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*Minimal Hellinger martingale measures in incomplete markets*

In incomplete markets, one of the crucial problem that we face is concerned with the choice of an “appropriate” risk-neutral measure to price any payoff. Via Hellinger processes, optimal criterions are proposed. These criterions are charaterized by the explicite forms for the extremal martingale measures as well as the control of markets’ information dynamically. Hence the methodology illustrates an interplay between control and information theories. The relationship of the obtained martingale measures and the existing ones is investigated. The existence and comparison results are detailed in the general semimartingale framework.