Valuation and incentives of exotic performance-vesting stock grants with path-dependent (price- and earnings-based) vesting schedules

Elisabeth Megally* 

Abstract 

Relying on option pricing techniques, we quantify analytically the incentive properties of performance-vesting (p-v) stock grants, i.e. stock that vests with performance targets. We study how and which vesting provisions of p-v stock grants can potentially improve – or exacerbate – agency conflicts associated with both the separation of ownership and control (i.e. shareholder-manager agency issues) and the limited liability feature of equity (i.e. debtholder-manager agency issues). We find that both ownership and risk-taking incentive measures exhibit considerable variation, which qualify prior findings. In addition, we find that p-v stock grants that vest with accounting vesting provisions tend to convey a higher degree of manager-shareholder alignment than those which vest with stock-based vesting provisions, except in the case of an extremely low expected dividend yield. 

However, we show that despite the higher alignment of interest, p-v stock grants may convey inefficient incentives if the threshold performance hurdle is set too high. In addition, the higher alignment effect may be offset by extremely high risk-taking incentives due to

*University of Zurich and Swiss Finance Institute. email: elisabeth.megally@bf.uzh.ch. 
I am thankful to my PhD advisor, Michel Habib, for valuable guidance and suggestions. I thank Marc Chesney, Jean-Charles Rochet and Nikola Vasiljevic, as well as seminar participants at the University of Zurich, for very helpful comments and suggestions. I am also thankful to Yacine Barhoumi and Kamran Kalbasi for mathematical assistance. I am responsible for all errors.