“Corporate Hedging and Shareholder Value”

by Wolfgang Kürsten, University of Jena (Germany)

Corporate hedging has become one of the most challenging tasks of modern business management in the age of globalized firms and increasingly volatile markets. Usually, the need for risk management is deducted from an “entity”-perspective of the firm as a homogeneous risk-averse subject (Spremann 1986), though shareholders are acting risk-prone due to their option-like position in equity (Merton 1974). In a pure neoclassical framework, risk management proves to be irrelevant except for the case that lower risk is also inducing a higher firm value.

Corporate hedging of shareholder-managed firms is commonly based on one-period models and is grounded on diminishing the value of third-party claims like taxes or bankruptcy costs, comparable to the “exogenous frictions”-approach in the theory of optimal capital structure (Modigliani / Miller 1963, Kraus / Litzenberger 1973). For a more thorough discussion of these contradicting points of view, and following the lines of Merton (1973), we first give a theoretic characterization of Rothschild/Stiglitz’ (1970) mean preserving spreads (MPS) as an adequate risk measure in the shareholder value context. With MPS-differentiated projects, however, risk management can no longer be grounded on well-known arguments from the literature as, for example, reducing expected tax burdens (Smith / Stulz 1985), agency costs (Bessembinder 1991) or expected costs of financial distress (Rawls / Smithson 1990). Another argument from the literature relies on the reduction of stakeholders‘ risk premia, which follows any corporate risk management and is to the benefit of shareholders’ residual claims via lowering the cost of stakeholder priority claims (Stulz 1996). The validity of this argument requires a rational expectations framework and proves to depend on the trade-off between risk and value which is ambivalent, both from a theoretical (Markowitz 1959, Stiglitz / Weiss 1981) and an empirical point of view (Goyal / Santa-Clara 2003).

As a result from our review of arguments in the literature, there seems to be no robust explanation of hedging in shareholder-managed firms (Kürsten 2006). We thus leave the widespread one-period context of hedging models in the literature to allow for hedging in a multi-period world as well. Here, the option-like characteristic of equity turns into a compound options one. This is due to the fact that the shareholders of a non-bankrupt firm in the first period have another option-like position in the second period. In the context of the well-known two-state model of Stiglitz/Weiss (1981) we show that this can induce hedging activities by the shareholders, which would not prevail in a single-period world. We also sketch some directions for future research w.r.t. the adequate risk measure in a multi-period hedging model.