Financing Power: Impacts of Energy Policies in Changing Regulatory Environments

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Abstract

Liberalization of power markets has changed the institutional setups under which investments into power generation assets are made, e.g. through competition on the production and retail levels and the breakup of vertically-integrated companies. Yet, renewable energy investors require long-term certainty for their output to secure their revenue streams. We compare the differences between public and private counterparties to these contracts in a simple analytical model, demonstrating additional re-financing costs for private counterparties continengent on their initial financial situation. Using financial data of European utility companies of 2015, extra costs for these counterparties are estimated at 1.9% of contract values. We also analyze investors' additional financing costs using interview data on wind power financing costs from 23 European countries. The results indicate that feed-in tariffs and sliding feed-in premia lead to similar costs for investors, while green certificates are associated with additional revenue risks, increasing financing costs by about 1.2-1.3 percentage points. Together, additional risks for investors and for private counterparties are affiliated with increased costs of renewable energies by around 14 percent.

Key words: Investments; Long-term contracts; Financing costs; Liberalization of power markets; Renewable energy policies.
JEL classification: Q42, Q55, O38

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