrees in Quantitative Economics, Management Science, and Industrial Engineering from the Institute for Advanced Studies (IHS) and Sharif University of Technology (Tehran). His research interests include Resource and Energy Economics, Asset Pricing, Society-Centered Financial Innovations and Contracts, and Risk Management. He has been a visiting scholar/consultant at the International Institute for Applied Systems Analysis (IIASA), Oxford Institute for Energy Studies (OIES), UT Austin, UC Berkeley, UNDP, and UNIDO.

Univ. Doz. Dr. Robert Stehrer
Scientific Director wiiw

Dr. Sándor Richter
Organiser