

Kurzzusammenfassung

Non-Negativity of Nominal and Real Riskless Rates, Arbitrage Theory, and the Null-Alternative Cash

Pragmatic-world nominal riskless rates are non-negative. However, conventional arbitrage theory has yet to develop a theoretical justification of this phenomenon. - We define the null-alternative cash as an investor holding onto cash and refraining from investment and consumption ("doing nothing"); we use the null-alternative cash to prove that both nominal spot and nominal forward rates are non-negative and that prices of zero-coupon bonds do not increase with increasing maturity. In a positive inflation environment, however, both real spot and real forward rates might well become negative, but prices of zero-coupon bonds still do not increase with increasing maturity.

Key words: arbitrage theory, inflation, non-negativity of spot and forward rates, short selling constraints