Strategic Timing Decision for Entering Foreign Market: A Real Options Approach

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Abstract—The Cobb-Douglas production function with Abel's (1983) model is extended herein, and real options analysis for entry-exit decision making with Dixit's (1989) model under exchange rate uncertainty. A general form with the first order of degree homothetic production functions is also considered by the rule of decision-making in the proposed model. The firm is risk neutral and this study adopts the real options analysis for valuing the behavior of the transferable location. This investigation extends Lin and Wu (2002) from considering only threshold value to expected arrival time for exporter deciding to transfer the production location form domestic to foreign. Furthermore, a closed form solution of the ratio of the expected arrival time for exporter deciding to transfer the production between the production location obtained by the real options analysis and using the NPV method, sensitivity analysis, and some characteristics of optimal production strategy are sought, providing for another way of thinking.

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