October 9th, 2017
KAP 414
2:00 P.M. – 3:00 P.M.

Professor Kasper Larsen

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“CONDITIONAL DAVIS PRICING”

Abstract: We introduce the concept of conditional Davis pricing and study its properties. Our ultimate goal is to use utility theory to price non-replicable payoffs in the case where the investor’s portfolio already contains a different non-replicable endowment. We show that even in the simplest of settings - such as Samuelson’s model - conditional Davis prices are typically not unique and form a non-trivial subinterval of the set of all no-arbitrage prices. This is in stark contrast to the case with a replicable endowment where non-uniqueness of Davis prices is exceptional. Our main result characterizes the interval of all conditional Davis prices and provides simple conditions under which its two endpoints can be effectively computed. We illustrate the theory with several examples.

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