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Hasanjan Sayit* (hs7@wpi.edu). *Absence of arbitrage in a general framework.*

Cheridito (Finance Stoch. 7: 533-553, 2003) studies a financial market that consists of a money market account and a risky asset driven by a fractional Brownian motion (fBm). It is shown that arbitrage possibilities in such markets can be excluded by suitably restricting the class of allowable trading strategies. In this note, we show an analogous result in a multi-asset market where the discounted risky asset prices follow more general non-semimartingale models. In our framework, investors are allowed to trade between a risk-free asset and multiple risky assets by following simple trading strategies that require a minimal deterministic waiting time between any two trading dates. We present a condition on the discounted risky asset prices that guarantee absence of arbitrage in this setting. We give examples that satisfy our condition and study its invariance under certain transformations. (Received September 09, 2012)