1117-91-250 Arash Fahim and Lingjiong Zhu* (zhu@math.fsu.edu). Optimal Investment in a Dual Risk Model.

Dual risk models are popular for modeling a venture capital or high tech company, for which the running cost is deterministic and the profits arrive stochastically over time. Most of the existing literature on dual risk models concentrated on the optimal dividend strategies. In this paper, we propose to study the optimal investment strategy on research and development for the dual risk models to minimize the ruin probability of the underlying company. We will also study the optimization problem when in addition the investment in a risky asset is allowed. (Received January 15, 2016)