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Modeling Trades in the Life Market as Nash Bargaining Problems

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Zhou et al. (2010) proposed an approach to price mortality-linked securities in a competitive market. However, its underlying assumption of market competitiveness is not satisfied in today's embryonic life market, which has few participants and few products. We consider the pricing in a non-competitive market and model the pricing process as a bargaining game. Nash's bargaining solution is then applied to obtain a unique trading contract. With no requirement of competitiveness, our approach is more appropriate for current market. A comparison of these two approaches is also provided.