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ANALYSIS OF THE FINANCIAL STATE OF AN INVESTOR BASED ON THE CANTOR–LIPPMAN MODEL

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The problem of restoring the economic growth and overcoming the stagnation of the Russian economy is associated with escaping the institutional traps. One of these traps is the big difference between interest rates on loans and deposits, which expresses the imperfection of the capital market and prevents an objective assessment of investment projects. In these conditions, the assessment of an investment project becomes dependent on the business environment in which the project is implemented. We propose to use the Cantor–Lippman model of investment at an imperfect capital market to describe the entrepreneurial (investment) environment. In the Cantor–Lippman model, the investment environment is described by a pool of stationary, replicable investment projects. Deflators are built and used to evaluate new investment projects and the financial state of the investor. The asymptotic properties of the deflators and, with their help, the problems of economic growth in Russia are discussed.

Keywords: investments, Cantor–Lippman model, mathematical modeling of economics, NPV, IRR, dual problem, investment polynomial, linear programming.

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