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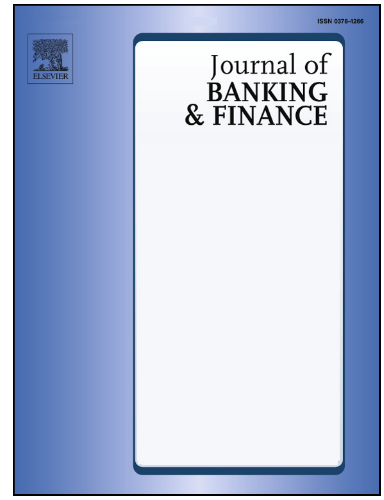

The odd notion of "reversible investment"

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The odd notion of "reversible investment"

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Abstract

Irreversible investment and the attendant concept of real-option value have been well discussed. Complete reversibility has been frequently invoked but less studied, especially for the case of lumpy investment typically considered in capital budgeting. We examine a simple lumpy investment problem for the full range, from complete irreversibility to completely reversibility, with a focus on the latter. The optimal stopping rules under complete reversibility are to invest when the project generates enough net cash flow to cover Jorgenson's opportunity cost of investment and to disinvest when it does not. Given the static nature of these rules, net present value as a timing criterion under reversibility is not pertinent. Investments that are partially reversible have much in common with completely irreversible investments but nothing in common with completely reversible investments. The case of reversible investment provides a foil for understanding that the distinguishing feature of investment as treated in corporate finance is that it entails at least some irreversibility.

JEL classification: C61; D92; E22; G31
Keywords: Investment timing; Stopping; Irreversible investment; Reversible investment; Capital budgeting; Net present value.