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Model Applications

Application 1. Let us consider payoff matrices for two players on financial markets of bond and assets. Matrices $A$, $B$ reflect the behavior of "bulls" and "bears", respectively:

$$A = \begin{bmatrix} 10 & 0 \\ 1 & 10 \end{bmatrix}, \quad B = \begin{bmatrix} 0 & 20 \\ 0 & 0 \end{bmatrix}$$

In the Figure 2 we depict the static Nash equilibrium $N^*$, switching lines $A^1$, $A^2$ for feedback strategies, the new equilibrium at the point $N^*$ of their intersection, and equilibrium trajectories $T_1$, $T_2$, $T_3$. The new equilibrium point $N^*$ differs essentially from the static Nash equilibrium $N^*$ and provides better results for payoff functions of both players.

References