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NUMERICAL ANALYSIS OF TWO COUPLED KALDOR-KALECKI MODELS WITH DELAY

This paper is concerned with two coupled Kaldor-Kalecki models of business cycles with delays in both the gross product and the capital stock. In our study we consider two types of investment functions that lead to different behaviour of the system. We introduce the model with unidirectional coupling to investigate the influence of the European Union economy as a global one on the local Polish economy. A wide range of model parameters yield interesting qualitative results, e.g. Hopf bifurcation, Bogdanov-Takens bifurcation and pitchfork bifurcations but also solutions which are stable can be found. We present the results of numerical analysis.