

On the bonus-auditing relationship in a real options model under asymmetric information

Takashi Shibata^{a1} and Michi Nishihara^{b2}

^a*Graduate School of Social Science, Tokyo Metropolitan University.*

^b*Center for the Study of Finance and Insurance, Osaka University.*

Abstract: This paper examines investment timing by the manager in a decentralized firm in the presence of asymmetric information. In particular, we extend the agency problem in a real option model to incorporate the audit technology which allows the owner, at a cost, to verify private information. The implied investment triggers include those in the three related papers: standard full-information model (e.g., McDonald and Siegel, 1986); Grenadier and Wang (2005); Shibata (2007). An increase in the penalty for the manager's false report *always* reduces inefficiency in the investment triggers, while it does *not necessarily* reduce inefficiency in the total social welfare. Most importantly, however, the full-information investment triggers and total social welfare can be approximated arbitrarily closely by making the penalty sufficiently large.

Keywords: Real Options; Asymmetric Information; Agency Conflicts; Audit.

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Reference:

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¹Email: tshibata (at) tmu.ac.jp

²Email: nishihara (at) sigmath.es.osaka-u.ac.jp