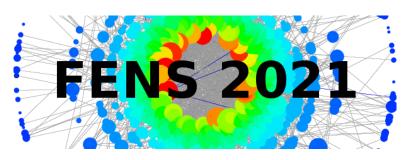
## 11th Polish Symposium on Physics in Economy and Social Sciences



Contribution ID: 13

Type: Invited talk (40 min)

## Critical phenomena in the market of competing firms induced by state interventionism

Saturday, 3 July 2021 12:20 (40 minutes)

There are two primary goals of this talk. First, we propose a flexible algorithm that can simulate various scenarios of state/government intervention. Secondly, we analyze in detail the scenario with the widest possible spectrum of stationary states. It exhibits the critical behavior of the market of competing firms, depending on the degree of government intervention and the activity level of the firms. Thus, we have analyzed the second-order phase transition series, finding the levels of critical intervention and the critical exponent values. As a result of this phase transition, we have observed an "unlimited" increase of fluctuations at each critical intervention level and the local breakdown of the average market technology concerning the frontier technology therein.

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